HERE WAS VINLAND

JAMES W. CURRAN

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HERE WAS VINLAND

A 1000 YEAR OLD MYSTERY SOLVED

It needs no ghost, my lord, come from the grave to tell us this.

-Shakespeare: Hamlet, Act 1, Scene 5.

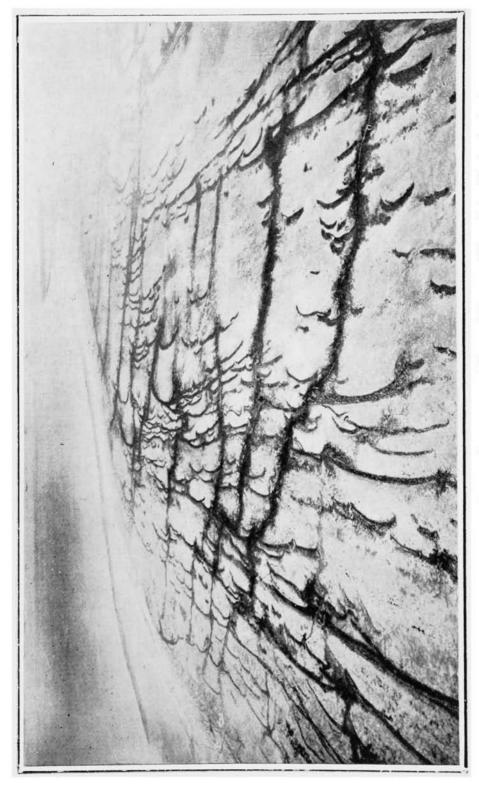


Plate 1.—The desolate shore of James Bay, near Albany River. Was this Karlsefne's beach where "the trees are a long way back from the water." They are not in sight here. (Courtesy of Royal Canadian Air Force.)

AMERICA'S STRANGEST STORY

HERE WAS VINLAND

THE GREAT LAKES REGION OF AMERICA

BY JAMES W. CURRAN

Editor, The Sault Daily Star Sault Ste. Marie, Ontario

THE SAULT DAILY STAR SAULT STE. MARIE CANADA

(Copyright)

TO MY CHILDREN

who have always set me a good example

MARY

BOB

NAN

JOHN

JANE

JAMES

DOROTHY

MARIANNE

CATHARINE

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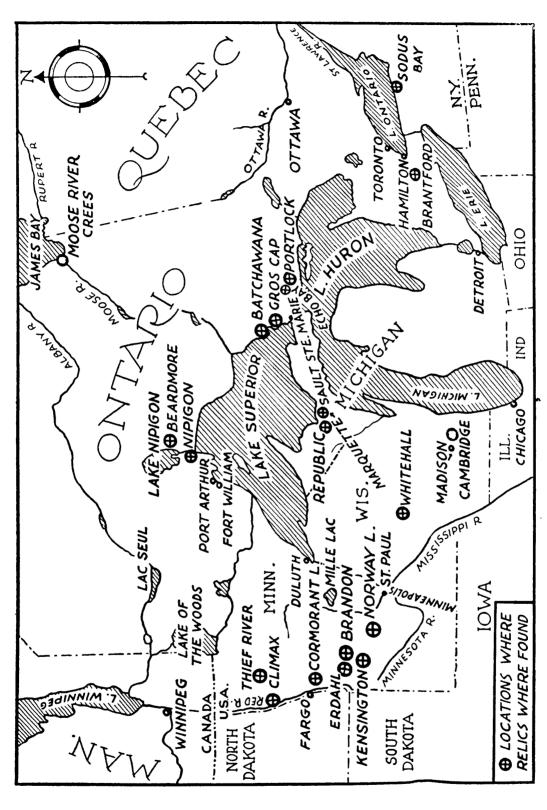


Plate 2.—Where Norse relics have been found (cross in circle) in the Great Lakes area. (Scale: About 200 miles to inch.)

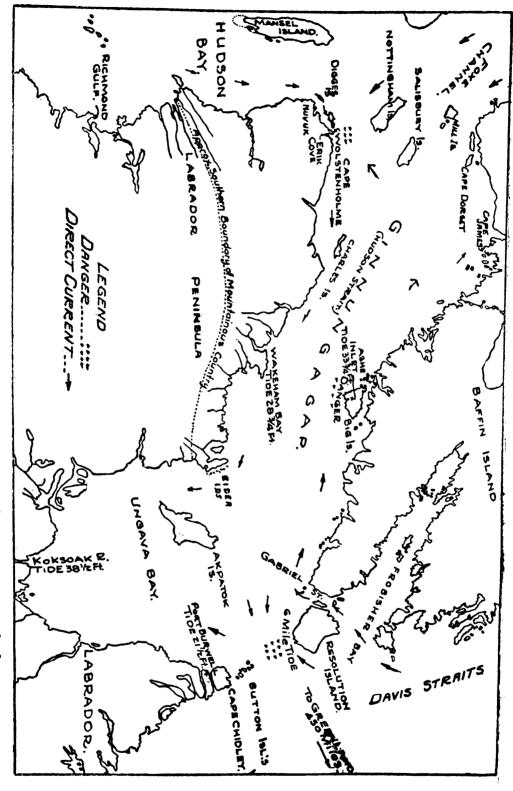


Plate 3.—Ginnungagap, (Hudson Strait), with its three danger zones marked.

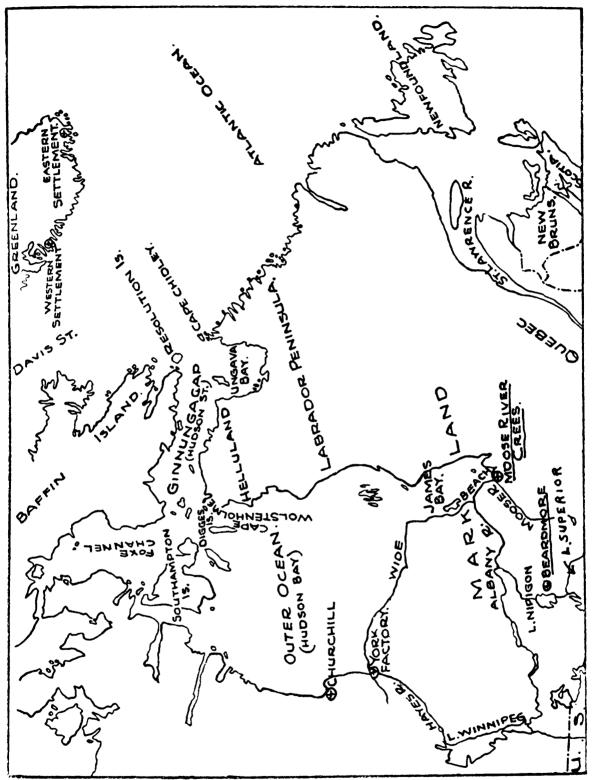


Plate 4.—Greenland to Moose River.

DATES IN THE NORSE RECORD

(Most of these dates are approximate. Some are just guesses)

- 700-800. Irish refugees land in Iceland.
- 789. First accepted date for a Viking fleet's raid on England.
- 825. Dicuil, Irish priest, first mentions Iceland in literature as discovered by Irishmen.
- 870. Arrival of Norsemen in Iceland.
- 908. Norwegian Gunnbjorn saw rocky islands off the coast of Greenland.
- 950. Eric the Red left Norway for Iceland with his father who was exiled for murder.
- 982. Eric banished from Iceland for three years for murder.
- 985. Eric returns to Iceland from Greenland.
- 986. Greenland colony started by Eric. Of 25 ships leaving Iceland 14 reach Greenland.
- 986. Biarni discovers America.
- 992. England first pays tribute to Viking invaders.
- 999. Leif, (Eric's son) arrives in Norway from Greenland: LC.
- 1000. Leif introduces Christianity in Greenland. Discovers Vinland.
- 1003. Thorvald, Eric's son, makes voyage to Vinland.
- 1005. Thorvald's death after being wounded by Indians. The first European burial in America.
- 1007. Thorstein, (Eric's son) makes unsuccessful voyage. His death.
- 1008. Karlsefne marries Gudrid, Thorstein's widow.
- 1010. Karlsefne sails for Vinland. His son Snorri first white child born in America.

DATES IN THE NORSE RECORD (Continued)

- 1013. Karlsefne returns to Greenland. He seems to have made other trips to Vinland.
- 1017. Canute, Danish King, rules Britain.
- 1028. Canute conquers Norway.
- 1042. Edward, the Confessor, succeeds Hardicanute, Danish King, in England.
- 1050. Lake Nipigon Norseman buried.
- 1066. Norman conquest of England.
- 1070. Adam of Bremen makes first written mention of Wineland, (Vinland).
- 1120-30. Are Frode's "Islendingabok" says Iceland discovered 870; skraelings indicated as Eskimos.
- 1121. Eric, whishop of Greenland and Vinland, sailed for Vinland and is believed never to have returned though the Greenland Chronicle says he "planted colonists and the faith."
- 1150. Viking era draws to a close.
- 1180-90. "Historia Norwegiae" by unknown author.
- 1205-15. Original "Landnamabok," source of Sturle, etc.
- 1230-40. Snorri Sturlason wrote "Saga of the Kings."
- 1240. "The King's Mirror" written.
- 1261. Greenland "republic" accepts the suzerainty of Norway.
- 1270-1310. Saga of Eric the Red written.
- 1294. Norwegian King makes Greenland trade a royal monopoly.

 Nobody else allowed to sail or trade there without royal license.
- 1310-15. Hauk's "Landnamabok" written.
- 1341. Western Greenland colony disappears.
- 1342. Greenlanders "turned to the people of America" (emigrated?) (Oddsson, 1635).
- 1347. Markland ship wrecked in Iceland.
- 1354. King Magnus of Norway sends Poul Knutson to restore Christianity in the Greenland colonies.
- 1362. Ten men of Knutson's force killed in Minnesota by Indians.
- 1367. Norwegian king's last monopoly ship lost.
- 1370. Final collapse of Norway's trade under misgovernment and the Hanseatic League's hostility.
- 1408. Marriage in Greenland (documented).
- 1410. Last definite news from Greenland.
- 1425-60. Reports of Bristol, England, traders visiting Greenland.
- 1440-70. Vague news from Greenland.

DATES IN THE NORSE RECORD (Continued)

- 1454. French fishermen on coasts of Newfoundland (Records of Beaufort Monastery, Brittany).
- 1477. Columbus visits Iceland.
- 1492. Pope in letter says there has been no news from Greenland for 80 years.
- 1492. Columbus discovered America.
- 1497. John Cabot's voyage to America.
- 1542. Jon Greenlander, of Iceland, finds last Greenland settler's body on shore.
- 1576-7-8. Frobisher voyages.
- 1585. Captain John Davis saw no people on visit to Greenland.
- 1588. Spanish Armada defeated.
- 1590. Bows and arrows and halberds lasted till about this time in the British army.
- 1656. Nicholas Tunes reported blond Eskimos in Baffin Land.
- 1738. Pierre La Verendrye finds Rune Stone in Dakota.

SOME NORSE RELICS FOUND IN GREAT LAKES AREA

- 1871. Norse fire steel found near Climax, Minnesota.
- 1878. Norse axe found at Republic, Michigan. Identified 1939.
- 1898. Kensington rune stone found in Minnesota by Carl Ohman, farmer.
- 1899. Norse spear at Whitehall, Wisconsin.
- 1907. Bronze axe found at Brantford, Ontario.
- 1908. "Bearded" axe found at Norway Lake, Minnesota.
- 1919. Norse hatchet at Thief River Falls, Minnesota.
- 1923. Axe (found in Ontario Co., N.Y.) acquired by Museum of the American Indian, N.Y.
- 1923. (?) Cast copper "spud" found at Portlock, Ont.
- 1924. Norse (?) axe found at Batchawana Island, Lake Superior.
- 1929. Norse spear at Sodus Bay, south shore of Lake Ontario.
- 1930. James Edward Dodd digs up Norse axe, sword and shield handle at Beardmore, near Lake Nipigon.
- 1938. Norse Spear found at Gros Cap, 12 miles from Soo.
- 1938. Discovery of meaning of the first American name for "white man,"—the Moose Cree word "wemistikose" (wooden boat); first recorded by Champlain in 1610 as "mistigoche," and "matigoche."
- 1938. Great Lakes location for Vinland proposed in articles in the Sault Star which are expanded in this book.

THE EXPLANATORY DOCUMENTS

HOW THIS BOOK CAME TO BE WRITTEN

Isn't it something of a commentary on our historical outlook at this late date that the suggestion of a Norse exploration and settlement of the Great Lakes region of America almost 1000 years ago is received with reserve? Superficially the notion that the Vinland of the Vikings lay on the Atlantic coast is perhaps allowable. But only by ignoring the records and the relics of our first white visitors is it justifiable. For almost two generations the plow and the spade have been offering evidence that has been received with scant respect. Within the last few years the Kensington rune stone has been denounced as a "forgery" by historical writers. This is a measure of the view taken by the modern world. The impressive Dodd find at Beardmore has only made a dent in the wall of unbelief.

This book is a plea for a somewhat more open mind on the greatest of America's historical mysteries, a solution of which is here offered with evidence. Has not the whole Vinland debate been distinguished heretofore more by a welter of notions than by a consideration of facts? After all it may be urged that a theory, even if put forward by a facile writer, should not be given quite as much consideration as the finding of a lot of Norse axes as an indication of where Vinland lay.

Wouldn't it be a good idea for all of the owners of Norse relics found in the Great Lakes area to bring them all to a central point in the summer of 1940,—say to Sault Ste. Marie,—and invite the experts from all countries to come and give their views on them?

The printing of this book resulted solely from the request of many people that the Norse articles in the Sault Star when a Great Lakes location was suggested, might be made available in a permanent form. Many of the articles had been printed in the Star before the idea was suggested. The writer has not tried to do anything more than comply with the wishes of many friends and correspondents. It is hoped this reproduction of the articles amended a little with the added matter has been done in a way to meet all wishes. There has been no effort to round out the whole Vinland tale as might have been done in a serious book presentation. But there is enough perhaps to interest students, and maybe start somebody doing a complete job.

The plan of this book has been affected by the fact that twenty-six articles were written for the Sault Star over half a dozen months, one of them having afterwards been withdrawn. From the nature of the job they could not be written in sequence. The reader, by consulting the list of contents, may help himself a little in that regard, but he will just have to do the best he can. An effort has been made to make his job easier, however, by a little rearrangement.

Some good men have been asked for opinions on the form of this book. Should the original Norse articles printed in The Sault Star from August 1938, till February 28, 1939 be included? On the other hand should there be a summary of the articles as a running story? The heavy vote was for full reproduction. This agrees with the writer's own feelings, as thereby the reader is able to follow the development of the story as it grew. For, to get a man really interested in a thing you must give him a fair chance to criticize. Besides this he has to earn a living and is not fond of work. Much time and money was spent on the job, but The Star thought it was well worth doing.

A summary is also included so that both camps should be satisfied at present.

In the story told herein the Vikings of Greenland are shown sailing west through Hudson Strait, (which medieval writers accurately describe) across Hudson Bay, (their "Outer Ocean") down the west coast of Hudson Bay with its vast beaches and barren shore, (only at Churchill and in the Nelson River area are there trees to be seen from the water.) to the mouths of the Haves, Albany and Moose Rivers. It is shown that the Norsemen who lost weapons in Minnesota may have used the easy Hayes route to Lake Winnipeg, and that Dodd's dead Norseman at Lake Nipigon undoubtedly travelled by the Albany River route. Thus, it is argued Lake Superior was reached, with subsequent navigation of all the Great Lakes and wanderings in the territory about these. Relics have been found over a length of 1,200 miles. History, Indian languages, geography and relics are all linked together to round out a solution of how the Norsemen reached Vinland, where they went, and what happened to them.

Where was Vinland? Its limits, according to the relics found, were between the Ottawa River on the cast; the Missouri River on the west; the Albany River on the north and the southern shore of Lake Ontario on the south. Ontario, Michigan, New York, Minnesota, Wisconsin and possibly Manitoba and North Dakota have given up relics so far but it seems reasonable to expect that there will be further finds made in other territory adjacent to the Great Lakes. The sagas ascribe the name Vinland to the finding of grapes, but Professor Soderberg, quoted with approval by Nansen, says the name really means "pastureland" from the old Norse word "vin", pasture, and he blames Adam of Bremen (1070) for translating it wrongly.

Some of the highlights in the proofs of the Great Lakes location for Vinland may be summarized:

- (1)—"Ginnungagap" as Hudson Strait.
- (2)—The Moose Cree words for "whiteman" and "oak."
- (3)—The Beardmore relics and many others found in the Great Lakes area.
- (4)—The fact that nowhere else have any Norse relics been recovered.
- (5)—The historical records which are unexplainable except when applied to the Hudson Bay area and the Great Lakes territory.
- (6)—The fact that all the above point in one direction, and that so far no evidence has been produced to make doubtful any one of these.

This record is fairly complete. If only the relics, the Indian features, Ginnungagap and a touch of Greenland history could have been stuck to all might have been well. Because these seem a little tangible. But what newspaperman can resist a "lead" for his paper? The lure of a chance to completely solve a 1,000 year old puzzle was too much. So there are speculations and wonderings and a jump or two in the dark. But out of the sum of it all, some bright chap may get a hunch on the details needed to round out the queer tale, and thus give the world America's earliest and most fantastic story.

The fundamentals here set forth are reasonably beyond question, that Vinland was the Great Lakes area of America. The years to come will see more relics turned up and much more corroborative testimony secured. Even now there is withheld evidence which is promising but not complete.

Every modern writer seems to pick his own favorite saga as the "most reliable" and so invents his own theories. The sagas alone can only confuse the reader. In this book the "Flateybok" saga is used, merely because, as the writer figures, one is as "reliable" or as understandable as the others. There is a substratum of fact discernable in all of these old tales, and the reader is as competent to select the facts in them as anybody else. So that it was thought advisable in compiling this record to give first place to finds of Norse relics in America, to topography that seemed recognizable, to words in use that are unexplainable otherwise than as applying to unknown sailors, to records accepted today as representing fact, to statements by men

who know the ground and to government reports that seem to apply.

This book does not argue that the Atlantic coast, or a portion of it was not included in the Vinland of the Norse. The desire is merely to emphasize the arguments for the Great Lakes Area as having been the territory occupied by the Norsemen. The historical writers who seek to locate Vinland only on the Atlantic coast seem to be making unnecessary trouble for themselves. They ignore the many evidences of Norse presence now unearthed around the Great Lakes.

Examination of collections of pictures of medieval axes, swords and spears, makes it seem probable that no one picture or drawing can be taken as exclusively representing a period. The fact seems to be that there are innumerable makes, styles, designs, and modifications of old weapons. Almost from year to year and from one blacksmith shop to another it would appear there were variations. A thousand years ago these weapons became as varied as today's. So that if an axe or a spear found now has any definitely Norse feature, there is at least a possibility that a Norseman once owned it.

It seems improbable that so many of the curious references in the old writers can all be founded on fable. Would a man like Jacques Cartier, who visited the St. Lawrence River in 1534, 1535 and 1541 or less than 100 years after the Vikings are known to have been in Greenland set down this paragraph in a frivolous spirit:

"Donnacona (of Quebec) had told us he had been in the country of the Saguenay in which are infinite rubies, gold and other riches, and that there are white men, who clothe themselves with woollen cloth, even as we do in France."

Cartier must have had a hard time getting such words as "gold" and "ruby" across to Donnacona for the Montagnais has no words in his own language for them even today. He merely has invented a name which he thinks expresses the white man's idea.

The white man gave all the "Algonquin" group of tribes the names they have for "gold" and "ruby". The first is just "yellow silver",—silver being the first white money the Indian saw. Ruby is either "very nice stone" or "stone which (is) pink." The idea of money or currency is foreign to the aborigine. No metal was of value of old except soft native copper which the Indian could use a little and which had a spirit (verdigris) which could kill people. So a piece of it often was a household god.

Donnacona could hardly have given Cartier terms meaning rubies and gold. These were as incomprehensible to him as electricity is to you and me. Our first explorers were strong for making the folks at home feel good. If they hadn't done this there would have been no money for another trip. A little bit of exaggeration never hurt an explorer. Read the flatulent stuff addressed to the idle rich in all centuries. Cartier made three voyages. He was more than a good sailor.

Even white people make grievous mistakes about gold. For instance Captain Frobisher came across the Atlantic in 1576-7 to dig for that metal in Baffinland. He actually took shiploads of pyrite ("fool's gold") to

England thinking it was the precious metal, and a London metallurgist reported gold in it.

Remember that Cartier carried Donnacona and several other Indians back to France with him in 1535, less than a century after the disappearance of the Greenland colony, and the chief lived there till his death. It was no casual talk the two had. They knew each other so well and so favorably that they were friends for a very long time. So we may conclude that the story of the white men who wore clothes up the Saguenay was no misunderstood tale on Cartier's part.

The "Saguenay country" is a deep narrow valley of that river where nature has provided a better climate and a much better vegetation and forest growth than in the surrounding area. It was this superior tract which attracted the Crees so much that it was for all substantial purposes one of their outlying "colonies", where their language was understood,—a Cree dialect in fact.

How could the old writers tell us so much about Indian ways if no European had been in America in saga days? How could Norse relics have been distributed all over the Great Lakes region if the Norseman had not been there? How can the Brantford axe be accounted for unless we are to consider a very early visit from the Vikings? How can we explain the fact that half of the objects found are Norse axes, the tool they would have in constant use and so the one most likely to be lost by them? When the wind blows from the north, it probably comes from that direction, and there seems to be no good in losing ourselves in speculation about it.

The sagas refer to an island as being remarkable for its bird population, and the commentators connect this up with certain islands in the gulf of St. Lawrence. But the sight is common in Hudson Strait and on the great lakes. Papoose Island, a mile long in Lake Huron, cannot be traversed during the hatching season, its surface being literally covered with gulls' eggs. The writer has a photo of the thick clouds of birds there, taken on his visit. Many of the islands in Lake Superior and Huron are remarkable as nesting places.

The "identification" of a "Norse" relic is a slow pro-It comes from a considerable process of discursive pros and cons between the experts. The writer has nothing to lose by saying what he thinks. All of the relics listed may not be "Norse." He has never asked anybody to pass on his suggestions,-not that several good men have not done so privately. Even the Minnesota rune stone and the Dodd relics are yet met with slightly uplifted eyebrows in some overcautious quarters. And the archaeologist must not be expected to rush forward and commit himself. As a matter of fact, after seeing here and there a good many ancient relics in the past year it occurs to one that snap judgments on their age and nationality may be out of place.

It is to be distinctly understood that the suggestions that our Indian axes are an evolution from the Norse models and that the Norsemen made some of these workmanlike copper tools we find, are put forward in no brusque and overconfident tone. Several respected correspondents do not fall in with the idea. But one says the suggestion may be worth considering. For

these tools seem beyond the capacity of uninstructed Indians, and the Norsemen probably kept on making things after he came to America. Some may be "trade" pieces. After all, it isn't a bad thing to take up a wrong idea, even if only to have it proven wrong. It all helps to clear the air, and the Viking invasion air certainly needs clearing.

The writer hasn't found anybody who has seen the Portlock cast copper axe or "spud", for instance, who thinks an Indian of former centuries made it. This particular matter will be settled as the years go by. We have hardly made a start recovering relics,—only a score so far.

The whole Norse matter was taken up as a newspaper job for The Star as a strict amateur in archaeology, so there will be doubtless many mistakes, omissions, contradictions, repetitions, wrong deductions, lack of sequence and what not found by interested friends. The writer feels that having done his part in passing out a new idea (with possibly some fairish arguments to support it) the critics and those who are interested in historical research should now do theirs.

And besides this book, as it is admitted over and over again, is not a scientific work but only a collection of "field notes" submitted with all due respect to men who are vastly better qualified than the writer to do the detail work.

The writer got into the story through too much curiosity. He has known Indians practically all his life, having been taught by an Ojibway band to paddle a birch bark canoe as a very small boy. The queer aptness of the "names" they give places and things, the fitness of the language to bush life, their friendliness and trustfulness (once you get their confidence) all appealed to him. The simplicity of Indian life, the lack of desire to acquire a lot of furniture to fall over in the dark, the readiness to give up a job to paddle down a long river, (the verb "unuke", to work, is irregular in Ojibway, as befits the genius of the language), the inability to understand the white man's desire to be forever fussing about something,—these always appealed as evincing a sound philosophy of life.

When Sam Chappice, Cree, of Moose Factory, gave the writer the first reasonable explanation of an Indian word that had bothered him for years and years, he knew he had to follow up the lead as he never could let an elusive Indian "name" alone.

It was on the rugged shore of Lake Superior where Sam had a job on the building of Jack McPhail's power plant at the marvellously picturesque chasm at the mouth of the Montreal River. He didn't boggle over "wemistikose" as all the other tribes had. He said it was Moose Cree and that it meant "wooden boat." And that started the whole Norse story. If it had been known how much work Sam was letting the writer in for he would never have asked him about the word Champlain wrote in 1610.

At least he doesn't think he would. On second thought, perhaps it was just as well. For an Indian word nobody can explain is to him very much like the itch to some folks. And it is well to do something about it.

It is remarkable the almost perfect unanimity with

which writers have argued that Vinland couldn't have been in the interior of America. They do this even in spite of Dodd's find at Lake Nipigon and the axes and rune stone. The open mind has not been enough in evidence. The Viking age as has been aptly said "was one which recognized no pedantic distinction between fact and fiction." Nowadays it should be the fashion to at least consider facts.

The writer does not rest the case on any particular relic or any particular piece of evidence. It is the mass of confirmatory testimony that must be considered.

Our Indian languages are fast fading, and a competent philologist might possibly yet rescue from oblivion some pre-Columbian history of America by a study of them. This book, such as it is, was the result of a quest for the meaning of a word,—obscure to all the Indians interviewed except the Moose Crees.

The Province of Ontario seems to have already lost the meaning and significance, (which may often be something else again) of a great many of its place names. Some of the accepted meanings rest on no secure foundation, if what our Indians say can be accepted. The meaning of some of our important names are disputed: Canada, Toronto, Ottawa, Niagara, Quebec, Nipissing, Saskatchewan, Muskoka and many others. We seem indeed to lack a healthy curiosity about our past.

The writer is fully conscious of the fact that it has been a little presumptuous in an amateur to have taken up such a tremendous subject and to have made a stab at it, even for his own paper's sake.

Some very excellent men have been very helpful and

gracious. The writer is under a debt of gratitude to them,—English and American authorities have been most cordial.

If some interest is aroused in a matter which should interest North America, the full purpose of this volume will have been served. For the Vinland tale is a local story for the whole of the Great Lakes area.

Criticisms, corrections and suggestions are requested from all sources.

JAMES W. CURRAN

Sault Ste. Marie, Ontario, May 1, 1939.

Faries' dictionary spells "wamistikose" with a mark over the "a" to give it a long sound, like "a" in pay. In this book the spelling "wemistikose" is followed because this follows the general practice and the Star office does not use the long "a" mark.

NORSE CASE SUMMED UP FOR JURY

(The Star article on Feb. 20, 1939, summing up the newspaper series)

My Lord, and Gentlemen of the Jury:

I appear before you on behalf of my clients, the Norsemen of Vinland, to plead their cause for a just world judgment. It has been denied that they were the first white men to discover America, or to settle in its vast Great Lakes Region. It has been doubted that they even came across the Atlantic from Norway and Iceland to occupy Greenland, which my clients verily did previous to coming to the mainland of America and taking up land in its interior. In justice to these gallant men, and in a spirit of giving honor where honor is due I am sure that you will give me a few minutes to outline to you what they actually did almost 1,000 years ago on this continent. I feel that if I have the ability to marshal the facts in the case as they should be presented to you, you will not withhold longer the deserved honor that rightfully belongs to them.

There are a very great number of old sagas known,—about 200, many of them of historical value. Then there are also the medieval historical writers who are numerous. Thus the events of the Viking world before Columbus came along are recorded in many narratives.

From these old records it is easy to see why Iceland and Greenland and Vinland received so many immigrants,—the constant levies and taxes of the kings and chieftains and the recurring feuds and murders. In the middle of the tenth century, there were a series of cold summers with famine in Norway. The sagas paint a gloomy picture of the insecure condition of the people. The Norsemen were exceedingly jealous of their rights and when conditions became intolerable they preferred to leave Norway. So they came to the western islands and finally to Greenland and America. Their decision was helped by the success of Moslem armies which had conquered part of Asia and Europe and dislocated the trade routes. But it was their desire for individual freedom that above all moved them.

These American Norsemen were known in Europe as the Vikings, bold sea rovers, who conquered many lands in Europe in their heyday of power from 850 to 1200 A.D. They were among the first to build real seagoing vessels and their design was so sure that the fastest racing yachts today follow the lines they laid down. These men were the first to introduce in England, France, Sicily, Russia and other countries a rudimentary system of municipal government. We have testimony from medieval English writers that they were the most accurate of the chroniclers of their time. They wrote copiously and well and raised the art of recording events to an excellence admittedly superior to their contemporaries in other countries.

Practically as soon as they had discovered Greenland they set out for America, the date of which is disputed. If any people could know of the attractions of this continent before 1000 A.D. it was the Norsemen, fearless navigators that they were. It is estimated that from 3,000 to 9,000 of these were in Greenland at times during 500 years, finally dying there of starvation. Or else emigrating to America.

In my own experience with Indian tribes I have been impressed that some of their old stories,—fables as we call them,—rest on something more solid than dream stuff. Take Michipicoten, the "floating island" of Lake Superior, as it has been known to the Ojibways. The Jesuit Relations of 1669 first told about it. Not till recently has it been realized that changing atmospheric conditions explain the curious legend,—on some days the island as viewed from a distance seems quite near while on other days it appears to be at a long way off. So it has been avoided for centuries as bewitched.

Ancient writers told of the Fortunate Isles to the west where man lived happily. And St. Brandan's Isle and others where men could escape from toil and want. The stories of these fabled places lasted for ages,—up till the time of Columbus and after. Were they just visions conjured up by human longing for an earthly paradise, or did some ancient voyager land on the shores of America and note the carefree life of its aborigines surrounded by the abundance of a lavish nature? Where a folk tale lives for ages it may be well to consider that there may have been a human experience behind it.

For it is curious that so much of shadowy stuff out of the past somehow vaguely connects with facts as we know them.

Take the Brantford axe that would seem to have

been made perhaps a couple of thousand years ago. How did it get to Canada before the Norsemen,—if it did?

Or the dolmens of the prairies reported by Verendrye, were they fashioned after the stone graves of the Celts and the Scandinavians—a mode of burial that died out before the Roman Empire existed we are told by archaeologists? There are some 700 dolmens identified today in Ireland; they are quite common in Brittany, Scandinavia and in other parts of Europe. In England the best known specimen of the few there is "Kit's Coty" in Kent. Is it possible that the ancient Americans invented these identical practices independent of European suggestion? Or was the idea brought to America by an ancient mariner who went back to Europe and was responsible perhaps for starting the story of the Fortunate Isles?

There may be some foundation for the claims that America was first found by Irish navigators. Ireland is the closest European land to America, and it may not be unreasonable to expect that its inhabitants would first find the western continent. The Irishmen could hardly have sailed to Iceland before the Norsemen unless they had been competent ship builders and seamen.

Dream stuff? Possibly.

We may guess that America was known to the Norsemen before the time history records. Because their old writers describe Hudson Strait to a nicety,—something unrealized till today. "Ginnungagap" is how it was known to the middle ages,—a word taken from old Norse mythology as the name of the impass-

able rocky gorge between the worlds of light and darkness,—a passage so terrible that it was said no man ever was able to get through it.

Much light is thrown on the dangers in the strait by various reports of government exploration parties, the tides and currents tables of the Hydrographic Survey of the Canadian government, and other documents. From these we can guess where various incidents in the sagas occurred.

When the Norse ships passed Hudson Strait, with its violent high tides and high rock walls, they found themselves on Hudson Bay, 1,000 miles long and about 600 miles wide at the entrance. The world of 1,000 years ago believed that this bay was really the "Outer Ocean" of the ancients, a part of "the waters which encompass the earth" as the Bible phrases the idea.

On entering this vast inland sea my clients steered for the low swampy western shore because it was the safer,—the east shore is lined with rocky islands. They sailed south and explored it, finding as it is recorded that there were "no harbors." They found beaches miles wide in ebb tide. As first class sailors and explorers they quickly examined all the rivers and from the natives secured information about the interior of the country. Probably they used the Hayes River route to reach Lake Winnipeg as it is such a good one our own pioneers used it up till the time our great railways were built. The Albany and Moose rivers were also used, and doubtless others.

I would like to make it clear that my clients did not come to war on anybody for they brought their women and household goods. They came only to find a home where life was easier than in the cold regions of the north, to escape from an ungrateful soil that failed to reward labor and a starvation which always impended.

I realize that your lordship and you gentlemen of the jury must have solid proofs of my statements. I propose to lay before you what I consider a much abbreviated list of facts showing that my clients did actually explore and occupy the Great Lakes area in America for hundreds of years, and that there is indubitable proof of this.

Let me start by saying that the finding of many relics of the Norse period here is not doubted by any person who has studied these. At Beardmore, seven miles from Lake Nipigon in Canada was found a Norse axe, a Norse sword and the handle of a Norse shield by James Edward Dodd in 1930. A sheaf of affidavits prove the discovery, and the Royal Ontario Museum, on the advice of European scholars, accepted them as genuine and paid \$500 for them.

The Beardmore Viking was put in his grave with all his warrior equipment. During the pagan period of Norse history this was the custom as it was thought that a warrior would need his arms in his journey after death. Mr. Holand relates in "The Kensington Stone" that this was the reason given him at Norway's Trondheim Museum for the lack in Norwegian museums of equipment following the Norse period. It is an interesting sidelight on the Beardmore find. By 1362 however, the picture had changed and we find a prayer to the Virgin on the Kensington stone. It may be permissible to guess that the Nipigon warrior died before 1000.

In Minnesota four Norse axes and a Norse rune stone have all been vouched for as authentic. At Brantford, Ontario, has turned up a bronze axe of "pre-Columbian age." At Republic, Michigan, an axe. At Sault Ste. Marie, Ontario, and at Sodus Bay, New York, two Norse spears have been found. At Whitehall, Wisconsin, another spear. There are several more finds of possible authentic Norse indications but I will not list these as they have not yet been reported on by the archaeologists.

You may not yet be convinced that these rusted fragments scattered over 1,000 miles of territory are Norse relics. Every man is entitled to his doubts. But you will agree somebody must have been responsible for leaving them where they were found, and so far as modern knowledge goes only the medieval Viking used the particular type of sword and axe found so widely. And nobody would take the trouble, surely, to "plant" so much old armor over so much territory for fun. You and I are entitled to suspect that the Norseman lost these things in his wanderings. What other explanation can there be?

And please remember that these old pieces of iron,—made to look, if you will, like the weapons history tells us were used in Scandinavia 1,000 years ago,—were placed where they have been recently found long before Columbus came to America. How do we guess that? Not alone from the old records and pictures, but because science can determine now the relative age of any iron from its physical properties. I assume the experts to whom the Beardmore relics were submitted for an opinion took all possible pains to assure them-

selves that they were justified in saying, as they did, that the things were made in the 11th century.

In the discussion over the Brantford bronze axe between the archaeologists as to the time of the Bronze Age we have no particular interest. Whether this era ended before or after the birth of Christ, and whether it actually dovetailed into the iron age of the Scandinavians,—a time later than in all other European countries,—concerns us little. What is of interest to us is that the experts agree that this axe was of Norse origin with an "Irish look." It is hard to conceive of the Norsemen or the Irish having known America more than three centuries before Eric the Red came along about 1000 A.D. So that we may concentrate on the fact that this axe,—made 1,000 years B.C., or 500 years A.D.,—was found in the Province of Ontario "on the site of an old Indian camp." It wasn't likely that a Norse family would possess it for a couple of thousand years; the probability is that it was made during the Viking age (850-1200) or shortly before. It must be considered that the Irish influx in Iceland about 750 A.D.,—a century before the Norsemen got there,—may be responsible for the tool getting to Iceland. blood in Iceland is guessed as high as 30 per cent. Or the Norse invasion of Ireland and their many battles there in the eighth century may have given them possession of it,—that is if the relic is Irish.

But we are really only interested in the fact that this axe "of pre-Columbian age" was actually found in Canada a little north of Lake Erie. And the conclusion that the average man will reach is that some European was responsible for bringing it across the ocean hun-

dreds of years before Columbus' "discovery." Because this fits in with other finds in the Great Lakes territory.

For 200 years the world has talked of a queer tribe of Indians, the Mandans in Dakota, not far west of the location of the Minnesota find. Their discoverer, the French explorer, Verendrye, remarked their houses, their stories of the dolmens, or stone graves he saw, their superiority in agriculture to any known tribe, their fair hair and blue eyes, and many other curious features which have caused visitors to them ever since to wonder if they were really Indians or some unknown race.

The first recorded Indian name in Canada for the white man, set down by Samuel Champlain in 1610 on the St. Lawrence River, was "mistigoche." It was apparently given him by the Montagnais tribe of the north shore of the river. Ven. Archdeacon Richard Faries, a missionary to the Swampy Crees for 40 years at York Factory on Hudson Bay, and author of a model Indian dictionary of the Cree language, says the word is Cree of Moose River (James Bay) origin, and that it means "wooden boat." All Indian tribes north of the St. Lawrence use the full word "wamistikose," as written by Faries. Today the Crees themselves have shortened it to "mistikose." But the Crees alone call oak "wamistikose-watik" or "wooden boat wood." No oak grows within hundreds of miles of James Bay. The Crees had spread wemistigoche (French form) to all their neighbors before Champlain came to Canada. The reasonable explanation of these two Moose Cree words must be that the Crees invented them from seeing oak ships on James Bay a very long time before Quebec was founded.

Archdeacon Faries says also that Eskimo is a Cree word applied to their Arctic enemies as a term of reproach for their raw meat eating habits.

Thus we are met with puzzles innumerable in this Norse affair unless we accept the Hudson Bay entrance to Vinland, with a Norse acquaintanceship with the James Bay residents, with river passage to Lake Winnipeg and Lake Superior; with subsequent Norse wanderings over a large area; with eventual Indian absorption of the Vikings.

But the acceptance of the Great Lakes theory dissipates practically all our troubles, historical, linguistic, geographical, and archaeological.

In saying this I wish to add I fully believe that the Norsemen explored the Atlantic coast in their long stay and probably saw also the Pacific ocean.

You and I, with more light on the Norse mystery than past generations, with a knowledge of the relics recovered or identified in the last few years must feel assured that in the Mandan Indians or possibly the "white" Indians of James Bay we may read the fate of our first white discoverers, and guess the truth that they represent the remnants of the people who, a millenium ago, lost all the relics spread over 1,000 miles of Great Lakes territory, and who at last were absorbed into the Indian population around them, giving it the distinctive character that white men instinctively recognize.

For here I suggest are the undoubted descendants of the men who in the middle ages found "self sown wheat" here, (prairie grass) and frostless winters, and grapes, and abundant fuel to burn, and trees that were so big they "could be used in houses,"—everything so different to Greenland and the icy north.

I hesitate to keep you longer. In the documents which you have now an opportunity to read you will find all in detail I have here tried shortly to say. And much more, very much more.

I cannot produce a Norseman actually burying his axe, spear, or shield in the ground for you to see. But the evidence available, and your own good judgment, unclouded by pre-conceived ideas, will lead you to a just judgment.

My Lord and Gentlemen: I invite your close attention to the printed details I now place in your hands, confident that an unbiased judgment will guide you, and that after centuries of clouded argument you will, setting aside all else but the facts and in the light of what you now have learned not withhold from our first white Canadian and American citizens, the acknowledgment of the worth of the work they did so long ago. I am not pressing for an immediate verdict. The world makes up its mind slowly. But with the facts you now have there is, as I see it, little excuse for delaying your decision very much longer.

My Lord and Gentlemen: I now, with all due deference, leave the matter of justice to my clients in your competent hands.

Document I

WHERE NORSE RELICS HAVE BEEN FOUND

READER, SUPPOSING YOU AND I, as Norsemen, had been in Knutson's place in 1362 scattering relics all over the country, people today would be justified in arguing that from the relics we lost we had come in from Hudson Bay by the Hayes River or by the Albany River to Lake Winnipeg. Or by the Albany and Kenogami route to Lake Nipigon and thence to

Lake Superior. For somebody left axes and a spear

on Superior's shores, and it may have been us.

See "Contents" for Page Numbers of Illustrations

As we had apparently lost our fire steel in Minnesota at Climax, on the Red River we seemingly had been there. The trail of our relics (people would say) led through Minnesota, across the Mississippi, through Wisconsin to somewhere around Whitehall, which is about 160 miles west of Green Bay on Lake Michigan with a fairly convenient river approach to that great lake.

Where did we go then? Of course we liked Green Bay because it is a remarkably fertile area, always noted for an easy living. But of course we couldn't be satisfied to stay in one place, and so we went to Sault Ste. Marie because just north of that place, with its rapids and plenteous whitefish and lake trout, (praised

by Radisson in 1658), we lost a spear at Gros Cap on Lake Superior and, 24 miles away, an axe at Batchawana Island,—a terribly made tool of poor iron. Somehow we got down to Lake Ontario either through the Lake Simcoe route overland from Lake Huron, coming out at Toronto or through the great lakes for we reached Sodus Bay on the south side of Lake Ontario, because one of our spearheads was found there, and some people claim we dropped something at Oswego, N.Y. also. Maybe we just gave these things away, but that doesn't sound reasonable. We lost so many that we undoubtedly made others to replace them and some of these copper tools certainly do not look like Indian work. It's so long ago that you and I have forgotten where we went.

All this was in 1362,—which was over 300 years after Karlsefne's men, (who spent three years in Vinland), had to bury an officer (?) and his axe, sword and shield at Beardmore, seven miles from Lake Nipigon. How do we know it was so long before our trip? Because the armor was made sometime between 800 A.D. and 1050 A.D. So the experts say.

So apparently there isn't much use of us denying we Norse were all round the Great Lakes either perhaps before or about 1000 A.D., or about 1362 A.D., because at Republic, Michigan, they picked up in 1878 one of our helmet smashing axes weighing $3\frac{1}{2}$ pounds exactly. A good many evidences we can't deny (even if we want to) exist. If there was any desire on our part to conceal them, we certainly badly bungled things. Our tracks are plain as day over 1,200 miles of area from east to west, and for half that distance from north

to south. We were east, west, north and south of the Great Lakes because they have found our tools to show this. Of course they might have been taken from us by the Indians, but it seems unlikely that the Indians would bury an axe and sword and shield at Nipigon, or carve a rune stone at Kensington. We really must have had something to do with bringing these things here,—though everybody is so doubtful about it that we'd better keep quiet for a while yet.

It is queer how deep we buried some things, and left others practically on the top of the ground. We don't seem to have done much farming, unless some of these copper "spuds" were made by us. We apparently fell in with Indian ways and lived principally by fishing and hunting here for 500 years. And there seems hardly a doubt but that we finally forgot we were Norsemen and where our own folks lived.

Just between the two of us they haven't yet begun to really tie up our trails. Because how is it that they only find things on one side of long rivers like the Red or Wisconsin, or just a couple of things on a lake as big as Ontario? How is it that they got a bronze axe of ours at Brantford, Ontario, on the old Grand River route (used for ages by the Indians) and nothing else, (except that alleged fireman's axe at the old Indian camp at Hamilton.) We believe that relics should be found all over the Great Lakes and on many of the rivers running into them, as well as in Ohio, Iowa and Illinois, not to speak of many more in Ontario. Lake Superior, so far, has been the place where we were most careless, taking the number of things of ours found there. The centre of these losses seems to have

been Algoma District in Ontario and the northern peninsula of Michigan. Most have been recovered in Minnesota with Ontario next. The oldest axe apparently was found at Brantford, and the oldest spear either at Gros Cap or Sodus Bay.

We must have spent a very long time on the lakes, and it is quite apparent the Indians didn't worry us much if at all eventually.

We may have started being careless at Climax on the Red River, perhaps because we found the Indians friendly enough, and our equipment too heavy for comfort. The French were just as careless as we were on the Great Lakes in the 17th century. People have actually picked up three of their swords on Lakes Superior and Huron in 1938, and possibly the reason these were "lost" was because they were too clumsy to carry in a canoe. Perhaps like us they may have just left them at camp sites. Iron was scarce with us, so it seems to have been a mistake. But unsuitable equipment never was popular.

We must have spent a lot of time exploring. Consider some of the distances between the spots where relics have been found. Let us start at the Red River in Minnesota. It is 400 miles in a straight line from the relics there to Republic in Michigan, and that's 180 miles from Gros Cap in Ontario. From Kensington to Sodus Bay, N.Y., is over 1,000 miles. Here are a few figures you can look at and draw your own conclusions:

	Miles
Beardmore, Ont., to Erdahl, Minn.	720
Beardmore, Ont., to Sodus Bay, N.Y.	670

Beardmore, Ont., to Gros Cap, Ont.	260
Thief River Falls to Gros Cap, Ont.	550
Thief River Falls to Sodus Bay	1,000
Republic, Mich., to Gros Cap	180
Republic, Mich., to Kensington, Minn.	400
Mandan area to Sodus Bay	1,200
Batchawana Island, Lake Superior,	
to Gros Cap	24
Kensington to Whitehall, Wis.	230
Whitehall to Republic	210
Whitehall, west to Mississippi River	25
The Minnesota relics all lay in an area of al	oout 21 0
.,	

0 miles long.

We can't explain all these wide distances between our relics except by figuring we didn't lose them all on one trip. It must have taken a century or two. It was probably your great great grandfather who dropped that bronze axe at Brantford, after it had been handed down from one of your ancestors back in the ages. It has an "Irish look" they say, and I suggest it is too peaceful looking for a Norseman. We can guess how the other relics got here,—all but the Brantford axe. and the cast copper "spud" found at Portlock, Ont. Either the archaeologists are wrong in their dates, or somebody from Europe got here a long time before we did. Which is more probable? Or maybe the bronze age didn't close on schedule.

Apparently the relics found belong to two different periods of time. To the earlier the Brantford axe, the Dodd relics, the "dolmens" of Dakota, the "spud" and possibly the Gros Cap and Sodus Bay spears. To the period of Knutson's visit all the rest. But nobody consulted is sure. The Norse relic trail is too new.

It is curious too that they haven't found regular Norse spearheads like ours in Greenland. The things the Vikings seem to have particularly taken from there when they left were iron weapons, axes and spears. The shields probably went out of fashion there as they were not needed against Eskimos, and only one has been found so far in America. So the Nipigon shield must seemingly have come very early in the Norse rush.

We were some travellers all right as is shown by some more crow flight figures:

	Miles
James Bay to Lake Nipigon, Ontario	340
James Bay to Sault Ste. Marie, Ontario	360
James Bay to Lake Superior	300
James Bay to Lake Huron	370
James Bay to Brantford, Ontario	550
James Bay to Sodus Bay, N.Y.	560
York Factory to Kensington	
(via Hayes River and Lake Winnipeg)	7 50
Here is a list of the actual and possible Nors	e relics
known:	

PROVINCE OF ONTARIO, CANADA

BEARDMORE:—Sword, axe, shield handle and two pieces of the "boss" of a shield, all together, (May, 1930). Suggested dates of origin from 800 to 1100. Sword: "Type I, with straight cross pieces . . . goes back continuously to the prehistoric iron age in Central Europe."—London Museum Catalogue No. 1.

BATCHAWANA ISLAND, East shore of Lake Superior:—Norse (?) axe, (1924). (See "Contents" for page numbers of illustrations). End view of outside

edge on plate. Iron is of very poor quality and the work very rough. Badly pitted. Length 6¼ in.; width of blade 3½ in. Batchawana Island in bay of same name, east shore of Lake Superior. The only "Indian" axe found on Lake Superior with a "hammer" head. Diverse opinions expressed by experts as to origin.

GROS CAP, on Lake Superior, 12 miles from Sault Ste. Marie:—Spearhead (Plate) (August 10, 1938). One archaeologist thinks this is a very early sample, while another suggests it was made much later.

BRANTFORD:— Socketted bronze axe, (Plate), found in 1907 by M. R. Harrington, of the Museum of the American Indian, New York, in an Indian scrap heap and listed in his "Indian Notes" as Norse. Now in the Museum. "Extraordinarily Irish looking." Made perhaps 600-1000 B.C. or 500 A.D.

STATE OF MINNESOTA

ERDAHL:—Iron axe, (about 1893), 5 1/3 pounds.

NORWAY LAKE:—"Bearded" iron axe. (1908), 5 pounds. (Plate). (See "Contents" for page numbers of illustrations).

BRANDON:—Iron axe, (found by an Indian and given to an early pioneer). (Plate).

THIEF RIVER FALLS:—Hatchet, (1919).

CLIMAX:—Fire steel, five miles north of Climax, 1871.

KENSINGTON:—Rune stone, (1898). (Weight 202 pounds). (Plate).

CORMORANT LAKE:—Holes in "mooring stones."
STATE OF NORTH DAKOTA

In 1738-9, a rune stone was found on the prairie by

the French explorer, La Verendrye. It was sent to Maurepas, secretary of state, Paris, France. It was examined by several Jesuit missionaries in Quebec. Its whereabouts is unknown.

Kalm, the historian, records that La Verendrye told him he had found "dolmens," or arranged grave stones on the western plains. Nothing seems to be known about these by present day writers.

STATE OF MICHIGAN

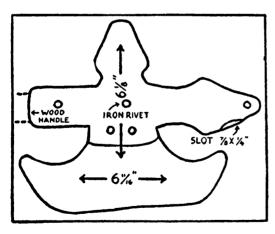
At Republic, on the Michigamme River, a prospector found an iron axe, (Plate), an exact duplicate of the "helmet smashing" axe in the museum at Lillehamer, Norway, (1878). Three and a half pounds.

At Marquette, a copper axe was found with a nick on its side, which is said to be a Norse feature.

STATE OF WISCONSIN

WHITEHALL, 160 miles west of Lake Michigan, a spearhead, (1899).

CAMBRIDGE, 50 miles west of Milwaukee, a com-



Cambridge, Wis., "halberd," or fence ornament.

bined axe, point and "hook." (1912). Possibly a "halberd" of the 15th or 16th century, and possibly a "trade" piece. Or maybe, thinks one archaeologist, a piece of an iron fence. Found on Vasby farm, Cambridge, 1912.

Mr. H. R. Holand in-

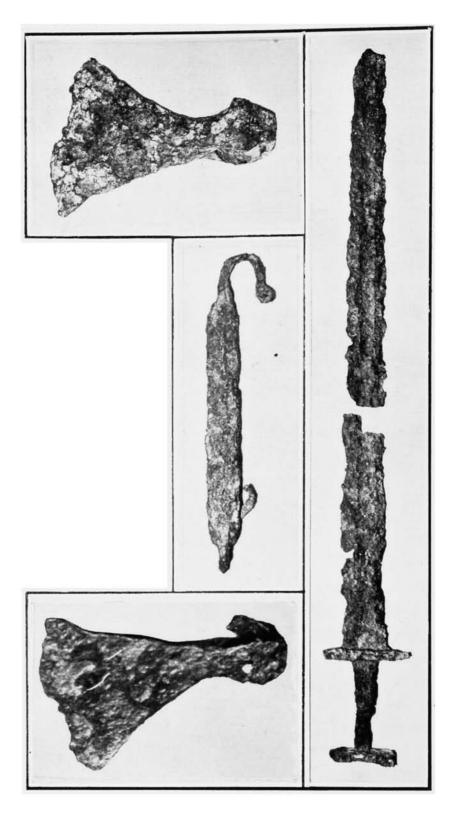


Plate 5.—Norse sword, axe and handle of shield found by J. E. Dodd, 1930, near Beardmore, Ont. Two views of axe. (Courtesy of Royal Ontario Museum.)

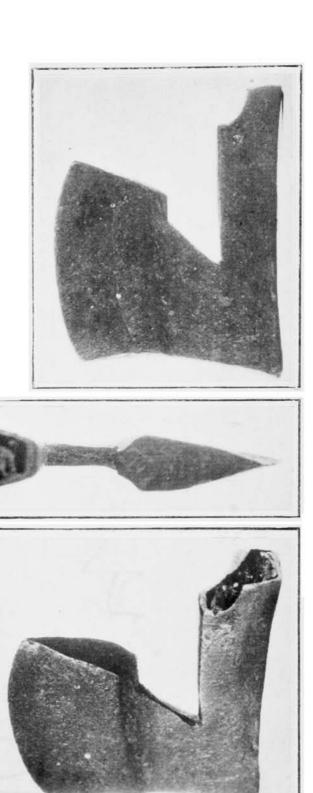


Plate 6.—The helmet smashing Norse axe found at Republic, Michigan. 3½ pounds. Courtesy of Morgan H. Stafford, Newtonville, Mass.)

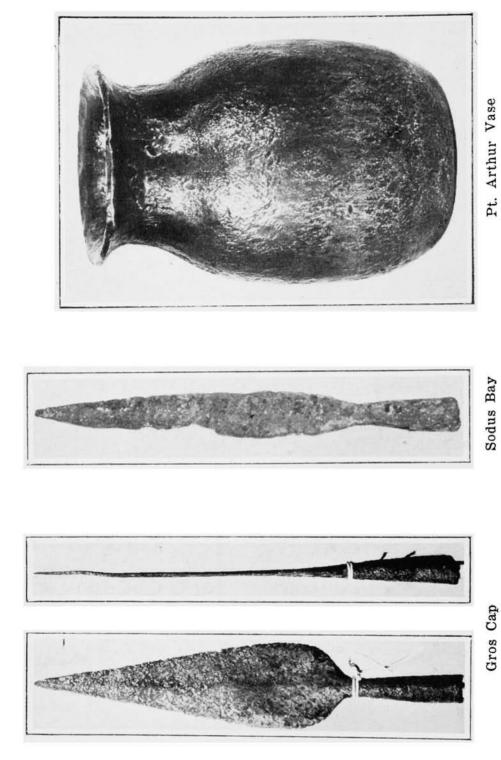


Plate 7.—Gros Cap, Ontario, spear, 13 in. x 2%. Sodus Bay, N.Y., spear, 9¼ in. Port Arthur copper vase, 4½ in. high. (Picture of vase by courtesy of Milwaukee Public Museum and Capt. McCannel.)



Plate 8.—Norse axes found in Minnesota at Erhahl, (1) 5 1/3 pds.; edge 8¼ in. At Norway Lake, (r) 5 pds.; edge 16 in. (Courtesy of Milwaukee Public Museum.)

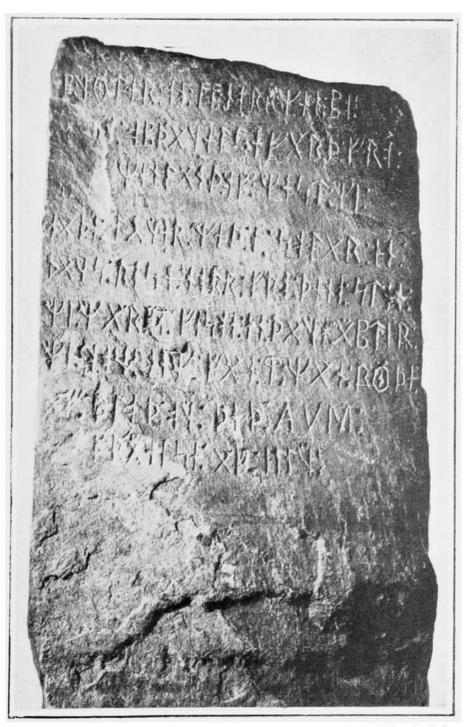


Plate 9.—The Kensington, Minn., Rune Stone of 1362. Weight 202 pounds; 31 in. long, 16 in. wide, 6 in. thick. (Courtesy of H. R. Holand and National Editorial Association.)

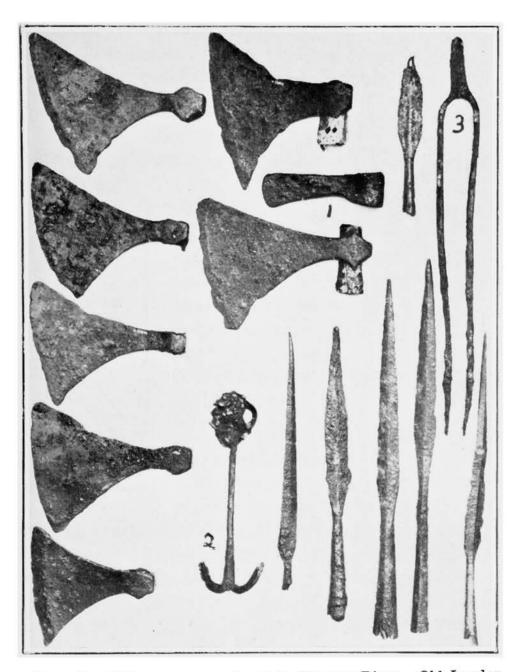


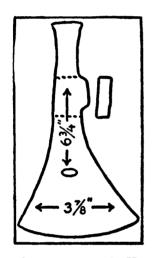
Plate 10.—Viking weapons found in Thames River. Old London Bridge group of Norse weapons. From Viking battleship. Axes shown came into use about 990. Metal of blade remarkably thin, except behind edge. No. 1 is of Type 1 (see "type" plate) which lasted from early iron age to middle ages. No. 3 is a pair of smith's tongs and No. 2 is a ship grappling iron. Six spears shown. (Courtesy of London Museum.)

forms the writer that a relic like the Cambridge tool has been found near Sherwood, Wisconsin, and another at Alexandria, Minn. He suggests they are all "trade" pieces,—imitations of ancient weapons.

STATE OF NEW YORK

SODUS BAY, south shore of Lake Ontario:—a spearhead, (1929). (Plate).

IN ONTARIO COUNTY, which runs up within 20



Ontario Co., N.Y., axe.

miles south of Sodus Bay a Norse looking axe with "hammer" head and a widely flaring blade 6% inches long, was found many years ago. It lay in the area formerly occupied by the Iroquois. Is it possible it is connected with Sodus Bay's Norse spearhead?

It was through the kindness of the Museum of the American Indian, New York, that the New York axe was brought to the attention of the

writer. The reader will ask himself how it came that the French, (if it be French) struck on a model so close to the battle axe of 1000 A.D. The characteristic flaring blade, and the "hammer" head of the Norse weapon of the Viking of Canute's era are both in it. There is a name stamped on the blade "PAUL..." the second name being illegible. Mr. Erick Bengsson, of Helsingborg, Sweden, says that this was the spelling used of old "as old books show." The Roman letters seem to be out of place, but it must be remembered that the Roman letters AVM appear on the Kensington

stone of 1362. The early Dutch and the English axes were different from those made by the French for Canadian Indians. The question is of interest: Did the French make a different model for the Iroquois? Or is the N.Y. axe Dutch, English or Norse? Some experts view it as a "trade" axe.

The Norse spears found at Gros Cap and at Sodus Bay lack iron "tabs" projecting from the sockets to hold the handles firmly. It may be that the handles (and the tabs,) were broken off in the hands of the owners, and that these spearheads may have been actually discarded where they were found. The Whitehall spearhead still shows the "tabs."

The Feature of the Finds

Thus we have a tabulation of possibly ten Norse axes, three spearheads, two rune stones, one sword, one shield handle, one mooring stone, one boss (two pieces) and one fire steel.

There is one striking feature in the location of nearly all of the relics; they were found on or near the shores of lakes or rivers.

The Beardmore relics were 200 yards from the Blackwater River.

The Gros Cap spear was found at the edge of the Lake Superior shore near Sault Ste. Marie.

The Kensington stone was recovered from a small hill in a dried up lake.

The Norway Lake axe was close to the shore.

The Thief River axe was about three miles from the river. The Whitehall spear was apparently not far from a river.

The Republic axe was in a small stream.

The Batchawana Island axe was close to the shore of Lake Superior.

The Portlock "spud" was on the bank of a creek.

The Echo Bay "spear" was near Echo Lake.

The Marquette axe was close to Lake Superior.

Who Made These?

Axe found at an "old Indian camp" near Hamilton, Ontario, near Lake Ontario shore line. Weight, 3 pounds. In Dundurn Museum, Hamilton.

Unidentified tool with curved 10 inch head found in 1929, by Fletcher Gill, Dodd's mining partner, 200 yards from Dodd's relics near Beardmore in Lake Nipigon area. May be ancient adze. Lost again on Dodd's claim about 1931.

Report received of a "small stone foundation" on an uninhabited island in Lake Nipigon, "about six feet square buried under a couple of feet of earth."

Earth "fortification" on an island in a Northern Ontario lake.

Rune stones have been reported from Manitoba, but are said to be just weathered specimens.

At Cormorant Lake in Minnesota, Mr. H. R. Holand examined years ago old drill holes in rocks on its shore line. One was about 7 inches in depth and an inch and a half in diameter and the others much less in depth. He concludes the story with the information that these "mooring" holes for iron spikes are common on the coast of Norway, where the practise is to anchor a boat to shore, with an anchor in the water at the other end to prevent it pounding on shore in rough weather.

It is such careful personal investigation that gives Mr. Holand's book "The Kensington Stone" a preeminent place among books on Norse activities on this continent.

Mr. Guy H. Taft, of Terrace, B.C., writes that in 1903-4, while a resident of Minnesota, he read in a Minneapolis paper an account of the finding in a muskeg of the remains of a Norse boat by men who were digging a North Dakota drainage ditch to connect with the Red River. The item was sent in by a North Dakota correspondent.

Mr. Roy P. Johnson, of the Fargo Forum, kindly forwarded this from the Minneapolis Tribune of April 3, 1938:

"At last they found a haven by steep hills, well-protected against (referring to the Vikings of the Runestone possible attacks. legend). Here they stopped to rest and write the Runestone story, which sets forth the catastrophe that occurred at Cormorant lake. They still had the boat, because directly below the place where they set up the Runestone in the ground, I found a large rock which had the very same deep hole as the other two stones. wooden plug from Cormorant lake fitted it exactly. It was undoubtedly the remains of this boat that were found many years ago in the ground in a wooded plot on the north side of Grant lake, which lies five or six miles east of the discovery place of the Runestone. Grant lake touches Holmes City, Minn. One of the men who owned lots between the main street and the lake decided to arrange a terrace on his property, which is hilly. He found in a layer of earth 12 feet over the water level, the rotted remains of a large boat. They thought at first this boat was the remains from the settlement period but it was shown that the boats of that period were small rafts or long dugouts with blunt ends. The boat found in the hillside, on the other hand, was of a rounded construction and a large boat with bowed ends. Its position in the hillside indicated that it was left there a long time before the later explorers came, because no one can recall that the lake has been as high by many feet as the location of the boat. I have been on this place many times and besides had a number of letters from the men who were present when it was found. (Quotations from H. R. Holand, Ephraim, Wis.)

About 50 years ago, a curious solid bronze or brass object was plowed up on a farm near Marchmount, in Simcoe county, Ontario. It was guessed to be all the way from a candle mould to a locomotive ornament. It was loo large for the first and too cumbersome for the second. It was never identified. Its length was 8 or 9 inches and its base about 3 inches. Up to about 1840 Indians had occupied the area.

In the Brantford, Ontario, Museum is a small bone carving of a man, which is thought to be of Eskimo origin.

Mr. G. M. Gathorne-Hardy, of England, librarian of the House of Lords, is an outstanding historian. At the suggestion of Rt. Hon. H. A. L. Fisher, warden of New College, Oxford, he took up the study of the Norse discovery of America, and wrote to Mr. H. R. Holand, whose book, "The Kensington Stone" established the genuineness of that relic, fully accepting its authenticity.

In the fourth volume of the South Dakota Historical Society's papers, (1906) is an article by Rev. Lars J. Hauge, in which is given a picture of an alleged Norse anchor said to have been found at Crookston, Minnesota. There has been no confirmation of Mr. Hauge's claim. It is said to be a telephone pole anchor.

Document II

MICHIGAN'S HELMET SMASHING AXE

MICHIGAN, WHICH SHOULD be rich in Norse relics, has only contributed one of iron—a "helmet smashing" axe found on the edge of a small stream at Republic, 25 miles from Marquette, and about the same distance from the shore of Lake Superior. A prospector found it in 1878, but it wasn't definitely identified till this year. It weighs $3\frac{1}{2}$ pounds, and there is one exactly like it in the museum at Lillehamer, Norway. It is now in the possession of Mr. Morgan H. Stafford, of Boston, he having acquired it with other relics from his brother.

The finding of this axe makes an interesting Norse set up for Michigan, Wisconsin and Ontario as this table of distances to other relic finds shows in crowflight miles:

Republic, Mich., to Whitehall, Wis.	210
Republic, Mich., to Beardmore	
(across Lake Superior)	320
Whitehall to Mississippi River	25
Republic to Gros Cap, Ont.	180
Republic to Brantford	420
Gros Cap to Batchawana	24

Mr. Stafford has kindly sent particulars of the Republic axe:

"I have read and enjoyed your article on the Norse Case, in the Sault Daily Star and am glad to know of your interest in the subject. It seems to me that people are just beginning to awaken to the fact that we have on this continent a very real history that precedes the French and English settlements, as well as the Spanish, but I find most of my friends take my stories of Norse finds in the West with obvious grains of salt, and rock salt at that.

"The Norse battle axe which I own was found on the bed of a small stream near the town of Republic, Marquette County, Michigan, about the year 1878, by a prospector or landlooker, whose name has never been known either to me or my brother who bought it about 1887. The finder stooped to drink as he trudged along a pathway in what was then doubtless a very wild section, and directly beneath him, resting on the sandy bottom, he espied the axe which he attempted to raise by the wooden handle which appeared to be substantial but which through centuries of immersion had softened and became a sort of paste, and which instantly disappeared, beclouding the water. He then raised the axe head and seeing that it was something very much out of the ordinary he carried it down to Marquette with him and disposed of it to one T. Meads who kept a curio and jewelry store in that city. My older brother, Walter K. Stafford, hearing of the find and being an omnivorous collector of curios although then but a lad, attempted to buy it, but Mr. Meads refused to let it go, and it was not until the lapse of about ten years

that the offer of a gorgeous banquet lamp proved too much for him and he made a trade. It remained in my brother's possession for some years when I purchased it along with other Lake Superior relics, including a silver cross found at Marquette, and a collection of ancient copper implements. The axe is of steel and a test of the metal made in New York about a year ago discloses the fact that it was made hundreds of years ago at a time when the Norse were flourishing, and slight traces of silver are found. Bits of the wood which remained in the axe head became hard after being taken from the water and have somewhat the appearance of petrification. It has also been subjected to chemical tests and the fact brought to light that it is at least six hundred years old and of a kind of hard pine that is to be found in the extreme north portions of this continent and in the North of Norway. The axe has a hard edge welded on, as you may be able to see from the photographs, three of which I am pleased to send herewith. The prints show also the fragments of wood which still remain in place, and which runs through the back of the axe, projecting slightly from the upper The axe measures 7 1/16 inches from the base of the handle to the tip, and 5½ inches from the outside edge to a point at the back directly back. Its weight is 31/2 pounds exactly. It is known as the skull cleaving type, and is so made that if the handle were to be broken off the hand could fit in around the haft, as you will see. The only known counterpart of this axe, and that a duplicate of its shape and material I am told, is in the museum of antiquities at Lillehamer, Norway.

"There is, of course, much speculation as to how this

axe found its way into the interior of North America and landed on the bottom of a stream where it lay undiscovered for centuries, as the state of the wood certifies. As you doubtless know, H. R. Holand, of Ephraim, Wisconsin, has written a book entitled "The Kensington Stone," in which he contends that the Norse passed over from Iceland to Greenland, and thence to this continent through Hudson Bay, and by devious water routes finally landed in the present State of Minnesota where they maintained a settlement until exterminated by the Indians. He, that is Mr. Holand, is interested in my axe and believes it originally belonged to some of this group, whose expedition was made about the year 1362. Others believe his theory is not correct but that the axe was carried inland from the Atlantic Coast, after being taken from the Norse either by violence or trade. Personally I think one man's guess is as good as another.

"Among my curios are several silver crosses, including that found at Marquette, to which I have already referred. That cross was found about 1876, with the barrel of an ancient pistol; the skull of a human being; remains of a bear; and the ashes of a camp fire. It has the initials in script C.A., and has long been an object of interest and curiosity. Some years after this was found another cross, with but one bar (the Marquette, Michigan, cross has two cross bars), was found at Marquette, WISCONSIN, and strangely enough came into my brother's possession shortly before I purchased his collection, and the second cross also has the initials C.A. struck from the same identical die, as certain die defects prove. Within recent years I have added eight

more silver crosses, more or less similar, including one of large size with the name Montreal stamped on the back. Do you know anything of these crosses as a class? I supposed they were originally of religious significance, but have recently been told they are purely commercial, and used in barter with the Indians of Canada and the Lake region.

"It is my intention to deposit my Lake Superior curios and relics with the Marquette County Historical Society, at Marquette, Michigan, my birthplace, and where my brother lived at the time of the finding of the axe. I have quite a collection of objects of considerable interest which I feel are only temporarily in my custody, and a sort of trusteeship feeling prevents my disposing of them otherwise than as indicated."

Michigan's Axe Fits Into Story

It is curious how much confirmation of the Great Lakes story of the Vikings comes from the weapons found scattered around our great inland seas. The axe found at Republic, Michigan, furnishes a missing link in the chain of evidence and it is bound to take high rank as confirmatory evidence of the whole queer tale.

We are making progress in gradually working out a reasonable and connected story. Wherever we turn all parts of the drama are seen to fit into place, and the more the details of the 1,000 year old mystery are examined the surer we can be of an eventual detailed solution.

With the known history of the development of Norse axes, so it is with the helmets and armor,—these help us dimly to round out the Vinland tale. The fact that

there has been found a "helmet smashing" axe in Michigan is thus important. This axe was invented after the medieval helmet had been developed,—around 1300 A.D. In 1277 an English Knight was buried who was clothed in chain armor from head to foot; by 1320 another Knight, whose picture we have, had added iron knee caps, elbow guards and arm pieces, but he still wore a round head hood of chain mail. By 1400 the armor was entirely of plate iron, and the chain mail out of date.

The age of chain mail armor was from 1000 to 1300; from mail to plate, 1300 to 1400, and of plate entirely from 1400 to 1600.

The conical iron or steel cap was the typical helmet of the 11th century as we see from the Bayeux tapestry depicting the conquest of England in 1066. The height of the armorer's art came about 1520. Shortly after that the invention of the arquebus, the first hand gun, sounded the knell of the armor age.

Applying this information based on the Encyclopaedia Britannica, to the finding of the axe at Republic, Michigan, we may guess that its design was coincident with the development of plate armor for the body. Thus it is justifiable to consider the axe as having been brought to America about 1300-1400, the century in which Knutson came into the west to lose so many of his axes.

It is not an unreasonable guess that the owner of the Republic axe belonged to Knutson's party, and so the route of the expedition to or from Minnesota is indicated to some extent.

All would be fairly clear sailing but for the fact that

a "bearded" axe was found near Norway Lake in Minnesota, and this weapon, archaeologists say, had been pretty well displaced in 900-1000 in favor of the broad axe.

On a plate are shown the wide axes picked up at London which came into use towards the end of the 10th century (900-1000), when the Norsemen were raiding England to succeed in having their King Sweyn called King of England. The English had paid heavy tribute to the Vikings since 991.

The hazardous English venture would of course claim the latest and best military equipment, and thus the presence of the old "bearded" axe in Minnesota in 1362 may be explained by assuming that out-of-date equipment was thought good enough for a foray against American savages. The Northmen's bolt was pretty well shot by 1150, and interest in foreign adventure was soon dying in the losing struggle of the Northmen against the cities of the Hansa League, who avenged all the assaults on their neighbors of the Vikings in the previous centuries. The Danes, Norwegians and Swedes were not popular in Europe then.

In the London Museum's catalogue No. 1 is a picture of a sword which seems to be the same as the Beardmore weapon, which "may be of the 9th century," (800-900 A.D.) The sword is classed as:

"Type 1, hilt with straight cross pieces; no capping to the pommel. This is the simplest type (of Viking sword hilt,) and goes back continuously to the prehistoric iron age in Europe. It seems to survive as late as the 10th century (900-1000 A.D.) in Norway."

"Of the two examples in the London Museum one

(which seems to be the same as the Beardmore sword) might be 8th or 9th century."

Of the axes shown in this catalogue, the one which resembles the Beardmore weapon most is accredited to the 9th or 10th centuries. Two plates from the Museum's Bulletin are printed in this book to illustrate the above paragraphs. See "Contents."

The "beard" axe found in Minnesota merged into another type "after the middle of the 9th century," (800-900,) being "used in Scandinavia during the 8th and early 9th centuries," (700-850). Thus in Minnesota was found an axe which was out of fashion in Scandinavia about 850 A.D.

Of the "helmet breaking" axe found in Michigan no illustrations are given in the London catalogue.

Thus it would seem that Knutson's party in 1362 lost equipment made apparently some hundreds of years before that date,—that is if it was Knutson's men who lost them. These men were sent out by King Magnus to find out what was happening among the neglected American Norsemen.

Can it be possible that Knutson in 1362 lost axes that were "not used in Scandinavia" for 500 years before? That seems hard to believe.

The Dodd axe is definitely of a type that succeeded the "bearded" axe type, and its vogue lasted till about 1050. If the experts are right, the Minnesota "bearded" axe is a couple of centuries older in style.

The Michigan "helmet smasher" wasn't made before the wearing of helmets, and it went out manifestly with the halberd, the battle axe and the helmet. Against the Indians it wasn't useful. The Michigan axe was found some miles from the south shore of Lake Superior; the Gros Cap spear on the east shore. It would thus appear that the Norsemen sailed that lake. May we assume that it was at the west end of that inland sea that Knutson left some of his men "at the sea" to take care of his ship? If so Duluth may figure in the relic list eventually. The Nipigon find indicates that Lake Superior was surely visited by the Norsemen.

Knutson never returned from his trip to Vinland, although some of his men are said to have got back to Norway. So that we may guess that all the equipment of his exploration party was lost around the great lakes. Undoubtedly more of it will be found.

Document III

POINTING TO GREAT LAKES LOCATION

Here are listed some features in the search for Vinland which cannot be overlooked:

The relics as listed on previous pages.

Medieval references to "Ginnungagap" "between Greenland and Vinland" fit Hudson Strait, and the Canadian Government's Hydrographic Survey confirms these references.

The "Outer Ocean" of the middle ages seems to indicate Hudson Bay.

The low west shore of Hudson Bay with wide beaches and "no harbors" meets the description of the first Norse landing places.

The Crees of Moose River invented the first North American name for the white man and have also a purely local name for "oak" based on the word. No oak grows near James Bay.

The Beardmore relics lay 350 miles inland from James Bay, as the crow flies.

The many Viking relics found over 1,000 miles of Great Lakes territory are north, east, south and west of the Great Lakes.

"Self sown wheat" (prairie grass) and "no frost in

winter" must mean that the Vikings had reached the prairies.

No "grapes" grow north of the 49th parallel.

Eskimos (Skraelinger) met by the Norsemen do not come farther south than the Straits of Belle Isle.

"On an island far to the west" the Norsemen found a wooden "corn barn." In Indian days Indian corn was not grown farther north than the south shore of Lake Superior. No wheat was grown in America till the 16th century. If the "corn" was wild rice, then it may have been the Green Bay area of Lake Michigan where the "corn barn" island lay. This grain is common over a wide territory.

The Kensington Stone says it was carved by an exploration party "from Vinland over the west."

A European country is known to the Swampy Crees of Hudson Bay as "Ukamuske," (land across the water), but the Moose Crees farther south on James Bay use the term Wemistikose-wuske, (wooden boat land).

The Norsemen were interested in the fur trade. The Hudson Bay area was so rich in furs in the 17th century that England and France fought over it. The principal reason for the century of war between these two nations which only ended at the Battle of the Plains of Abraham in 1759 was the beaver trade and northern Canada was and is the finest fur area in America.

The Norsemen cut wood in Vinland and probably also on the Atlantic coast. But as there are spruce forests on the east shore of Hudson Bay up to about the 55th degree of latitude, that area would be a good source of supply to Greenland.

"Early one morning when they looked about them, they saw nine hide boats and wooden poles were being waved on the boats, making a noise like threshing flails as they were moved with the sun. Karlsefne's men took this to be a token of peace,"—Saga of Eric the Red. This sounds like a number of Eskimos using their double bladed "paddles," making the familiar noise that goes with that narrow "pole." A double paddle about two inches wide is only used in a kyack.

Garden River Ojibway Reserve Indians in Algoma told the writer that two Cree women visiting the reserve some 20 years ago told of a legend current among the "white Indians" of James Bay of a ship with white men being wrecked on that coast "a long time ago." Several old members of the Garden River Reserve who were formerly packers to James Bay also told the writer at different times that they doubted that the "white Indians" were "real Indians."

Verendrye's story to Peter Kalm of the finding of a rune stone and his detailed account of "dolmens" on the prairie together with his account of the strange Mandans can hardly be dismissed without more investigation. Who taught the Mandans to build European fortifications?

A Markland ship was blown to Iceland in 1347,—347 years after Leif visited Vinland. There were apparently centuries of active trade with America.

The early traders in the north usually married Cree women, (Father Lacombe, 1872) as they were "preferred to others." Was it because these women had a dash of white blood?

Document IV

OTTAWA ON DANGERS OF GINNUNGAGAP

When henry hudson, the indomitable, entered Hudson Strait in 1610, one of his unruly crew was a man named Prickett, who is credited with a statement that the ship ran into "strong currents" and "overfalls." "Some of our men," says Prickett quaintly, "this day fell sick. I will not say it is for feare, though I saw small signe of any other griefe."

Hudson thought it well to call his grumbling and almost mutinous crew together and make them a speech, offering to leave to them the decision whether to go ahead or turn back for England. (See an article in the April issue, 1939, of the *National Geographic Magazine*, —a summary of research work on Hudson's voyages.)

Thus the English crew entered the strait with the same misgivings about its mysterious terrors as had the Viking sailors of 600 years before.

What were the "overfalls" at the entrance? We may guess that they were the same phenomena "The King's Mirror," written about 1200, so graphically describes when it records the impressions of the Norse sailors that

". . . it looks as if all the storms and waves that there are in that sea gather themselves to-

gether and become three waves."

The reference can hardly be to anything else than the approach of the "rushing" tides from the west which "roar" through the narrowed entrance to the strait between Resolution Island and the islands off Cape Chidley in Labrador,—a tide that gathers force in a 110 mile wide channel and "abruptly" (Hydrographic Survey's word) finds itself constricted to one 30 miles in width.

These "three waves" (King's Mirror) . . . "fence in the whole sea, so that men cannot find a way out," etc.

The whole 30 mile channel suffers from the walls of water the tides and "violent currents" bring along. Out in the centre of the entrance, the terrified Norse sailors could see the awesome sight for 15 miles on each side of them. (See article: "Proof Norse knew Hudson Strait as Ginnungagap.")

And in stormy weather even today the Dominion's Hydrographic Survey warns of the dangers there. With adverse winds it must have been next to impossible for the Norse ships to advance against the racing water which is credited with a speed of five knots by the Hydrographic Survey. The dangers of Ginnungagap were real, and the descriptions of them in the "King's Mirror" is proof that the Norsemen actually navigated Hudson Strait, with its towering bleak walls of rock and fearsome tides centuries before Columbus came over to find America. The government tide tables given in this article will convey an idea of what mariners have to face in the strait.

Talk to a man who has had sailing experience on

Hudson Bay and he will tell you that the areas most feared by sailormen today are the Cape Wolstenholme section, at the western entrance to Hudson Strait, the Big Island area in the middle, and the eastern entrance.

From the Hydrographic Survey's tide tables, 1939, comes confirmation of this. The north west corner of the Labrador peninsula from Digges' Island to Erik Cove has a sinister reputation. The Canadian Government's report reads like a supplement to the medieval tales of terror in the strait.

From the Erik Cove to the Wolstenholme Cape the "heavy rips, swirls and eddies" "create danger to small craft in strong winds," and this is caused by "this deep body of water moving in one direction."

Here were some of the "abysses" and "whirlpools" medieval writers described and here were some of the "strong currents" the Norse sailors found. The Dominion government's report indicates that the Vikings had reached the western end of Hudson Strait, where they were entering Hudson Bay.

At the Atlantic coast entrance to the strait, the distance between Resolution Island and Button Island is some 30 or 35 miles. This narrow passage develops a current of six miles an hour,—almost the fastest recorded speed of Norse ships.

Thus at both its eastern and western ends and in its middle Hudson Strait is a problem to any kind of sailing ship, and it is a reasonable guess that it was in these turbulent waters that the strait with its $38\frac{1}{2}$ foottide and its high rock shores, earned its name of "Ginnungagap," the terrible. So 1,000 years ago the Norsemen with their cockle shell ships, feared this 450

mile passage as do our sailors in stout steam vessels today.

It is curious how numerous details of the report of the 1903-04 cruise of the Dominion government's steamer "Neptune" in Hudson Strait, and Hudson Bay tally with the accounts of the old writers. The cruise was in charge of A. P. Low, geologist. He says the western entrance is about 60 miles wide and 30 at Big Island in the middle of the strait. The ice free channel is down the centre. The drift current is from the eastwards on the north side. A ship entering from the Atlantic should keep to the north side to take advantage of a current of more than a mile an hour and to the south side when leaving Hudson Bay.

The "abysses" and "whirlpools" told of by medieval writers in "Ginnungagap," (Hudson Strait) perhaps are explained by Low:

"The Arctic current down Davis Strait . . . turns westward through the channel between Resolution Island and the north shore of (Hudson) Strait, while another stream sweeps westward around Resolution Island, where meeting the current flowing out of the strait the strong cross currents, tides and "overfalls" noted by the earliest navigators are found . . . These waters are quite unnavigable for ordinary (steam) ships owing to the great sheets of heavy ice borne backwards and forwards by the tides and currents . . . Care should be taken to keep some miles from Resolution Island as the strong currents close to the island cause the ice to move with considerable violence."

Thus as even steamships are in some danger at the Atlantic entrance to the strait, it would seem that the old Norse sailors had reason to dread Ginnungagap. Modern surveys of the strait confirm all the warnings we find written before Columbus landed in America.

All this recalls Ivar Bardsson's (15th century): "many whirlpools that there be all over the sea." Nansen says: "The idea of whirlpools in the northern seas appears to have been widely spread in the middle ages." In "The King's Mirror" (about 1250) is a reference to these which Nansen summarizes:

There is also mention in the Greenland seas of the strange and dangerous "sea fences" which are often spoken of in the sagas. The author (of The King's Mirror) does not know quite what to make of this marvel for "it looks as if all the storms and waves that there are in that sea gather themselves together in three places and become three waves. They fence in the whole sea so that men cannot find their way out, and they are higher than great mountains like steep summits," etc.

A very curious sea phenomenon. We read of a Newfoundland governor in 1905 writing "the clash of these two mighty streams (the meeting of the tides at Resolution Island) roared like a giant waterfall and produced powerful eddies and whirlpools."

There are strong tidal movements at Lancaster Sound, but not as great as at Hudson Strait; at Richmond Gulf in Hudson Bay "a very fast current;" and at Hamilton Inlet on the east shore of Labrador, the current runs seven miles an hour. Manifestly the "bores" at Nelson, Albany, Moose, and other rivers would bother the early mariners. With the dangerous "rips and swirls" off Cape Wolstenholme at the west end of Hudson Strait, the "dangerous" waters off Big Island, and the "roaring" waters at the Atlantic end, we may have the explanation of Bardsson's "many whirlpools all over the sea."

Mr. G. R. F. Prowse, Winnipeg, was kind enough to forward this note:

"On Ruysch's map, (1508) is a notation on Hudson Strait: 'Here a surging sea begins; here the compasses of a ship do not hold, nor are ships that have iron about them able to turn about'."

An English state document, written about 1575, has this to say about Hudson Strait: "But to find oute the passage oute of the North Sea, (North Atlantic) into the Southe we must sayle to the 60 degree, that is from 66 to 68. And this passage is called the Narowe Sea or Streicte of the Three Brethren, (the three brothers Corte-Real, Portuguese navigators) in which passage, at no tyme of the yere, is ise (ice) wont to be found. The cause is the swifte ronnyng downe of the sea into sea. In the north side of this passage John Scolus, a pilot of Denmarke, was in anno, 1476."

Sir Thomas Button, in 1612, came into Hudson Bay. Prince Henry's instructions to him show accurate knowledge of Hudson Strait:

"Being in (the strait) we holde it best for you to keep the northern side as most free from the pester of ice, at least till you be past Cape Henry; from thence follow the leading ice, between King James and Queen Anne's foreland, the distance of which two capes observe if you can and what harbor or rode is near them, but yet make all the haste you maie to Salisbury Island (at the western end of the strait) between which and the northern continent (Baffinland) you are like to meet a great hollowe billowe from an opening and flowing sea from thence," (the current out of Foxe channel that makes trouble in the Cape Wolstenholme area).

Captain W. Baffin came in 1615. He got through the strait. His opinion of a northwest passage was doubtful. He wrote: "But this I will affirme that we have not been in any tyde than that from Resolutyon Island, and the greatest indraft of that cometh from Davis Strayte."

Captain Davis in 1588 remarked the "strong tides" met with at the entrance to Hudson strait.

La Potherie came along with the French ships to wipe out the Hudson's Bay Company posts in 1697, and the currents and dangers in the strait took up some pages in his story. The ships were pushed around for many leagues in the Digges Island area, backward and forward. It was the same story that had been written for hundreds of years. He tried to account for the strange roaring sound at the Atlantic entrance. He speaks of the "snowy mountains" thus recalling that Leif used these same words in 1000 A.D. La Potherie saw these mountains and the saga writers got their information about them by report. This is the obvious difference in the two reports.

Tides and Currents

These notes and figures are taken from the Tide Tables of the Hydrographic and Map Service, Department of Mines and Resources, Ottawa:

In Belle Isle Strait the highest tide is $5\frac{1}{2}$ feet; in Hamilton Inlet on the Labrador Atlantic coast, $6\frac{1}{2}$ feet; at Cape Chidley at the Atlantic entrance to Hudson Strait, $14\frac{1}{2}$ feet.

TIDES IN HUDSON STRAIT

Port Burwell, near Cape Chidley	38½ 32 33¾	feet feet feet
Nottingham Island (west end H. S.)		
Digges Island (west end H. S.)		
HUDSON BAY		
Tavane, 200 miles north of Churchill	12	feet
Nelson River	141/2	feet
East side of Bay 3	and 4	feet
Churchill, perigean springs, 15 feet; apogean springs, 11½ feet; mean neaps 7½ feet.		
JAMES BAY		
Stag Island north of Rupert River,	9	feet
Moosonee	$7\frac{1}{2}$	feet

 Stag Island north of Rupert River,
 9 feet

 Moosonee
 7½ feet

 Ship sands (south shore)
 8¼ feet

 Moose Factory
 7¼ feet

 Rupert House
 6½ feet

(The above records are for springs tide, the highest.)

TIDES IN HUDSON STRAIT

Hudson Strait tides have an unusual range, the average at Ashe Inlet in the central part of the strait on the northern side being 31 feet at springs and 14% feet at neaps. On the opposite side at Wakeham Bay and Stupart Bay there is distinctly less, while in Ungava Bay the range reaches its maximum with a rise of 381/2 feet reported. The duration of rise and fall are almost equal and there is little diurnal inequality; but the semi-monthly variations are extremely large. The springs range is twice, and at some places almost three times the neap range and the variation with the moon's distance from perigee to apogee may occasion a difference of almost eight feet in the range of successive springs tides. The increase in range of tide from that of the Atlantic Ocean takes place abruptly in the region of the entrance to the strait for at Nachvak Bay on the Labrador Coast, near by, the mean tidal range is only 3% feet. It falls off sharply again towards the western end of the strait in the more open areas adjacent to Hudson Bay. Authentic information with regard to Ungava Bay is almost entirely lacking.

TIDES IN HUDSON BAY AND JAMES BAY

Information on the tides and currents of Hudson Bay has been gathered from various sources. At Churchill where long periods of tidal record have been obtained and which form the basis of the Canadian tide tables for that harbour, the tidal character is that of the open water type of tide but showing strongly the effect of the moon's distance as in Hudson Strait. This feature and the range of tide are about the same as at Nottingham Island in the western entrance of Hudson Strait, but in between and to the northward there are likely variations. At the south end of Coats Island for example the Admiralty chart notes a tide of six feet reported. At Tavane, about 200 miles north of Churchill, spring tides were determined as being 12 feet and neap tides 6 feet approximately; at Nelson in the river estuary 141/2 and 11 feet respectively, from long periods of observation. On the eastern side of the bay, tides of only 3 and 4 feet are indicated on the charts.

The tidal undulation progresses southward along the west side of Hudson Bay and aside from tidal currents, the general circulation of water in Hudson Bay is southward on the west side and northward on the eastern shore. There is an influx of water from Foxe Channel as evidenced by water salinities and a preponderance of flow south-westward was indicated when flood and ebb tides were observed in Fisher Strait (between Southampton and Coats Islands). Drift material also moves southward on the western This slow movement of the waters down the west side probably veers eastward in the lower part of the bay and parallels or joins the streams on the Labrador side that are indicated on the charts as constantly moving northward. Driftwood found along these shores far north of the tree line is natural evidence of this northward flow which bears with it much or all of the aggregate waters of the rivers discharging into Hudson and James Whether or not there is a return northwestward in the region of Mansel Island by a division of these waters is still to be learned, but in part at least the flow continues around Cape Wolstenholme and eastward out the south side of Hudson Strait.

HUDSON STRAIT AND DIGGES SOUND

The main tidal streams in Hudson Strait are strong and definite and no cross currents setting to either shore have been reported. It is likely, however, that the indraught to Ungava Bay curves the flood waters entering the strait somewhat to the southward so that the progress of the tidal undulation would be more rapid along the south side of the strait than on the north shore. Thus it is found that the time of high water at Wakeham Bay is only a little later than at Port Burwell while at Ashe Inlet, opposite, it is later still. The same relation holds for the time of low water at these points but it is likely the main ebb stream holds farther north across Ungava Bay than the flood.

It would be quite unusual in an area of this extent and connecting other great bodies of water, differing in character, if in addition to the ordinary tidal pulsation there were not general progressive movements or circulations of the water. Thus in the main entrance to the Gulf of St. Lawrence, there is an outward flow of water on the Newfoundland side of Cabot Strait and a dominant flow outward around Cape North.

That a similar condition obtains in Hudson Strait is more than conjecture. Icebergs which enter the strait can do so only around Resolution Island and through Gabriel Strait. In their southward journey from Baffin (Davis) Strait they are drawn in by the flood tide and some fail to go out with the ebb. Winds and eddies then displace them from the main course of the tidal streams, and they work westward with a general movement of the water in the northern part of the strait in that direction, and are eventually borne eastward if they should in any way be carried to the south side of the strait. They are found westward to Charles Island and one was reported as seen in the vicinity of Nottingham Island by the officers of the Hudson Strait Expedition of 1927-28.

Observations of the ice movement south of Resolution Island over a period of several months show the duration of flood tide and of ebb tide to be about equal, but this is not proof that an excess inward movement of water on the north side of the strait does not exist, for the necessary indraught is more than likely supplied through Gabriel Strait or it might be a deep undercurrent.

The outward flow from Hudson Bay is evident as a dominant easterly set of the tides along the northern side of Digges Islands and off Cape Wolstenholme where it becomes locally, and perhaps for some distance, a constantly outward current. Doubtless the movement continues along the southerly side of the strait completing the analogy with the currents in Cabot Strait.

CURRENTS - TIDAL STREAMS

The currents in Digges Sound and its approaches are not considered dangerous to navigation. By allowing his ship to drift during quiet weather and by the use of pole floats, Capt. Balcom of the "N. B. McLean" observed flood and ebb rates of 3.0 knots and 2.3 knots at spring tides between Capes Digges and Wolstenholme; a flood rate at springs of 1.7 knots off Fairway Island and Nuvuk Harbor, (south west of Digges Island) and an ebb rate at neaps of 2 knots in these latter localities. Between the North and South Skerries flood and ebb rates of one knot at neaps were found.

The flood approaches the (Digges) sound from the northeastward and turns to the southward on entering. The ebb flowing northeastward past Cape Wolstenholme turns eastward into a continuously outward current in this locality, the rate then being upwards to 3 knots as found at springs off Erik Cove, which slackens, however, to a low rate with flood effect. Off the (Erik) cove and extending westward to the Cape there is a shelf with moderate depths of 50 to 70 fathoms extending out for half mile or more from the shore: soundings then drop sharply to depths approaching 250 fathoms and this deep body of water moving in one direction, causes heavy rips, swirls and eddies over this shelf which, during strong winds create a danger to small craft.

Centrally in the (Digges) sound, off eastern Digges Island and off Staffe Island, the direction of the ebb is fairly with the channel; directions during the strength of the flood were not obtained. Off Ivugivik Point and Nuvuk Harbour the ebb runs fairly with the channel but the flood is more variable and turns somewhat toward the Nuvuk Islands at times, as found also to a lesser extent south of Fairway Island. One mile south of North Skerries flood and ebb were observed to run west and east. Other than in this locality the observations were taken in the middle of the deep water channel.

The few observations obtained appear to show that the ebb stream has much longer duration than the flood: from the north-eastern region of the (Digges) sound to Fairway Island the average flood period seems to be 4½ hours and the ebb 8 hours. No definite times can be given for the turn of the tide.

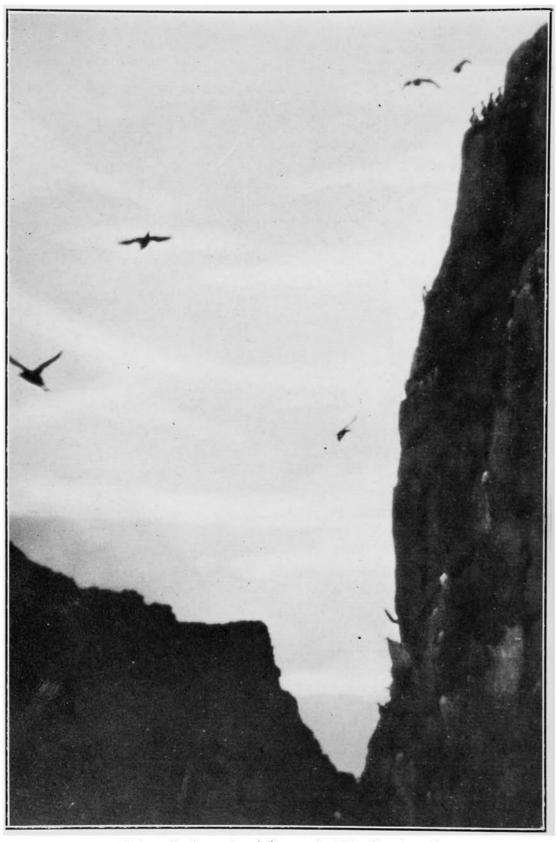


Plate 11A.—Along Hudson Strait westward for nearly 100 miles from Cape Wolstenholme these cliffs tower above the sea, a rampart from 1,000 to 2,000 feet high. Here tens of thousands of Brunnich's Murres form a spectacular sea-bird colony. Natives call the cliffs AGPA, their name for Murres. (Courtesy of Miss Lorene Squire and "The Beaver.")

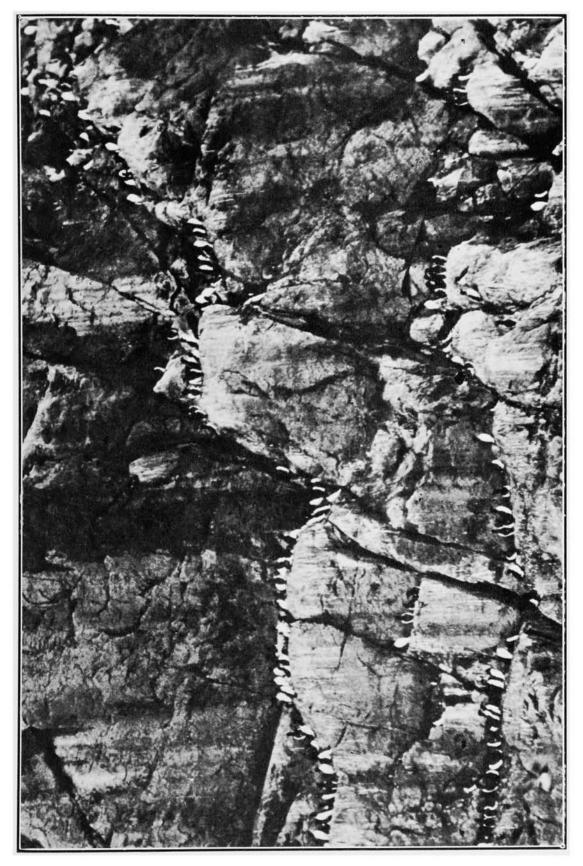


Plate 11B.—""Murre" is the American name for Europe's "guillemot." These birds do not build nests, and the eggs have flattened surfaces which prevent them rolling off into the sea far below. See "Can the Birds Help Us?" (Courtesy of Miss Lorene Squire and "The Beaver.")

Document V

CAN THE BIRDS HELP US?

Perhaps the birds of the old writers will help us find Vinland.

If we can determine the species of the "birds" of Eric the Red's saga it will help to locate "Straumsey," ("the island of currents or rip tides,") and also Straumsfjord, ("the inlet distinguished by currents or tides.") There are several points to consider here in the search for the entrance to Vinland.

The Hauk's Book, which refers to the birds as "eiders," was written about 1310 or 40 years after the Eric saga, which just calls them "birds."

Which of these terms is the more useful to us?

Were the "birds" eiders, murres, or guillemots,—all "specialized diving sea birds" of the north?

Only the Hauk's Book is definite in using the word "eiders." Are we justified in accepting it, or in considering the others suggested which are also northern birds and share many of the eider's characteristics?

If we would unravel the sagas it is advisable to often ignore the flow of the story and examine them sentence by sentence.

The story of Karlsefne in Eric the Red's saga is especially jumbled. Let us struggle with a reference or two in it, which seem to be reminiscent of the one place the Hydrographic Survey accentuates as having dangerous currents, and tides,—Hudson Strait. Says the saga:

"There was an island outside (a fjord) about which there were strong currents, so they called it Straumsey. There were so many birds on the island that a man's feet would hardly come down between the eggs. They held along the fjord, and called the place Straumsfjord."

The eider duck is an Arctic fowl which assembles in great numbers on the nesting ground. They in fact only come to shore to nest.

The "King eider" is a circumpolar bird, and the "American eider" haunts Labrador and south as far as Maine.

The "Northern eider" like the other two favors north eastern Canada.

Eric's "birds" may have been one of these, if we exclude the Labrador eider which became extinct over half a century ago.

The nesting habits of all of the eiders somewhat resemble those of murres and guillemots, who favor the north Atlantic particularly, living in the sea far off shore, frequenting outer reefs and rocky stretches of storm beaten coasts.

The Canadian Government's "Birds of Eastern Canada" has some information of interest in this matter.

Speaking of the murres, known also as guillemots, which are abundant along the northern east coast, and nest in large colonies among rocks, this is given:

"The numbers of murres that will occupy a nesting is sometimes remarkable. At the edge of the rocky shelves they gather as close as they can stand like files of soldiers, bearing strong resemblance to the lines of penguins that are familiar to us in pictures."

The bird is classed: "Family, alcidae, — auks, murres and puffins."

These birds are "never or rarely found in the interior on fresh water." "Breed in large colonies often of mixed species on rocky islets or inaccessible seawashed cliffs. Build no nests but lay their eggs directly on the ground." Frequent the open sea and are distributed "from our southern borders to the Arctic." "A strictly maritime species." Come ashore only to breed, and crowd each other in laying eggs.

Turning to the general title of "eiders," the Government's book notes nesting habits as follows:

"On the ground near water, sometimes under shelter of overhanging rocks or bushes; nest lined with down from the parents' body." "Distributed over the whole of Canada, nesting in the north."

Under the heading "eider duck" the nesting for all kinds is described: "on the ground, nest built entirely of down."

From the above it would seem that Eric's "birds" and the Hauk Book's "eiders" may have been guillemots, as their nesting habits seem to be closest to the Norse description. Or our common murres.

The reader may have his choice. But whichever of these far northern birds he chooses, he must remember that by doing so he is in danger of accepting a northern entrance to Vinland.

It is now known that the greatest wild duck nesting grounds on the continent extend from the marshes of James Bay up into Baffinland,—the particular home of the blue goose. Hudson Strait is a favorite haunt of duck and goose.

Thus we may not be far wrong in assuming that Karlsefne's duck island was in the Arctic region; and particularly that this "rip tide island" was in an inlet notable for a strong current.

We cannot overlook in our search for Vinland an area of strong currents frequented by northern sea birds,—apparently the entrance to it.

THE FIRST DISCIPLE

I am convinced you have found Vinland. the Good.—C. M. Moon, News-Herald, Victorville, California, Jan. 13, 1939.

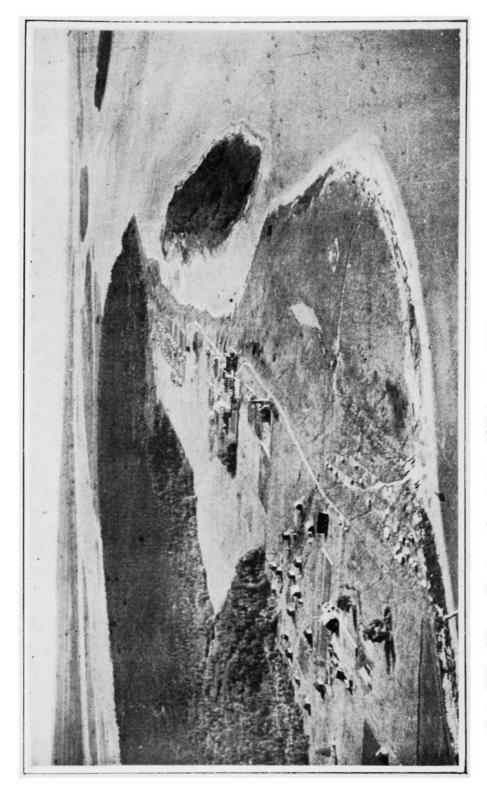


Plate 12A.—Moose Factory, founded in 1671 by the Hudson's Bay Company near the mouth of the Moose River, Ontario. (Courtesy of Hudson's Bay Co. and Associated Screen News.)

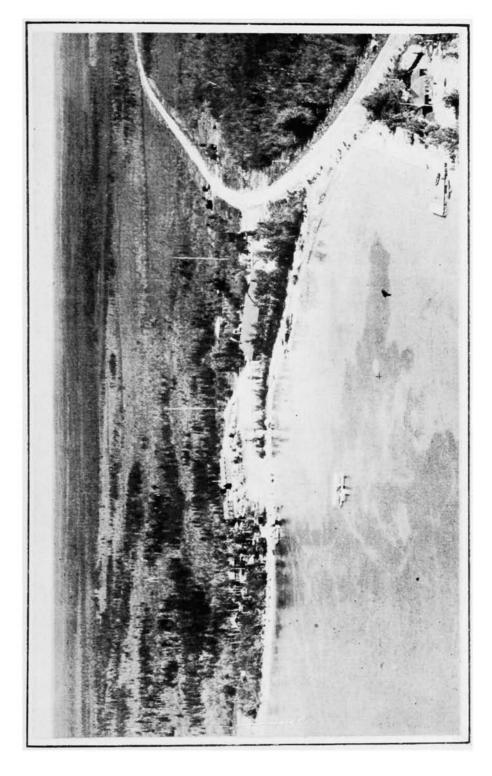


Plate 12B.—Cormorant Lake, north of Lake Winnipeg, showing type of country. (Royal Canadian Air Force camp and photo.)

Document VI

HOW HUDSON BAY FITS THE SAGAS

(See Map)

FROM WHAT IS NOW known of the physical features of Hudson Strait and Bay, it seems evident that some of the references in medieval writings were to the dangerous Wolstenhome area, at the west end of the strait. So we may be entitled to deduce that this meant that Norse sailors had been through the strait to the bay.

Hudson Bay is 594 miles wide in its widest part, and about 950 miles long including James Bay, which is 250 miles in length. The rugged east shore has many rocky islands; the low west shore some sand shoals. James Bay is shallow, the sailing channel being in the centre. Thus the shores are difficult to approach. For this reason Hudson's Bay Company ships land cargoes at Charlton Island. For almost 100 miles inland from James Bay to the west and south west the country is swampy and the rivers hardly move.

Churchill is the only harbor on the east shore of Hudson Bay. The Nelson and Moose river mouths with sand bars are only roadsteads, the ships having to lie off shore. The Dominion Government wanted to use Nelson as a terminal for the Hudson Bay railroad, but couldn't make a harbor there. The Hayes river, only a few miles south of the Nelson, offers a fairly easy canoe route to Lake Winnipeg, a series of lakes in flat land being part of the route. The Hayes has always been popular as the place to build trading posts.

Father Albanel went 20 leagues up the coast of James Bay from Rupert House. In his letter quoted in the Jesuit Relation of 1671-72 he wrote:

"It passes belief how far the sea recedes at low tide... all that vast stretch as far as the eye can reach presenting nothing but mud and rock... and nearly all being left bare of water."

This was on a three day journey north from Moose River, and the father noted "blueberries, little red apples, dark peas, and an abundance of gooseberries." Albanel's Indians told him the beach was 20 leagues (60 miles) wide. He states that the tide backed up the Rupert River four miles. It does run up the Hayes eight miles and the Nelson 25 miles.

Mr. C. A. Schiller, experienced Sault Ste. Marie flyer, who has flown over the Hudson Bay area and spent a couple of years in its northwestern area gives a good picture of the great inland sea. He didn't travel over Hudson Strait but ship captains told him that a west wind will drive the drift ice so solidly eastward that it can't be "bucked" at times. This adds to the difficulties made by the tides in the confined rock areas.

The high east shore of the bay is very rocky with deep water. The low west shore is marked by wide mud beaches and Mr. Schiller has been stranded "a mile or two" out from shore. Thus the east and west shores are markedly different. The extreme northern part of the west shore is however rocky. The tree line on the west shore ends at Churchill, and on the east shore in the same latitude. The rocky Belcher Islands (about 56 degrees) have practically no trees, and little driftwood.

Follow the bleak shore line of Labrador from Hamilton Inlet on the Atlantic coast through Hudson Strait and down to Richmond Gulf which is half way down to Moose Factory on Hudson Bay and the whole of this is barren and devoid of trees except for two places: a commercial forest up from Hamilton Inlet along the Hamilton River; and another inland on Ungava Bay in the Koksoak River valley. Thus these forests would be the nearest to Greenland. From Richmond Gulf south the shore is fairly wooded more or less. west shore of Hudson and James Bay there is no tree growth on the shore except for a few miles north of Churchill, a 50 mile stretch south of York Factory and then no trees till 100 miles north of the Albany River. But, especially in James Bay area, the tree growth is quite good along the river banks. The whole country is swampy and only rises to the west 750 feet in 75 miles.

The Albany (navigable for 250 miles), Moose, Nelson and Hayes have some wood. The swamp area west of James Bay has to be passed before there is a vigorous tree growth. At Albany poplar is used as fuel. It may be that the river mouths have had their wood supply cut, as some of these points have been "occupied" for a very long time.

At the mouth of the Albany River the land is low. If

one of the channels around the H. B. Co's island becomes choked with ice in the spring breakup, goods are moved to the second story. Canon George Prewer, the former Anglican missionary was in the habit then of moving his family up stream a dozen miles to escape the flood, which rose several feet in his little church.

The Department of Lands and Forests of Quebec describes the east shore as follows:

"The eastern side of Hudson Bay may be divided into two regions: the northern part, which is covered by what we call the tundra formation, extends from Cape Wolstenholme, south, to Lake Minto, (half way to Moose River). This country is the kingdom of mosses and lichens, particularly the "caribou moss" (cladonia rangiferina). The soil is always frozen to a great depth and thaws on the surface for only a foot during the short summer period. It is a barren country, when forest vegetation is practically non-existent and when found is of a scattered and stunted character. However a varied growth of shrubs of the Heath family is scattered everywhere. The southern part, south of Lake Minto to Fort George, shows better tree-growth although still scattered and rather stunted. The species represented are black spruce and balsam fir, with a few birches and Jack Pines. black spruce swamps and treeless moors are encountered, but where soil conditions are more favorable, such as around some of the lakes and in the better sheltered valleys, a much denser forest occurs."

On the east coast is Richmond Gulf with a six-mile tide at its narrow entrance.

"The Eskimos," says Mr. Schiller, "are good workers, and superior to the Indians of Hudson Bay as hunters and trappers. They bring down white fox skins from north of Churchill and much other fur including seals. They are bright, intelligent and industrious. They have more of a Mongolian look than the Indians." (Note that the old records seem to give white fox skins as one of the principal Greenland exports.)

Karlsefne steered "south east" from Helluland going to Vinland. When he came through Hudson Strait, he would do as all navigators now do,—proceed well towards the west coast of Hudson Bay to avoid the numerous islands and rocks on the east coast of the bay. This would give him a "south east" course to James Bay. Knutson (?) in 1362 went "west from Vinland" and found himself in Minnesota. A glance at the map of Hudson Bay will clarify the above points.

From the Encyclopaedia Britannica: "James Bay is much shallower than Hudson Bay and unfit for shipping save for a central channel . . . The west shore . . . (of Hudson Bay) is absolutely free of shoals, rocks and islands" but the east coast has small islands for 100 miles out. Hayes River, (just below Nelson River), is "the old boat route of the voyageurs to Winnipeg." "Spruce, balsam and poplar grow to a fair size as far as the northern limits of James Bay." "Around much of James Bay extend marshes and swampy ground." "The compass often refuses to work in Hudson Strait owing to its proximity to the magnetic pole (in Boothia). Hudson Bay Company's sailing ships found safe sailing season from July 15 to October 1. Steamers can safely use the strait for four months with care."

Apparently the sagas' references to "very shallow water" and "a long way between their ship and the water" would apply to a great deal of the west shore of Hudson Bay and James Bay. "The country was flat and overgrown with wood, and the strand far around consisted of white sand and low towards the sea." This saga description would fit much of the west shore

from the Churchill River south, a difficult shore for landing.

Take the passage: "Thorvald with his merchant ship proceeded eastward (across Hudson Bay to its east shore?) and towards the north along the land." This sounds like a description of a journey from say the Hayes River to the East shore of Hudson Bay and thence north to the Hudson Strait.

From "The Cruise of the Neptune" by Commandant A. P. Low:

"That evening (September 12, 1903) the ship was headed for Cape Wolstenholme, (at the western entrance to Hudson) and early next morning came to anchor in Erik cove, close to that headland... On both sides, hills from 800 feet to 1,500 feet afford good protection against all but north winds. Unfortunately the bay is V-shaped, and quite open to the north, so that with strong winds from that direction it would be unsafe, and, during the season of ice, the ice would be liable to block, and to force a ship on shore without much chance of escape." Low emphasizes the strong tides and currents there in the strait.

From the Neptune's log, Fullerton Harbor, north of Chesterfield Inlet, east side of Hudson Bay, to Point Burwell, near the east entrance to Hudson Strait, July 18-25:

"Broke thru ice at Fullerton. Loose stringers of ice off shore. Only occasional lumps in open sea. Stringers off Southampton and Coats Islands. Ice forced ship close to Coats Island. Open leads to Mansfield (Mansel) Island of low limestone. Patches of water near Digges Island. Found west end of Hudson Strait filled

with ice from east and south currents. Fast in ice three miles west of Digges Island. Drifted with ice to five miles east of Erik's cove. Persistent ramming forced ship to five miles east of cove. Steamed east in lane. Bold rock coast, Digges to Charles, 100 miles, then less abrupt. Rapid drift east to Douglas Harbor. After drift of 20 miles went north to open mid-channel. Little ice from Douglas to Point Burwell across Ungava Bay. Ships should take centre channel well off Big Island midway in Hudson Strait, where ice is dangerous."

Leif's men in 1000 noted that the salmon in Vinland "were larger than any they had seen before." Mr. Low notes that this fish on the west shore of Hudson Bay north of James Bay was "superior to the best Pacific coast salmon." This would seem to put Leif's landfall in Hudson Bay.

Low notes that the mouths of all the west coast rivers had sand bars. Leif remarks the difficulty of getting to shore. Larger ships have to lie "several miles" out. The Norsemen found "wonder" strands. Low tells of the very low shores and the beaches miles wide. Leif remarked the forests in Markland and Low notes the "large areas of pulpwood and spruce."

Document VII

ESKIMO, CREE AND WOODEN BOAT MEN

The language feature of the Norse discovery of Vinland deserves attention. Its importance in reaching a conclusion acceptable on historic grounds can hardly help growing. It is only in the hope that a competent philologist may become interested in the matter that the writer presumes to deal with some features. There is a deal of fog to plow through and the experts do not seem to pull together.

Early mention of the name "Eskimos" was made by Father Hennepin in 1698 as "Esquimones"; by La Hontan in 1703 as "Eskimaux"; and by John Oldmixon in 1708 as "Eskeimoes" and "Eiskemoes." Oldmixon got the word out of the Hudson's Bay Company records which had been kept since 1670, and it was probably the company's faithful scribe, Thomas Gorst, who first recorded the word as we know it.

Do the Eskimo or Cree languages yet retain words that tell anything about early Norse visits? Where do the words "Eskimo" and "Cree" come from, as they are not recognized as their own by the people who bear these names?

Taking first the Eskimos, who were the first American people to have knowledge of the Norsemen in Greenland, and apparently also in the Hudson Bay area, is there any reason for doubting what historians have written about them?

The Eskimos were driven north when the Crees secured guns. Up till near the end of the 17th century, the Eskimo had come as far south as Belle Isle on the Atlantic coast, and had Hudson Bay and James Bay pretty well in hand. But with the European weapons to contend against he retired to Hudson Strait on the Atlantic and to his Chesterfield Inlet home on "the bay." Before that the Eskimo, a good fighter, had been able to hold his own.

It is evident that the Vikings did not have a high opinion of the native race they found in America. The sagas tell us the Norsemen called them "skraelinger," which is variously interpreted as "inferior people," "small people," "barbarians" and so on. We hear that Karlsefne's men killed eight out of a party of nine apparently sleeping under three "skin boats." This was about 1020. This inauspicious opening was not the last of the battles. The Norse weapons of the 11th century, (1000-1100) found at Lake Nipigon seems to show that the white men thought it well to go armed. Passing over the killing of Knutson's ten men in 1362, we read of the encounters of Captain Frobisher's crew with the "skin boat" men in 1576, resulting in deaths on both sides, as well as of the kidnapping of five of the English crew, besides other encounters.

In 1612 Father Pierre Biard, S.J., after seven months in Nova Scotia, reported that he had never met the northern people he indicates as Eskimos but said they had a reputation as being "treacherous and tricky."

Then in 1633 Champlain records that the tribes "to the north" (of the St. Lawrence) were "irreconcilably hostile" to the French. He does not give their name. He says that the French (fishermen?) had killed the wife of a chief but is silent about the reason or whose fault it was. Apparently the Eskimo blamed the French.

Whence Came the Word "Eskimo"?

Father Biard, writing from Nova Scotia to his Provincial in France in 1612:

"The shores of the gulf (St. Lawrence) and the rivers are occupied towards the north by the Excommuniqui, or as they are commonly called the Excommunicati which has been guessed to mean Excommunicatio . . . Neither the Excommunicati nor the . . . are well known to the French."

In Prowse's History of Newfoundland is this: "The name Esquimaux is a French corruption of the Abnaki word Eskimatsic, an eater of raw flesh . . . Eskimo is the Danish form of the name and has now the old French form. They are probably dubbed "Excommunicated" in Biard's time because of the marked hostility to them of all the other savage tribes in Canada and the French early joined in opposing them."

Captain Frobisher made voyages to Hudson Strait in 1576-7-8. His mapmaker placed the word "bacalaos" on the Labrador peninsula just south of the strait. The word is Basque for "codfish." Cartier in 1534 was the first European to ascend the St. Lawrence. He noted that the people of the gulf used the word, a proof that these Spanish fishermen had long frequented the New-

foundland fisheries. Canada was first known as "Bacalaos." In Frobisher's time "Bacalaos" was seemingly Labrador to the English while the word "Canada" was restricted by them to the St. Lawrence region. Does this signify that the Basque fishermen went almost up to Hudson Strait for cod? If so the Eskimo apparently did not come much farther south than this strait. Which would help to explain Father Biard's allusion to them in 1612 as "infesting the northern rivers," and thus making it improbable that it was a Nova Scotia tribe, the Abnakis, who invented the word Eskimo.

The Abnakis, a Maine Algonquin tribe, were nowhere near the Eskimos in recorded times, and the Danes didn't arrive in America till 1721,—too late for them to be authors of the word. The Danes got the word Eskimo "from the Algonquins" according to Webster's dictionary. The "Algonquins" in this case of course were the Crees, who had also given the word to all their Indian neighbors.

From Lemoine's Dictionnaire Français-Montagnais, (1901):

Esquimaux,— Katshekuashueunts, Katshekuashueu, (si l'on ne parle que d'une d'entre eux,—if we are speaking of only one among them); Katshekuashueushkueu, (si l'on parle d'une femme,—if we speak of a woman). Approximate English pronunciation: Kawshekwashwens.

Meshtuk, tree, stick.

Meshtukush, wooden canoe, coffin. (English pronunciation, maystukoosh.) This is apparently the word Champlain wrote as "matigoche" and "mistigoche."

Ashkun, ashkushu, (long "a") terminations indicating "wood."

A comparison of Cree and Montagnais dictionaries reveals much similarity in the two dialects. Even more than the Cree the Montagnais likes the "sh" sound.

Archdeacon Faries, in his English-Cree dictionary says "Eskimo is a Cree word," and in a list of cognate words seems to make an unassailable case for his statement. He gives these words bearing on the point:

Ayuskemao, (pronounced ayuskemayo), an Eskimo. Ayuskemawew, he is an Eskimo; literally a raw flesh eater.

Ayuskimoo, he eats raw flesh.

Eskimo, a raw flesh eater. "The Cree name for Arctic people."

The Ojibway language has these in Rev. E. F. Wilson's dictionary:

Askebood, an Eskimo.

Ushkebo, he eats things raw.

Rev. F. Baraga's English-Ojibway dictionary, (1858) has:

Eskibod, an Eskimo.

In Lemoine's Algonquin-French dictionary, (1911) is given:

Ashkipok pezhik towa, an Eskimo man: (literally: this man (is) raw meat eater).

Ashkipo, to be an Eskimo.

From Father A. Lacombe's French-Cree dictionary, (1874):

Askin, or askitin, c'est cru. (The meaning of the

French adjective "cru" is crude, unconcocted, blunt, hard or raw).

Askiwiyas, viande cru, (raw food).

Askipuw, il mange cru, (he eats raw).

In the same dictionary on page 706 among the derivation of names is:

Esquimaux,—Cree from the root "aski," which signifies something crude or raw, and "mowew," (he eats it), "Askimowew" (he eats it raw) or perhaps "askimow," (he eats raw). (The initial "a" in the word "aski" is pronounced like "u" in "but.")

In the Abnaki language: Eskimantsic, (Americana Encyclopedia).

Other Algonquin languages have similar forms to the above, but there seems to be no doubt that the word the white man uses is taken from the Cree. So long as the white man has known the Cree the tribe has used the word "Eskimo."

Faries' claim for a Cree origin cannot be lightly questioned. It would be entirely natural for the Crees, the nearest neighbors of the Eskimos, to invent the word. The two peoples jarred on each other and the disagreeable eating habits of the Eskimos were particularly objectionable to the Crees. The name expresses their disgust and like so many other Cree names and words it spread to their southern neighbors, the Ojibways, Ottawas, Algonquins, and Montagnais, as well as farther afield as is shown in Biard's word, apparently not a good reproduction of the sounds in Esquimo but probably an attempt. For why should a tribe the French didn't know very well, and had not started to

Christianize be "excommunicated?" The records go to show that the Vatican ardently sought to bring them within the fold.

There is no record of the Eskimos having been excommunicated. On the contrary in 1492 the Vatican offered the office of bishop to an ecclesiastic if he would go to America and bring the people of the bishopric back to Christianity. Vinland had been included in the Greenland diocese since the 12th century.

It seems improbable that a pagan Hudson Bay tribe would adopt a Latin name for their close neighbors. Can it be that the Crees forebore to pick a name out of their own tongue for the people they had lived beside for hundreds of years that would express the dislike they had of that people's filthy eating habits,—their chief characteristic as the Crees saw it? Is it possible that they waited till a man speaking a tongue unknown to them invented a word,—which of course they couldn't hear of very handily—and that when they did hear it they selected a word out of their own language to rhyme with it? These historical explanations sometimes need a lot of imagination.

And what bearing, you ask, has the origin of the word "Eskimo" on the question of the Norse penetration of the Great Lakes area?

For one thing it suggests that as it was the "skin boat" men, Eskimos, who first met the Norsemen in Vinland, that that fabled area was frequented also by their closest neighbors and constant enemies, the Crees. Thus the likely location of Vinland began in territory known by Eskimos and Crees and there is no such territory anywhere that so closely meets the sagas' de-

scription of the place where Leif discovered land to the west and also meets the topography as credited by the sagas to Leif, Karlsefne and to Eric's sons as the shores of Hudson and James Bays.

"Wemistikose" Is a Moose Cree Word

This naturally brings us to a consideration of the Cree terms that seem to have been born with the arrival of the Norsemen.

If you look at the map of Canada it will be seen that the Crees of Moose River at the southern end of James Bay, occupy the centre of the Algonquin family of nations pretty much today as in the time when the French took possession of the St. Lawrence over 300 years ago. The point is worth noting as affecting the spread of the name they invented for the first white men who appeared on Hudson Bay almost 1,000 years ago. The Crees had many Algonquin neighbors speaking their own group language:

To the east and south east of Moose Factory, the Montagnais of Labrador and the St. Lawrence, and across the river the Abnakis; west of the Montagnais were the Attikamegs of the St. Maurice region just over the height of land from James Bay.

South of James Bay—the Abitibis; the "Algonquins" of the Ottawa river; the Nipissings, and the Ottawas of Lake Huron.

South west,—the Ojibways of Algoma and Lake Superior, and also their neighbors in Michigan and Wisconsin.

Then west to Lake Winnipeg, the Crees themselves;

coming in touch with the Assiniboines, their allies who spoke a Sioux dialect.

Couple with this strategic central position, the fact that the Cree name for "white man" is used today by all these Algonquin tribes in one form or another.

Thus we have an explanation of how this word, "wemistikose," has been spread all round the circle.

In considering the influence of the Crees on their surrounding kin of Algonquin stock, it should be remembered that formerly even more than now the Crees were more numerous than any of these groups. They were prominent from Hudson's Bay to the Rocky Mountains. Their vigor was remarked by whites. Teachers in Indian schools give them credit for a superior ability to absorb an education. The French compared them to the Gascons. They have been the leaders in Algonquin warfare against the powerful and numerous Dakotas or Sioux. It is understandable that from their numbers and the widespread area they occupied that their dialect would affect the smaller groups, which they are inclined to regard as inferiors. Their word "Eskimo" thus naturally spread to all groups they were in contact with with its form affected a little by neighboring dialects.

Consider the extent of territory covered by Cree names: Mississippi, Winnipeg, Mistisinne, Chicoutimi, Mattawa, Michigan, Saguenay, to mention a few; and some words in common use: tomahawk, Eskimo, shagunappe, muskeg, pemmican, squaw (from iskwayo, woman), babishe, wikiup (from mekewap, tent?) sagamite, and so on. No other northern Indians so impressed their language upon outsiders.

Let us see how the word for "wooden boat" was written by the Indian dictionaries, beginning with Archdeacon Faries', which spells it "wamistikose," (long "a"):

"Wamistikosew, a Frenchman or Englishman. Wamistikosewew, he is French or English or any white man."

"Frenchman: wamistikosew, Plains Cree; pakwayes, Swampy Cree. (Plains Cree also use pakwayes for Roman Catholic, and Swampy Crees use wamistikosew for white man generally, but there is some confusion in the use of both)."

"Englishman, akuyasew, Swampy Cree and Plains Cree; wamistikosew, Moose Cree."

"Note: The Crees in the Hudson Bay district speak of any Englishman or any white man as Wamistikosew, while the Crees on the prairies mean a Frenchman when they use the same word. The word Pakwayes is generally applied to a Frenchman, but is also used for Roman Catholic, perhaps because most Frenchmen are of that religion."

In Rev. Edward Wilson's English-Ojibway dictionary is given: Wemetegooche, a Frenchman.

In Father A. Lacombe's French-Cree dictionary is:

Wemistikojiw,—Un Francais, un Canadien, un blanc, un homme civilise, (a Frenchman, a Canadian, a white, a civilized man). (In English the French "J" has the sound of "zh"; it is sometimes written in French "tch.")

Wemistikojiwew, il est français, il est homme civilise, (he is a Frenchman, he is a civilized man).

Rev. F. Baraga's English-Ojibway dictionary: wemitigoji.

Thus we see that Lacombe and Faries say the word discussed is applied to all white men. Both of these missionaries have labored among the Crees. Wilson and Baraga had purely Ojibway missions hundreds of miles south of James Bay, and apparently thought the word applied only to Frenchmen. Mistakenly our Ojibways and Algonquins themselves think they were the originators of the word, though they have, unlike our Crees, no clear explanation for it. This probably arises from the inability of the Crees and these tribes to talk understandingly to each other. On both sides the idea is held among Indians interviewed by the writer that the languages are unrelated or practically so.

Champlain wrote "mistigoche" in 1610. He was on the St. Lawrence river at the time. He seems to have gotten the word from the Montagnais.

In 1633,—that is 23 years after,—Father P. LeJeune, S.J., recorded that the Montagnais gave him this word: "ouimichtigoucheio."

But like the Ojibway, the Algonquin and the Ottawa, LeJeune's Montagnais was a little foggy about the meaning of the word, as Father LeJeune translates it:

"A man who works in wood, or who is in a canoe or vessel of wood. They saw our ships which were of wood, their little canoes being made only of bark."—Jesuit Relation of 1633, page 121.

This is at least closer than the Ojibway guess of "a wooden beak."

Ven. Archdeacon Faries wrote to the Editor of the Sault Star from York Factory on January 27, 1939, (after having apparently received the first 14 articles in the Star out of the 26 printed) a much appreciated letter in which he explains much in one sentence:

"The Montagnais is the hill tribe of the Cree nation, found in the Laurentian Hills from the St. Lawrence River to James Bay and the dialect is nearly the same as the Moose Cree."

A letter to the Ontario Provincial of the Society of Jesus, which maintains missionaries among the Montagnais, brought confirmation of Mr. Faries' statement:

"The Montagnais (of the Algonquin family)... are found on the prairies, in the far north of Ontario and on the coast of Labrador. They speak the Cree dialect, very similar to the Ojibways..."

LeJeune's "ouimichtigoucheio" is based on the old Cree form "wemistikose," though the Crees have colloquially shortened this word to "mistikose." It was this short Cree form Champlain recorded though he used a "g" instead of a "k" in spelling it. The Crees don't like a "g." Faries ignores the letter in his dictionary. "The sound is seldom heard, and only in localities where the language has been influenced by the Ojibway (or Saulteaux) tongue."

Thus it is explained how the Moose Cree word was carried across the Laurentian Hills and down the

Saguenay river to the St. Lawrence and so reached Champlain in its shortened Cree form, and LeJeune, 23 years after, in the old full Cree form, which all the Algonquin group use today,—except the Moose Crees themselves.

Dr. Wilfrid Barolet, Indian agent at the Montagnais reserve at Bersimis, 200 miles east of Quebec on the north shore of the St. Lawrence, writes that Crees and his Bersimis Montagnais do not understand each other at first meeting. His people, he says, do not recognize "wemistikose," "wemistikose-watik," "oose," (boat), or other Moose Cree words submitted. They call a canoe "ush"; wood in general, "mistouk"; and oak "ka mishkushit mishtuk", ("wood which is hard").

The very rare Montagnais dictionary compiled by Rev. George Lemoine, O.M.I., and kindly loaned to the writer by Rev. D. Doucet, the devoted missionary at Bersimis, Quebec, makes it clear that "wamistikose" is not a Montagnais word.

Rev. R. Faries says the word is restricted to the Moose River Crees. It is so local that their fellow tribesmen on Hudson Bay, the Swampy Crees, who speak the same language, do not use it but have invented a name of their own, "akuyasew," which means "he comes sailing, he sails to shore, he is blown on shore."

From all this it seems reasonably certain that the first recorded American name for the white man was invented by the Moose River Crees on James Bay.

The writer is indebted to Mr. M. Christianson, general superintendent of agencies, Department of Mines and Resources, Indian Affairs Branch, Ottawa, for his help in this matter.

Algonquin Dialects Resemble Each Other

Passing an attractive shore spot for dinner on a northern lake one of our Crees exclaimed "Meloshin." This was his word for "handsome." One of our party asked what he meant and his reply was: "You can't beat it." The Ojibway would say "menoshin." Only the Moose River Crees among all the Crees use the letter "I" and this is perhaps from proximity to the Montagnais. The Ojibway doesn't use the sounds of "I" or "r" and others of the Algonquin group have letter likes and dislikes. This is one thing which differentiates the various "languages."

Hereunder is a comparison of some words from Montagnais, Cree and Ojibway. These words are from Lemoine's dictionaire Francais-Montagnais, Faries' Cree dictionary and Wilson's Ojibway dictionary. Making allowance for the difficulty of catching the exact sounds in an unaccustomed tongue, and for variation in letter values in the English and French languages, it may be guessed that many of the words are really identical in the three dictionaries. Compare the word for "gold" in the list herewith,—"yellow silver."

The compilation is made to show the close connection of the so-called Algonquin languages. The original Nipissing "Algonquin" who "sings his words" according to the Ojibway, seems to have the "Oxford accent" of the Algonquin group. He is said to make himself fairly well understood by all the tribes in the group. The Cree, however, from his numbers and his widespread activities had the greatest influence on other "languages" not his own.

The French form of words in the Montagnais column will bother the English reader. "Gama" (French form) seen in many of our lake names is pronounced "gummey" in English.

The common origin of Montagnais, Cree, Ojibway, Algonquin, Ottawa and other languages of the "Algonquin" (a word which no Indian recognizes) is obvious.

The French value of "u" and such combinations as "ueu" (yeugh?) is difficult to reproduce in English.

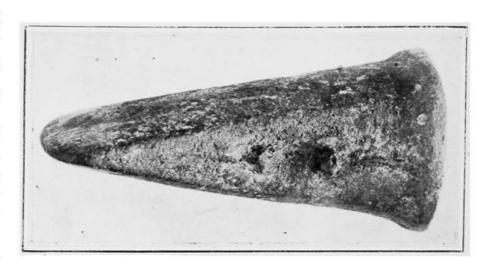
Biard in 1612 found his knowledge of the Montagnais language gave him a restricted entre to the Algonquin. Possibly the Devon man then had as much difficulty understanding the Yorkshire man. Dialects are bound to evolve in isolated areas.

ENGLISH	MONTAGN'S	CREE	OJIBWAY
	(French form)	(English form)	(English form)
wood or tree	meshtuk, mistouk	mistik	mitig
wooden	meshtukuu (meshtokwoo)	mistiko	metigoo
wood (in comp.)	ashkun	atik	ahtig
firewood	mitta	mite	mesun
ship	napekuian	nipikwan (Plains Cree)	nahbequaun
any white man	1	wamistikosew (Moose Cree)	
Frenchman	mesht ukush u, ilnuts	mistikosew wemistikosew	wametegooshe
England, Scotland	aglishau ut assi	wemistikose- wuske (Moose Cree.) Swampy and Plains Crees: Ukamuske, (land over the water;) Ukamikichekume, (land across the big sea;) Akuya- sewuske, (sailor's land.)	

ENGLISH	MONTAGN'S	CREE	OJIBWAY
France	(French form) meshtukushiu assi	(English form) wemistikose- wuske	(English form) wemetegooshewuhkee
oak	ka mishkusit meshtuk	wemistikose- watik (wooden boat wood)	mitigoomeezh
English (language)	aglishauimun	wemistikose- moowin, M.C.; akuyasemoowin, S.C. and P.C.	shauguhnaushë- moowin
Englishman	aglishauto, nete nuts, ilinium	wemistikosew, M.C. akuyasew, S.C.	shauguhnaush
sword soldier earth, soil kettle cariboo, deer man to be small	ashimagan ashimaganash assi (usse) assuk atuk ilnu (enu) ipishishishin	simakunis uske uskik utik eninu, eyinew upisesisew, upisasin	ahzhahwashk shemahgunish uhke uhkik ahtik, adig enene, inini onishishin
woman	ishkue (ishkwa y)	iskwayo (long A)	equa
girl	ishkuesh	ishwasis	equazans (little woman)
whiskey	ishkuteu apui	ishkota wapo	ishkoota wahboo (fire water)
fire it is high up bad island well (good) it is handsome gold it is large book large, adj.	ishkuteu ishpimits matshi menishtuk milu milushin uishauau shuliau mishau mishau mishau	ishkotao ishpimik muchatisew ministik meyo meyosisew osawe sooneyaw misaw, etc. mussinuhikun misaw, misikitew	ishkoota ishpeming mujje menis menouhyah mahmundang osuhwah shooneyah mechab muhzenuhegan keche, mechab
iaigo, auj.		mistuhe, mise, mese, etc.	
shoe knife moose fish	mukassin mukuma n mush namesh	muskisin mokoman mooswu numas (long A) M.C.	muhkesin mookomaun moons keego
trout	mashkume- kush (long A)	numakoos (long A)	namahgoos

ENGLISH	MONTAGN'S	CREE	OJIBWAY
	(French form)	(English form)	(English form)
sturgeon	nameu	namao (long A)	nahma
point of land	neiats (neyas)	nayaw (neyaw)	nayaushe
thunder	nimissuto	onimiskewuk M.S.	uhnemeke
bed	nipeun	nipawin	nebahgun
water	nipi	nipe	nebe, nebeesh
otter	nitshuk	nikik	neegig
shallow	pak uashu	pakwaw (shoal)	bahgwah
sand	lekau	yakow	pingwe
gun	passigan	pashisikun	paushkesegun
to fall	petshishin	pukisin, pukitin	pungeshin
grease	pimi	pimi, pimekan	pemeda
(the sun) rises (dawn)	shakashtueu	sakastao	sahgewaosa
duck	shiship	sesep	shesheeb
deep (water)	temiu •	timew	timew
mountain, hill (in comp.)	tin, tinaw	dinaw	denah
sea gull	tshiashk	keyask	kuhyaushk
day	tshijuk	kesikaw	kezhegud
it is long	tshinuau	kinosew, (adj.) kinwao, (adv.)	kinwahmuhgud
garden, field	tshishtikan	kistika n	ketegaun
sea	uenepek	wenepak (long A) kichekume	keche-gumme
birch	ushkuituk	wuskwiatik	wigwaus
canoe, boat	ush	oosee, oose, ose	cheemaun
birchbark	ushkuituk- ulitsheshk	wuskwi	wigwaus
town	utenau	otenow	odanah
muskrat	utshishk	wuchusk	wahz-ushk,
			"den in mud"
beak	ushku sh, ussum	miskot	okoozh

There are no oak trees in Montagnais territory. "Sugar maple and yellow birch, the so-called northern hardwoods" (Dominion Forest Service Bulletin, No. 89) are noted by the bulletin as only growing in the deep valley of the Saguenay River, a narrow strip over 350 miles from James Bay, on the way from the Bay to Tadoussac.



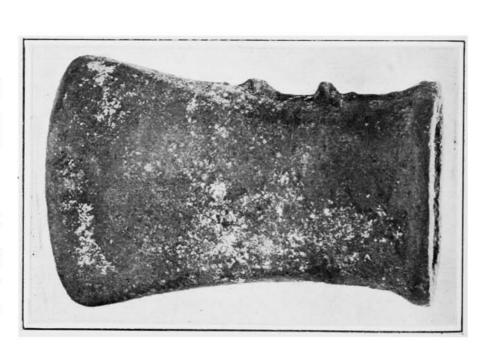


Plate 13.—Brantford, Ontario, socketed bronze axe possibly 3,000 years old. 3% in. long; 2 4/5 in. wide. (Courtesy of the Museum of the American Indian, N.Y.)

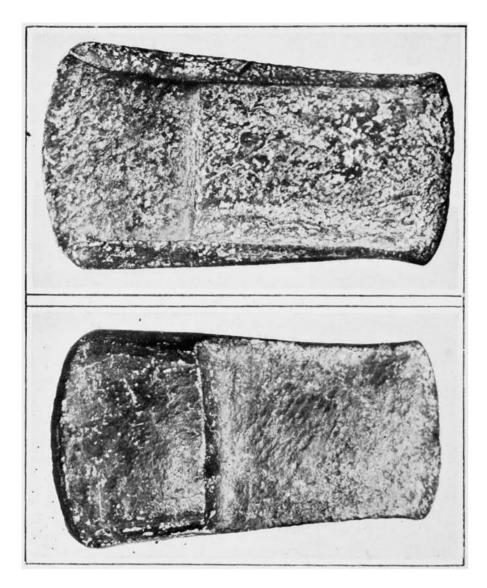


Plate 14.—Portlock, Ontario, cast copper "spud." Weight 3 pds., 11½ 'oz.; length 8¼ in, (Courtesy of Wm. Grasley.)

The Mystery Traders of Hudson Bay

Brother Gabriel Sagard, of the Recollet order, spent ten months in Huronia, (in Simcoe County, Ontario) in 1623-24 as a missionary. He wrote an engaging book about it in 1632: "The Notable Voyage to the Huron Country,"—the first book about Ontario. There are some curious references in it which bear on the story of the Norsemen and their discovery of America.

"The Epicerings (Lake Nipissing Indians visiting Huronia), talked to us several times about a certain nation (Crees?) to whom they go every year for trading, distant from them only a moon and a half which is a month or six weeks' journey both by lake and river. To the same nation also came for trade a certain people who reach the place by sea (James Bay?) in great wooden boats or ships, laden with different kinds of merchandise, such as AXES shaped like the tail of a partridge (the distinctive fan-tailed Norse axe), leggings with shoes attached but as flexible as a glove and many other things which they exchange for furs. They told us also that these persons have no hair, neither beard nor hair on the head, and therefore nicknamed by us "bald-pates" (the short haired blond sailors?) and they assured us that these people had said from the description of us given them they would be glad to see us. This made us guess that they might be some civilized race and nation living in the direction of the Chinese sea."

None of the Indian tribes were willing to take the French "up the Saguenay,"

"... for fear of revealing the rich and most profitable source of their trading and the country to which they go to collect most of their furs..."

It was in the James Bay area where the Nipissings got their furs in trade and beaver skins were the chief furs. About forty years after Sagard wrote Radisson went to James Bay (1662) as "the beaver country par excellence" as he called it and finally organized the Hudson's Bay Company. Sagard in Huronia (1623-24) gives us the first French news of white traders on Hudson Bay. The English scouts did not arrive there till 1667. The "wooden boat" men with the merchandise and axes were likely Europeans, and Champlain had recorded in 1615 that the Nipissings had a regular yearly trade with northern people 40 days distant.

Thus we have (see page 6) Donnacona, of the Saguenay Montagnais, telling Cartier in 1535 of "white men who clothe themselves with woollen cloth, even as we do in France" up the Saguenay. Eighty eight years later Sagard hears of these strange traders.

It was in 1610 that Henry Hudson "discovered" Hudson Bay, but for the 75 years before that we have reports about the Indian trade there with white sailors.

Cartier learns of it from the Montagnais on the St. Lawrence River in 1535 or possibly the year before; Champlain hears about it in 1615 and gets a promise from the Lake Nipissing Indians to take him on the 40 day journey, which they never did; Sagard in Huronia in 1623-24 gets the news from visiting Nipissings; the Jesuit Relations of 1640-41 and in other years refer to the commerce. The evidence points to the James Bay Crees as the tribe the "north sea" sailors traded with.

"A part (of the Nipissings of Lake Nipissing) go away to trade with the whites which gather on the shore of the north sea, upon which they voyage ten days, after having spent 30 days upon the river to reach it," says the Relation of 1640-41.

Who were the Hudson Bay traders who sold axes and merchandise to the Indians there apparently for about a century before the English and French arrived on the scene? Were they the Norsemen continuing a trade they had established hundreds of years before?

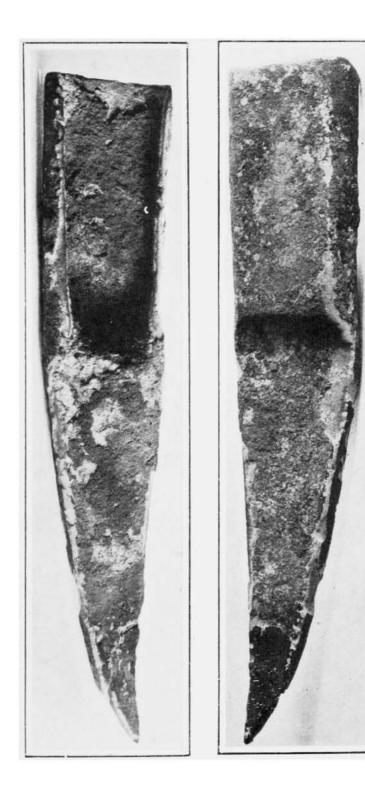


Plate 15.—Red Rock, Ontario, cast copper "spear," 81/4 in. long. (Courtesy of John Stadler, Montreal.)

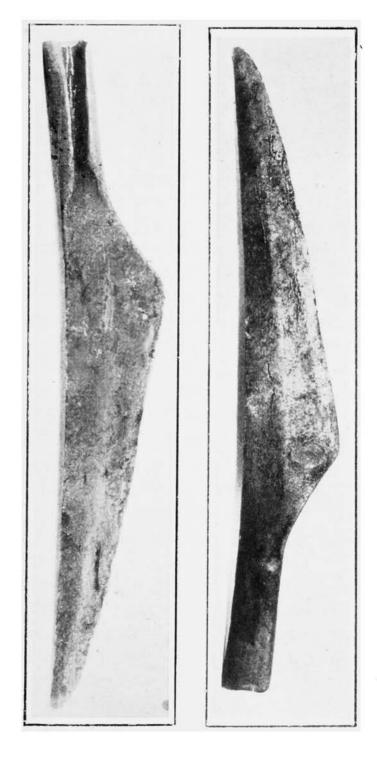


Plate 16.—Echo Bay. Ontario, copper spear, 13 % x 21% in. (Courtesy of Earl Alton.)

Document VIII

WHO MADE THESE COPPER TOOLS?

See Page Numbers of Illustrations in "Contents"

Perhaps in chasing the Norsemen we have stumbled on evidence of an invasion of a strange race which long preceded them. For it seems that some of the mementoes of the past now unearthed are "not Indian". If the Norseman was not responsible for them, who was?

When the Lake Sulphite Company was excavating the "difficult hard pan imbedded with many boulders large and small," (Mr. Harvey Ramsay who had charge of the work) for the foundation of its mill at Red Rock, on the Lake Superior shore, four miles west of the Nipigon River, there was found a new speciman of copper "spear," 13½ feet below ground. (See picture). It is 8¼ inches long, and has a flanged socket. It was apparently cast.

Captain James McCannell, retired from the Canadian Pacific Great Lakes service, is the possessor of a unique collection of copper tools which were dug up in the city of Port Arthur on Lake Superior. The chief relic is a copper "vase," (see picture) $4\frac{1}{2}$ inches high and three and one eighth inches wide in the middle. The width of the mouth, which flares out from a $1\frac{1}{2}$ inches high neck is $2\frac{1}{2}$ inches. The vessel curiously resembles the

pictures of old Greek vases, and the clay vessels of the Mandan Indians as shown in the Peabody Museum's book on that tribe. The metal is about one sixteenth of an inch thick, and the bottom is "filled with lead or some soft material." Among the Mandans such (earthen) vessels were made to hold sometimes as much as several gallons. The Port Arthur vase is artistic in its proportions, and must have been the work of a skilled artisan. It was recovered at a depth of $29\frac{1}{2}$ feet about 1900 in a sewer trench. The workmanship shows traces of careful hammering.

In Captain McCannell's collection is an artifact of copper which resembles a dentist's drill. He states it is of very hard metal. It was found at great depth in the digging of the Stanley Street sewer in Fort William, three miles from Port Arthur on the Kaministiquia River. He has also an 8½ inch copper hook which came up in a net from a depth of 125 feet on the Lake Superior shore. This hook is "welded" on one place on the shank, and it has "an appearance of corrosion." The above objects were sent to three large museums but it is stated no light could be thrown on them. Captain McCannell notes that several articles of copper have been found at the copper deposition on Isle Royal some 20 miles from Fort William in Lake Superior.

Reports have been made in the past by scientific investigators on the "prehistoric" mining of native copper on Isle Royale in Lake Superior, and one of these guessed that Norsemen had been the miners. The tools found, however, were all of stone, but perhaps iron implements (if any) may have been picked

up by curio hunters. Men who know Indian habits do not believe the work was done by Indians. If the Vikings made use of native copper the place they would likely operate would be the south shore of Lake Superior, particularly Keweenaw Point, where the metal is most abundant. In the memory of living men, noted the Jesuit Relation of 1665, no one had landed on Michipicoten Island because of the demon who guarded "the playthings of his children" (pieces of copper,) and killed pilferers, (by the poison from the copper in boiling water).

When a railway navvy dug a 17 inch right angled copper hook out of a cutting on the Canadian Pacific Railway's right of way at the Pic River, 100 miles east of Michipicoten in 1884, he broke off four inches to see what it was made of. The hook was found under 25 feet of glacial clay and gravel in a rock enclosed crevasse on a bluff above ground level, 600 feet from the river, and by measurement, one hundred feet above Superior. The Pic runs into Lake Superior a short distance away. The area is a barren waste, never inhabited. Beside the hook were found some fragments of charred wood. The ancient owner of the hook had seemingly used it as a pot hook, as its angle shows a little wear. The workmanship is fair. The hook is guessed to be of pre-glacial age. It is now in the Winnipeg Museum. The above particulars were taken from a report of the engineer in charge of the railway construction work.

A couple of miles east of Portlock, 34 miles east of Sault Ste. Marie, Canada, in the district of Algoma, Mr. William Grasley plowed up on the bank of the

Portlock Creek what is apparently a cast copper "spud",—or "palstaff" as the Icelanders called it,—apparently a species of axe weighing three pounds 11½ ounces. (See Cut). It is now in the Sault Star's collection. Measurements: total length, 8¼ inches; blade, five inches; flanged socket, 3¼ inches; head width, 4½ inches; width of socket "wings," five eighths inch. The tool appears to be the work of an experienced workman. There is nothing amateurish in its finish.

Macalister in his superb "Archaeology of Ireland" says the "flanged" axe preceded the "socketed" axe, and that these two were the last made in the bronze age. The previous tool to these had a split wooden handle, which covered the two sides of a thin metal "head." He gives pictures showing the tool as affixed to a root or branch at a right angle to the handle, (as an axe,) and also as attached to a handle in line with the tool (as a spade). The flanged type is common and the socketed scarce in our museums.

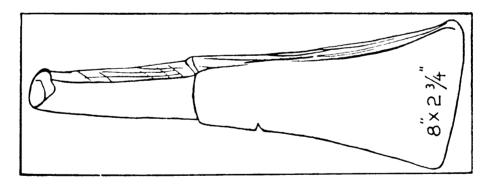
We may thus be justified in guessing that the Portlock "spud" is older than the Brantford bronze socketed axe. Commenting on the Brantford axe, Dr. Gudmund Hatt, of the National Museum in Copenhagen, says it "may very well be of Scandinavian origin," and places its age at many hundreds of years B.C. Curator Clarke, of Cambridge University, says the tool is "extraordinarily Irish looking." He agrees with Dr. Hatt as to its age. (See "The puzzle of the Brantford axe" in this book.) Measurement of Brantford axe: length, 3¾ inches: wides at edge, 2 4-5 inches.

Look at the picture of the Echo Bay spear or knife, and you will see a ridge down the centre of the blade, and this is repeated on the other side. This strengthening thickness is a feature of Norse spears. The handle also follows Norse practise. How could the Indian, lacking tools, make this weapon, with its finished workmanship? Length 135% inches; width, 21% inches at heel. Found in Kehoe Township on an old trail, where the ground disturbance caused by the dragging of logs, turned it up. It is the largest specimen of its kind known, the writer understands.

Marquette Gives Up a Copper Axe

A rather remarkable solid copper axe, eight inches long, found at Marquette, Michigan, about 1880, is in the collection of Mr. Morgan H. Stafford, of Newton-ville, Mass., who kindly sent details of it on May 3, 1939. He writes:

"Your ideas as to the origin of the copper implements found around the Lake country are new to me, although I have often wondered at a copper axe in my



The Marquette Copper Axe with Norse (?) Nick

collection, a rough sketch of which I enclose. This shows the exact size (8 inches long,) and gives some idea of its thickness. On the edge is a deep gash,

merely suggested on the enclosed sketch, and strangely enough the sharp edge of my Norse battle axe, (plate 3,) fits it with remarkable exactness, so much so that some are convinced that the two axes met in conflict, a rather too fantastic coincidence to suit my skeptical mind, but yet within the range of possibilities, for they were found but 30 miles apart, and deadly battles between rival bands of Indians occurred near Marquette, notably at a small river called Dead River, from the large number of those killed on its banks."

A "deep gash" on the side of Mr. Stafford's copper relic is characteristic of Scandinavian axes. "Nobody knows why the mark is put there, but I remember as a boy that these were common in Sweden," says Mr. Carl Stenbol, of the staff of the Soo's Algoma Steel Corporation. Thus the axe's "gash" may have been placed there by its maker. Indian tomahawks made by the French also have an indentation under the head. Is it placed there to imitate the Norse mark?

Mr. Stafford has some knives of copper which he thinks are "distinctly European in shape."

If, as seems likely, the Indians gave up making copper tools after the arrival of the French at the end of the 17th century, we may be allowed to consider that the workmanlike Marquette axe was not of Indian origin. And perhaps the "flaring" edges of so many of our copper relics suggest Norse workmen with Norse tools.

There must have been thousands of tons of native copper tools and "artifacts" spread over the Great Lakes area in the old days, and so it would seem that there must have been a considerable industry in the making of these at one time in the "copper country" on the south shore of Lake Superior. It could hardly have been located anywhere else, for around the Keweenaw peninsula native copper existed in enormous quantities in Indian days. Perhaps it is in that area we should expect to find many evidences of Norse occupation—possibly even to see remains of Norse buildings.

Thus the end of the Norse puzzle constantly recedes. As soon as we get the Viking safely through Ginnungagap, (Hudson Strait,) and find him burying his arms at Lake Nipigon, we become conscious that the end of the quest may not even be in sight. Perhaps when the archaeologist gets seriously to work on our finds, a new and possibly a more important angle of our quest may emerge, viz: were the Norsemen or somebody else in America before Eric discovered Greenland?

The bronze age reached Norway very late. So the Encyclopaedia Britannica tells us. Flint and copper and iron tools seem to have been used together long after the Mediterranean countries had discarded the first two. Bronze is a copper and tin alloy, the latter metal being added to harden it. Norway learned the use of bronze latest of its neighbours, and also possibly of iron. But the Norse iron axe, to judge by its shape, seems to derive from the older bronze axe, and it possibly from the original axe of stone or bone. Even in Greenland these bone axes have been recovered.

Did copper utensils survive among the Scandinavians into the Iron Age which succeeded the Bronze Age (1000 B.C. to 500 A.D.)? We are cautioned by Kendrick in his "History of the Vikings" (page 51) that the making of iron very gradually displaced

bronze among the Scandinavians who apparently learned how to use iron also later than other Europeans.

Is it possible that some day somebody will make a name for himself by writing a new chapter to our supposed Indian axes and "spuds" and spears that may have been made by Norsemen? Some archaeologists do not think so. But Indian workmen should be as skilful today as 1,000 years ago, and the native artifacts of today can hardly be said to show any improvement on some of those accepted as of ancient make.

The only spears in the museum of the Hudson's Bay Company at Winnipeg are from British Columbia and are of "various whaling instruments." The suggestion is offered that any iron spears the Indians ever had were made "by the post blacksmith". The writer had never seen a reference to an Indian using a spear in battle. Why should he make a thing he didn't use?

We may ask: If the Norsemen did not make copper utensils in their long stay on the Great Lakes, why didn't they? They used no iron here so far as is known, and they must have lost weapons and fishing equipment and necessary utensils. What did they do for these things when connection with Greenland ceased, if they didn't replace them with the plentiful native copper at hand on Lake Superior? Surely the Norsemen would show the aborigines how to make better articles. It may be that we have not yet recognized Norse influence on "Indian" tools.

This is a presumptuous suggestion from an amateur. But if the cast Portlock "spud" and the Echo Bay spear

are really old Indian copper work why didn't theirstandard of excellence obtain widely? All of the copper hoe "spuds" seem to have disappeared by the 17th century as we read then in the Jesuit Relations only of wooden tools for planting corn. In Huronia farmers find only iron tomahawks, iron knives about the size of an ordinary dinner knife, French copper kettles, pottery and stone utensils. The Hurons were killed off by 1649 and their village sites and fields seem to give up practically no native copper tools or spears. In our own district of Algoma copper relics are comparatively common. Does this result from our nearness to Lake Superior copper, or from Norse occupation? The wide distribution of copper utensils around Lake Superior happens to be where there are most evidence of Norse presence. The subject is one which might well be reconsidered.

"We know from two independent sources that the Irish did discover Iceland before 800 A.D." says Stefansson in his introduction to "The Vinland Voyages" by Matthias Thordarson, director of the National Museum of Iceland. It is indeed suspected that they had arrived possibly not long after 730 A.D. It was apparently the desire of Irish monks to escape from their turbulent country invaded by the Vikings that started the Iceland venture. At any rate the Vikings followed to Iceland about 850 A.D. By about 930 A.D., there were, it is thought, 50,000 people on the Island.

The gulf stream gives the south shore of Iceland a fairly warm climate,—not any colder than New York's, says Mr. Stefansson. To this not disagreeable place the Irish had brought their household goods,

cattle, slaves and utensils. We may guess that when the Vikings came along it was from reports heard in their Irish wars that gave them the idea.

Like every other feature of the Vikings' venture in the west, the matter of just how much the Irish civilization in Iceland affected Norse culture is debated. There is much resemblance between the tools and arms of the two people but here as in every other sphere argument is endless.

What connection, if any, is there between the bronze work of the two peoples? Did the Norse like the appearance of the axes and "palstafs" of the Irish in Iceland and so adopt them?

Consider these things in this baffling Norse mystery: The Brantford "bronze axe" may date back centuries B.C. Or it may—if made in Norway where the "bronze age" gradually melted into the iron age,—be a product of the first centuries of the Christian era as is suggested.

The Portlock "spud" or axe apears to be a direct descendant of the Irish or Norse "palstaf."

It is not clear, says Macalister, whether "palstaf" is derived from palsstafr, the handle of a digging tool or spud, (pall,) or from palstafr, a kind of missile mentioned in the sagas.

Macalister shows us pictures of the Irish bronze "socketed" axe, and also of an Irish bronze axe with the raised flanges the Portlock copper spud possesses to keep the wooden handle in place. If no Irish artificer was in America before Columbus, then apparently we have to face the conclusion that the Norse coppersmith made the Algoma spud,—or else the Indian.

Thus here is suggested a feature of the Viking puzzle which may take first rank in its many ramifications. The subject is away beyond the writer:

If—as the archaeologists say—

The Brantford "axe" was made long before the Christian era;

Verendrye's "dolmens" on the prairies were products of a stone age people;

The Pic River copper "hook" was made before the last glacial period, (say 30,000 years ago);

The Portlock copper "spud" was not made by Europeans though it seems patterned after the ancient Irish "spud."

—If the archaeologists are right in these statements, then there would seem to be a pre-Norse story of America that offers an interesting field for study.

The literature of copper artifacts is extensive and is well summarized in the Handbook of American Indians, Bulletin 30, Bureau of American Ethnology, U.S., reprinted as Sessional Paper 21A, by the Canadian Department of Marine and Fisheries, 1912. Possibly if the summary had been written with the evidence of Norse penetration of the Great Lakes region we now have before the compiler, his attitude towards the subject would have been modified. Keeping this in mind, his arguments for a pre-white copper industry fail to be wholly convincing. Doubtless copper was extensively used previous to the coming of the white man. But which white invasion? The possibility of a Norse influx isn't imagined. The vast extent of the pre-Columbian copper workings on Lake Superior is as-

summed to be of Indian origin,—but there is no Indian tribe in that area that can be conceived of as having the disposition to undertake such work. If the Indian was responsible for the fine workmanship of the centuries before the whites came, how is it that he has shown no such aptitude since? The Hopewell mound in Ohio with its artistic fragments happens to be in the area the Norsemen could hardly miss. The "spud" has only been found in the Great Lakes area, where the great mass of copper relics have been recovered. The Illinois mound, Etowah, is close to waters the Norsemen doubtless navigated. Mounds in Florida and Georgia might easily have had their relics made by people from the sea. The fact seems evident that it was only in areas where we know white men frequented or near the sea, that there is evidence of some skill in copper metal working. On the other hand vast inland areas lack this.

From Chas. E. Brown, director of the State Historical Society of Wisconsin:

outline which you send to me of an Indian "The pencil socketted copper spearpoint (the Echo Bay specimen shown in this book) is an exceptionally large specimen and undoubtedly a fine piece. I have seen smaller specimens like it, some of them with the median ridge you show on the blade and some without There appears to be no present proof that the prehistoric copper working aborigines of the Lake Superior region copied or attempted to copy the forms of the implements of any Norse explorers whom they may have encountered in that early period. The thought is not a bad one however. I have often wondered at the fine smithing of some of the thousands of native copper artifacts I have personally examined in the past 35 years of my own archaeological studies. It is hard to believe at times that this fine work could have been accomplished with the primitive tools of the Indian copper workers.

"The resemblance of certain types of Indian artifacts, notably the banner stones, to certain Scandinavian forms in stone has been pointed out by archaeologists. You may be interested to know that Dr. Ralph Linton, anthropologist at Columbia University, N.Y., has just written in The Teocentli published by Dr. Carl E. Guthe, University of Michigan, Ann Arbor:

"'No field work last summer, but a cruise which included Finland and Russia and gave an opportunity to examine archaeological collections there. Neolithic pottery from Finland and Carelia is almost identical with some of the Wisconsin woodland pottery in paste, shape and decoration—the last including not only designs but methods of application. The resemblance is so close that it seems impossible that this can be a case of convergence. At the same time the associated implements show hardly any similarities. There is a problem here which will repay further investigation'."

From Mr. W. C. McKern, Curator of Anthropology, Milwaukee Public Museum:

"The two copper specimens illustrated in your last letter judging from the photographs, are very fine examples of the prehistoric copper artifacts of the Lake Superior region, also occurring
to some extent in the Saint Lawrence Valley. Spuds of the type
illustrated are rather rare specimens at any size, and your
specimen (The Portlock "spud") is near maximum for this specific
shape. Naturally, I cannot definitely vouch for the authenticity
of the artifact without seeing it. There appear to be steel hammer
marks on the under side which suggest that it has received rather
harsh treatment since it was found. Such specimens should be
preserved exactly as they occur, without any attempt being made
to remove the green carbonization. Unfortunately, that is the
first thing many finders attempt to do."

In another letter Mr. McKern says:

"Harking back to the copper materials, information has come to light which leads us to believe that they represent an early pre-pottery period in the Great Lakes area and that the idea of copper implements may have been brought over from Asia by way of the Bering Straits. In any case, these implements have been found repeatedly associated with an old northern type of culture, and similar implements have been found in Alaska and (by verbal

report only) in Siberia. There are not sufficient facts to make a story out of this as yet, but archaeological work in the area between the Great Lakes and Siberia is finally being inaugurated and they may have some very interesting results within a few years."

"As to the copper "spear" (Echo Bay specimen) which you outline and describe in your letter, it has all the appearance of being a characteristic copper knife of some group of prehistoric Indians which we have not as yet identified. We are reasonably certain that they were Indians, since we have found their other implements associated with the copper specimens in at least one section of the area where they occur, and we have found mines and primitive mining tools on Isle Royale. Moreover, there is some evidence which leads us to believe that they were made by a relatively ancient group, long antedating the supposed arrival of the Norse in America. The shapes of these implements are definitely not European in character, and it has been determined by metallographic studies that they were annealed and beaten into shape according to purely primitive methods."

Document IX

WERE NORSEMEN THE "PREHISTORIC INDIANS"?

The idea that the numerous workman-like copper utensils found in the Great Lakes region are of Indian origin must be regarded as doubtful in view of the known facts regarding the Norse occupation for centuries of the interior of America. Copper tools with distinctive Norse characteristics are the Echo Bay "spear," the Portlock "spud," the Red Rock "spear" and the Marquette axe, all shown in this book. These show no evidences of the crudeness of "artifacts" of recognized Indian make.

Consider the facts:

Up to a hundred years ago, Keweenaw Point, Michigan, was littered with pieces of float copper. Michipicoten Island and Isle Royale were less plentifully supplied with these loose chunks. On the Ontonagon River was found a huge piece which now rests in the Smithsonian Institution. When modern copper mining started on the south shore of Lake Superior, pieces weighing up to 500 tons were found.

Apparently there is now a drift to the idea that our well made artifacts were the work of "prehistoric Indians." If this be so it is odd that these artificers used the thicker strengthening ridge for the centre of the spear blade and the "wings" to hold the handle of the "spud." These features, as well as others, seem to be European.

The copper artifacts are found practically only in the territory contiguous to the immense Lake Superior native copper deposits, which had returned more than a billion dollars to the miners in the first 50 years of work. Almost all the successful mines were on old "prehistoric" pits probably dug by the Norsemen, who found the malleable metal lying loose in vast quantities around Keweenaw. They thus had little work in mining the metal,—all they had to do was to fashion it. The writer has not run across any other reasonable explanation for the existence of the copper tools found so plentifully over an extensive territory.

Thus we may look with considerable confidence,—in the writer's view,—to eventually finding in the Michigan "copper country" further evidences of Norse occupation and industry,—even possibly of the ruins of Norse stone houses.

The idea that the Lake Superior red man has degenerated from a skilful worker in metal to his present status is one that cannot appeal to those who have had a long acquaintance with him. No record we have will support such a theory. History gives no clue that the tribes first met by Europeans in this part of America had any ideas beyond stone axes, flint arrowheads, a very crude type of pottery, (probably learned from the Norsemen,) and the use of bark even for boats. Their very hand to mouth existence, gained as a rule in eternal wandering after food, would render unlikely the development of skilled metal workers. The stone

"axes" picked up on almost every farm in Algoma,pieces of rock with almost no human work on them, can hardly have been used by the people who turned out the cast copper "spuds," the well made copper spears, or the iron relics that seem to have arrived before Columbus.

The theory of the "prehistoric Indians" who made artistic utensils had to be invented to account for the things found. The writer suggests the theory is illogical and wholly unnecessary in view of the facts that face us.

In his impressive Copper Handbook, 1910, Mr. H. J. Stevens has an interesting paragraph on the subject at page 182:

"Apparently the aboriginal inhabitants of the United States were entirely unacquainted with bronze or brass, and made but slight use of copper at the time of the discovery of the new world by Columbus, though both copper and bronze were used extensively at that time in Mexico where the superior Aztec civilization flourished, (though the Aztecs knew nothing of the use of iron). There are extensive remains, however, of mining done in the Lake Superior district by some race preceding the North American Indians. This people . . . is known vaguely as the mound builders ... many of the Lake Superior copper beds were mined to shallow depth for mass copper and at perhaps a majority of present day mines . . . there were pits and other evidences of prehistoric mining . . . That they were good judges of mineral values has been proved by the making of good modern mines under many of these ancient pits. The Ojibways . . . were but slightly acquainted with the practical use of copper and had no legends regarding the mining done by their predecessors."

The mound builders have been guessed to have been a "superior" race of Indians, but Bulletin No. 30, (page 949), received from the Smithsonian Institution takes the ground that this idea is not justified. The articles recovered "indicate a culture much the same as the more advanced tribes" the whites found on arrival. The mounds are practically all in the Mississippi basin. Apparently the mounds were an imitation of those of the Aztecs of Mexico, and articles of white origin have been found in them. It is now doubted that present day tribes displaced a superior Indian race.

The whole subject of our well finished copper relics must eventually be the subject of serious study, in which the possibility of a Norse origin cannot be overlooked.

"No Indian," says Dan McDonald, a copper miner, "could possibly cut pieces of metal off a copper mass with his primitive tools. The only pieces they could use were small pieces of float which they hammered with stones into the crude artifacts we now find." The modern miner uses the "blow torch" and the smelter to handle mass copper. Chilled steel chisels preceded the blow torch.

That there was mining done near the Ontonagan River and other places is evident from the ancient pits to be seen yet. These were in rock, but there is no doubt from the old evidences that practically all the copper used by the "prehistoric" miners was pieces of "float," picked up on the ground. On one old working a tree, said to be about 5 feet in diameter, grew on top of a dump of broken rock. This was noted some 40 years ago and the view was expressed that the dump then must have been several hundred years old.

In Alexander Henry's Travels and Adventures he

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tells of seeing a great deal of native copper on his visit to the Ontonagan region in 1765, eight years before he and his associates undertook a mining venture in that region, and he notes:

"The copper presented itself to the eye in masses of various weight. The Indians showed me one of twenty pounds. They were used to manufacture this metal into spoons and bracelets for themselves."

Brother Sagard, in Huronia in 1623-24, noted that Etienne Brule showed him a "l'ingot of copper" from an area 100 leagues from Huronia, (in Simcoe County, Ontario).

Document X

ARE INDIAN AXES BASED ON NORSE?

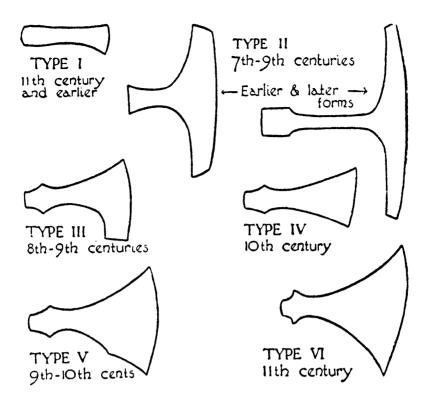
See Page Numbers of Illustrations in "Contents"

Some authorities consulted won't hear of any of the "trade" axes, (so called), having had a Norse origin, while others are not so sure. As the matter does not affect the proposal of a Great Lakes location for Vinland one way or another this chapter is written merely as dealing with the subject as a side issue of possible interest. "Trade" axes are not scarce in museums.

Is it a fantastic idea to hazard the guess that the Norse axe of 1,000 years ago was the original model of the axes used by the Northern Algonquin group of Indians in the centuries past?

There is a picture of five axes on Plate 17 in this chapter which might justify this strange notion,—the idea that it was the Norsemen who began the evolution of the Indian implement which finally caused the red man to abandon his stone war club, his stone chisel, and his skinning tool of stone just as soon as he could conveniently do so.

The first axe, (see picture), may or may not be Norse. It has the hammer head which none of the other axes have, the wide extended blade with its curved edge, and the hole for the handle is the round



(London Museum Catalogue No. 1)

TYPES OF NORSE AXES SHOWING EVOLUTION DURING THE CENTURIES

Plate A.—Types of axes used in the Viking period. About 900, five of the six types of axes were in use in Britain. The sixth arrived about 1000. Type 1, small woodsman's axe, lasted for centuries. Type 2, not recognized as a Viking type in Scandinavia—rather a tool. Type 3, the "bearded" axe, (6th to 11th centuries) comparatively small and light. Type 4, became most popular in 10th century. Type 5, between 850 and 950. Type 3 merged into an enlarged type 4. Type 6, about 1000 type 4 was superseded by this broad graceful type, "which is shown in many scenes on the Bayeux tapestry," the work of William the Conqueror's Queen, depicting the Norman Conquest of England in 1066.—London Museum Catalogue No. 1.

The reader will find it useful to compare other pictures of axes shown in this book with the above "types," noting carefully the years in which the "types" were made. (See also Plate 10).

(Plate A is wrongly marked as Plate 16 on page 338).

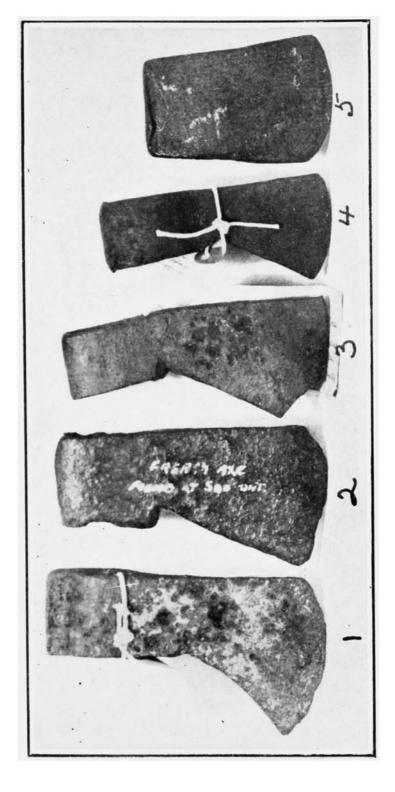


Plate 17.—Five Algoma axes. Are these evolved from old Norse weapons? 1, Batchawana Norse (?) axe; 2 and 3, French tomahawks; 4, Hudson's Bay Co.'s axe from Montreal River; 5, North West Co.'s axe.

type seen in some of the earlier Norse weapons.

The National Museum of Canada, at Ottawa says: "The heel of the iron axe (Plates 17 and 18, No. 1) is shaped like those on Norse axes and much longer than on French made axes, but the head is different from those of 'Norse' make."

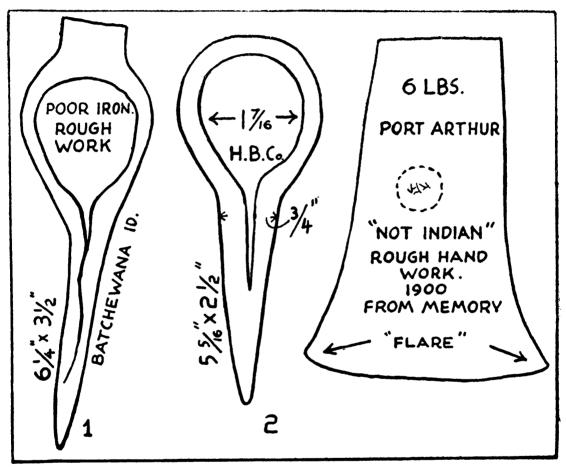


Plate 18—No. 1, end view Batchawana axe; 2, Hudson's Bay Co. axe, Montreal River.

Axe No. 2 (Plate 17), is a French tomahawk. Where did the French get the idea for it? From the Indians, probably. Three hundred years ago, the Indian, it is reasonable to suppose, had at least a few of the old

Norse axes; he had a vastly better chance to find them than we have today, and we have knowledge of several all found accidentally, apparently not one of the finders knowing what they had discovered. When the Norse hunt is really taken up by the public these old relics and others of our original discoverers are likely to turn up in many quarters.

We may guess that the French trader of the 17th century did his best to find out what his customer wanted, and then tried to fill the order. The old French tomahawk was unique; there was no other axe just like it. Its shape showed it was of no particular use to a woodsman. It was of no use as a hammer, (a lack the white man notices,) and some of the early issue to the Hurons up to 1649 seen by the writer actually had iron tobacco pipe bowls or other objects on the head. It was meant exclusively for Indian use.

The French trader narrowed the width of the cutting edge, and gave the handle side of the blade a straight edge,—which was very much easier to make than the inner curve of the Norse axe.

The French blacksmith improved the handle hole. He knew that a round haft hole did not grip the handle as well as an elongated one. The handle holes in the Norse and French specimens illustrate this.

In addition the crude Norse welding (Norlund notes this poor work in Greenland) was replaced by a solid French blade below the handle. The crude welding in the Norse (?) axe extends practically to the cutting edge; there is no weld shown in the French axes.

The iron in No. 1 axe is very inferior; in the specimen shown the mineral impurities are easily discernible.

The French axes (2 and 3) however, are made of good iron which permitted the smith to do a good job.

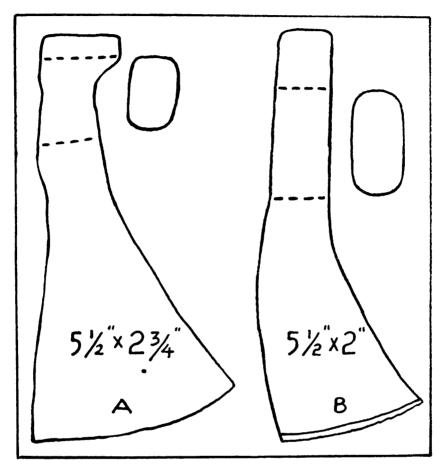


Plate 19—Showing the variety of Norse axes. Two found in England (800 A.D.)

Turning next to No. 4 in the Hudson's Bay Company axe we see a good class of iron with an inferior weld, and a tool which was economical in the use of iron. The round handle hole of the Norseman reappears in the specimen. There were many varying models of the Norse axe, but the French tomahawk followed a standard pattern, showing that they were made on pattern for "the trade" in quantity.

No. 5 axe shown in picture is the old North-West Company's trading axe. A bitter and fairly successful rival of the Hudson's Bay Company the North Westers refused to follow the style of the hated Hudson's Bay model and struck out for themselves with a less attractive but far more useful implement. The round haft hole of the H. B. axe gave the head a poor grip. This was recognized by their rivals who made an oval handle hole and a much longer head on their bush model. North-West axes have lasted till today in woodsheds here and there. Their handles do not work loose easily and the iron is the best of the lot.

It is interesting to compare the sizes of axes shown:

	Length	Edge	Head Width
Norse (?)	$6\frac{1}{4}$ in.	$3\frac{1}{2}$ in.	1 1/8
French (2 axes)	6, 6 in.	$3, 3\frac{1}{8}$ in.	$1\frac{3}{4}$, $2\frac{1}{4}$
Hudson's Bay Co.	$5\frac{5}{16}$ in.	$2\frac{1}{2}$ in.	11/2
North-West Co.	4½ in.	2% in.	$2\frac{3}{16}$

Thus as a general purpose tool, the Norse (?) axe had most uses till the North-West Company put out one of superior iron, with a satisfactory handle hole; it was smaller and easier to carry. But if the iron in the Norse (?) axe had been as good as the North-West's, it would be the best of the samples shown here.

The five axes (Plate 17) were found in Algoma district on the Lake Superior and St. Mary's River shores as follows:

- 1—Norse (?): Batchawana Island, 1925.
- 2—Tomahawk: Gros Cap, about 1918. (A Norse spear was also found at Gros Cap in 1938).

- 3—Tomahawk, (broken edge), in trench for water main at Soo airdrome, 1926.
- 4—Hudson's Bay Co.'s: Mouth of Montreal River, 1938.
- 5—North-West axe: in a Garden River Reserve woodshed. History unknown.

The distance from Montreal River to Garden River is about 80 miles.

The old iron axe dredged up at Port Arthur (Plate 18) during the construction of the dry dock at the beginning of the century was taken to Cleveland when the work was done. W. H. Arnold was dredge foreman at the time and was present when the tool fell out of the clam. His life has been spent on jobs requiring the use of bush tools. He was attracted by the oddity of the shape. It was new to him. "It was not an Indian axe," he said.

The axe was about six feet below the surface of the ground at the water's edge. Mr. Arnold noted that there was a "ring" stamped on it.

With the constant stream of Indian "trade" axes distributed from the beginning of the 17th century of many shapes and styles, with and without "polls" or heads, it would be rash to single out a specimen as Norse, no matter how closely it followed a known Viking shape. The Port Arthur axe is believed by Mr. Arthur Woodward, director of history and anthropology of the Los Angeles Museum,—basing his opinion on the sketch in this book,—to be of early 18th century make. Mr. Woodward has given special study to these Indian tools.

Of Greenland, Norlund wrote: "The objects of iron found in the excavations do not favor the preservation of that metal. Nevertheless it is strange how miserably small the knives and other implements are. Among them are remains of sickles and small curved knives for harvesting hay. From Brattlahlid we have a spearhead, small and very crudely wrought, from another farm in Eriksfjord a good axehead but modest in size too."

In 1189 a Greenland ship was held together with "tree nails" and lashings of strips of baleen,—such was the scarcity of iron.

Few axes and spears in Greenland and apparently no lack of these in America! What is the explanation? Did Greenlanders take all their weapons with them to America, or, did they make them when they got here?

A sketch of the 10 inch "pick" with a curved head an inch or so wide, found near the Dodd relics was sent to the Danish National Museum, at Copenhagen, for an opinion. The reply said that "on the basis of the sketch, I dare not say anything exact about the age of it, but it seems to me most likely to date from later centuries. From the Norse colonies in Greenland, we don't know anything of this sort."

The amateur archaeologist will be struck not alone with the possible evolution of the Indian axe from the Norse, but with the striking similarity of the style and form of some types of each. Compare the two Norse axes, (800 A.D.?) roughly sketched (Plate 19), found in England, with the tomahawk of the first half of the 17th century (1600-1700) shown in Plate 17. One of these Norse axes has half inch of iron for a head,

apparently for use as a hammer. The other lacks this. So far as the writer knows the Canadian tomahawk never had this "hammer head," the Indian apparently not needing it. The Hudson's Bay Company continued the French practice of making hammerless axes. But the North West Company (end of 18th century) fashioned its trade axe in a different style. It had both the hammer head and a modern blade for use in wood cutting. The North West axe, in fact seems to have set the style for our axes in use today.

We can guess that the French tomahawk was meant principally for war use. But with the white man suppressing tribal strife, the tomahawk had finally little practical application to everyday uses. Thus the advent of the North West Company's tool marked an epoch in Canadian history—much better iron, better edge, a handle hole that was designed to keep the haft from working loose, a shorter and easier tool to stow in a pack or carry. As well try to drive a nail with a piccaroon as with a headless tomahawk! The French axe went out of use with the capture of Quebec, but the Hudson's Bay Co. needed the rivalry of the N. W. Co. to wake it up to the need for something better than its imitation of the tomahawk of 1640.

The handles of the first Norse axes must have quickly worked loose. By the time Poul Knutson lost his axes in Minnesota, the Norsemen had sensed that a firmly held handle was desirable even in a battle axe, and so some of Poul's axes had an auxiliary iron grip for the handle a couple of inches out from the head. The N. W. Company made the handle hole longer and designed it much better, apparently the first American

axe to forsake the round hole and forecast the modern style of approaching an oval shape. The Indians probably had used round tree branches as handles, the haft hole of today requiring tools they did not have. Let it be noted that some Norse haft holes were not round,—but the difference between them and today's axe is noticeable.

The curved edge of the Norse axes found in America were faulty for wood use. The tomahawk and the H. B. Co. axe had a straighter edge, but this was only a transition stage, as recognized by the form of the N. W. Axe, which was designed for peaceful use.

The modern axe has evolved from the stone age. It took thousands of years to invent the hole for the handle. The successive steps seem to have been:

First, the flint tool which took various forms, till it finally emerged as the stone axe, that in its various forms served different uses. The "grooved" stone axe,—with a groove for the handle and the thongs which tied the stone head to it,—is common in the eastern states but "scarce in Ontario." The specimen in the Sault Star collection found near Bar River, Algoma, is the best of the kind the writer has seen.

Second, the metal copy of the stone axe, generally of copper.

Third, the "palstave" with a handle, which was tied to the head with thongs.

Fourth, the "socketed" axe. A hole was cast in the top of the head, into which a handle was fitted. Apparently this axe had usually the form of a chisel, though some were attached it is thought to curved roots or

right angled branches. The Brantford axe belongs to this type.

Fifth, the axe as we have it today, the blade being in line with the handle. Compared to the axes of the past modern electric hammers and cutting tools have jumped the world ahead a thousand years.

Once mankind got beyond using flint there were innumerable styles and sizes of axes. The Roman iron axe was made in a vast variety of models. In medieval times there was nothing to limit the axemaker's imagination. The Norseman made wide and narrow axes, light and heavy axes, plain and decorative. The Dodd axe has a five inch edge, but there are Norse axes half that width and also three times that much. The tool, its form and its quality of workmanship differed with its maker. The flaring edge was also distinctive of the early French and Italian axe. It seems a little difficult to say whether an axe is Norse unless it belongs to a definite era.

Collectors of Indian relics are often in doubt about the use of the objects they find. "Skinning stones" are probably mostly axes, for instance. In the old Indian's daily life he would find most need for axes, knives, fishing hooks and cooking vessels. The last were of bark as a rule. The "axe" was a piece of stone as was often the war club or "tomahawk." When the Norseman came along and saw the utensils the native used, he would quickly see what he could improve of the native equipment. So the multiplicity of the axes now found of iron and copper. War spears formed no part of the red man's equipment,—the stone club sufficed. Indian words for a cleared place, a barn, etc., show

that the only way he knew to pioneer was by fire. In Ojibway a large prairie is "mashkode," ("mechah," it is big; "ishkoota," fire). The Cree calls a hay barn "muskosewikumik," which may be freely rendered as a birch bark building (for a crop) grown on a large area cleared by fire. The word is a revelation of Indian method and outlook. One of the reasons the Indian used fire to get enough ground to sow his scanty crop was because he had no tool to chop down trees; on occasion he hacked down the saplings. Thus the Norseman's iron axe was to him a gift from heaven, and even his copper "spuds" and axes were miracle tools. The red brother prized an axe far more than beads in spite of what the storytellers write.

It is interesting to note that the old axes found around L.Superior,—the Dodd Norse axe at Beardmore, the French tomahawk, the Hudson Bay Company axe, are all about six inches in length. Only the Batchawana axe has a hammer head. These heads are shown in some museum specimens. As far as Algoma finds go the heads are lacking except in the Batchawana axe and the North West Co.'s specimen. For hammering the Indian used a stone, and Gros Cap has given Algoma its only known specimen of this "pounder."

Document XI

PUZZLING OVER VINLAND TALES

In STANDARD EDITIONS of Snorri Sturlason's "Sagas of the Kings," (1230?) there are interpolated several pages taken from the Flatey Book, (1390?) which are recognized as having no connection with Snorri's story. It is from this fully authenticated but injected portion that we get most of our knowledge of Bjarni's voyage and the events down to Karlsefne's voyages.

Snorri was born in Iceland in 1178 and died about 1240. He was killed with an axe in Iceland because he didn't obey King Haakon's order to return to Norway. He wrote the sagas sometime after 1220. The events he and others described in Vinland had happened a long time before these writers lived. They had their information from sailors and the scalds, or story tellers, who enjoyed much esteem from their public recitals. It is related that these were held closely to the old forms of their narratives and that listeners in their audiences were not backward in correcting any devia-So it is thought the old Vinland tales came to Snorri and the others with little variation. Critics think there is no doubt of the authenticity of his work and the substantial correctness of his writings.

The difficulties experienced by the Icelandic historians in compiling the many stories of Vinland involving different voyages by many men over many years will be especially appreciated by newspapermen who know what it is to try to weld second and third and fourth hand accounts, often contradictory, into some semblance of a harmonious whole. Where the reporter has no personal knowledge of the area tales cover, he is bound to get things mixed, to fuse stories that have no relation to each other and to jumble the facts his informants give him. These writers make no line of demarkation between the area frequented by Eskimos and the country where there was "no frost in winter,"—plainly these must have been a long way apart. Grapes certainly never grew in any latitude in which the Eskimos ever lived or frequented.

We know that the reason ships always stopped at Charlton Island in James Bay was because the shallow shores made it obligatory for them to do so. It is obvious from our knowledge of the swampy shores of the bay that there could have been no Norse settlement there. The bay fishing isn't so good in our time. So these historians listening to old tales, mixed up the details of the different voyages, and failed to note what they would have known had they visited the Hudson's Bay area that the events they related covered a wide stretch of country.

These Icelanders were artists in their way, careful and conscientious about what they set down, but with the best intentions neither they nor anybody else could make a flowing story out of the various pieces that traditions finally gave them to work with.

Indian tribes too had story tellers charged with the duty of keeping the tribes' wampum belts and reciting to each generation the history each symbolized. But even the story of the massacre of the Hurons, 30,000 strong, told in such faithful detail by the French missionaries in Huronia in the first half of the 17th century, is an inchoate tale as recorded by Rev. Peter Jones, an Ojibway who served his people as a missionary a century ago. The writer of the Flatey book got his stories from men who had heard them from former generations. He could not in fairness be expected, no matter how hard he tried, to do more than get a few outstanding facts right and this he did.

When the news of a fertile land in the west reached Europe it would seem that all the tales of the Fortunate Isles were transferred to it. Is it possible that these stories, which had come down from antiquity, were really based on what mariners had seen across the western ocean? However they arose, whether in imagination or in fact, they are a mixture that has baffled every attempt at a satisfactory interpretation.

The Flatey book version intimates several times that there were Eskimos at the entrance to Vinland. The Norsemen killed eight out of a party of nine who had been found "under skin boats."

The Eskimos had controlled Hudson and James Bay down to Hudson Bay Company days, (1670), when Thomas Gorst, the company's first recorder of events, set down the fears of the company's men about the skin boat men and the fights with them. The company's relations with the Indians in the James Bay area were,

on the contrary, quite friendly. See John Oldmixon's book "The British Empire in America," printed at London in 1708, and reproduced in part by the Champlain Society of Canada in a collection of old documents relating to the early history of Hudson's Bay. Mr. Gorst was intimate enough with the friendly Indians to be able to compile a short glossary of their words, but he records nothing about the Eskimos except their hostility and the efforts of the company's men to defend themselves. Thus from the first visit of the Norsemen to Vinland till the Hudson's Bay Company arrived, almost 700 years later there was trouble and little else with the Eskimos on "the bay." The Crees there tell the same story,—they have always found the Eskimos till recent years a source of trouble, and fighting had been the normal relation between the two up till the time white control stopped this. But old scores still rankle today at Moose Factory. Up to the time of the Moravian missionaries arriving in Labrador it is stated that "Newfoundlanders dare not go ashore there on account of the Eskimos."

Thus we get a fair picture of the Eskimo reaction to the Norseman as well as to the Hudson's Bay Company and the Cree,—all in James Bay. It is an indication worth noting.

If Vinland is in Nova Scotia, or on the Hudson River in New York state, or in the Cape Cod area, or in Virginia as is suggested by writers, then we must find "skin boat men" in these locations if they are to meet the requirements of the sagas. But there is no record whatever,—not even when the first Frenchman arrived on

the St. Lawrence that there were any Eskimos south of that river.

When Karlsefne's women sold "milk and dairy products" to the natives for their furs we may be justified in concluding two things:

First: The natives were Eskimos and these possibly had never tasted milk before and so were content to take their pay "in their stomachs" as the old record says.

Second: The scene of the bargaining and the subsequent battle,—possibly with the Indians,—took place in the interior of Vinland and not on the swampy shore of James or Hudson's Bay. In which case it is almost certain the milk came from domesticated buffaloes as the "cows" the Norsemen are supposed to have brought from Greenland could not have been carried inland hundreds of miles in canoes or in the small boats that must have been used for river travel. Neither man nor beast could get inland by foot.

It is recorded that Karlsefne's men had a fight with the "skraelinger." Mr. Gathorne-Hardy collates the accounts from the saga of Eric the Red and the Hauk's Book with this result:

"Karlsefne and Snorri observed that the savages raised up on a pole a very large globe, closely resembling a sheep's paunch and dark in color and it flew from the pole up over the party and made a terrible noise when it came down. Upon this great fear came on Karlsefne and his party and they wished for nothing but to get away up the stream," etc.

Freydis, the woman, came along and berated the Norsemen for running. She picked up a dead Norseman's sword and "beat the sword" on her naked breast and the savages ran away.

Brogger, of Oslo, says of the above that "the anthropologist Schoolcraft" proved that the Algonquin Indians were in the habit of throwing something from a pole among their adversaries which made a great noise and so frightened them. It is strange that no other Indian investigator has mentioned this noise maker; and the use of such a contraption hardly fits in with records we have of Indian strategy.—to travel light, the stealthy approach and finally the war whoop, with every man for himself. A noisemaker would hardly be the secret of one "Algonquin" tribe,—a term about as all embracing as "European." Mr. Schoolcraft was the Indian Agent at the Michigan Sault for many years.

It should be noted that the Hauk's Book version makes no reference to Karlsefne going to the place where Leif had built houses or asking for a loan of them. In fact it doesn't mention Leif building them.

There was "no frost in winter and the grass was not much withered." This description would not fit the Atlantic coast possibly farther north than Washington, but the coast states never had prairies, prairie grass or buffaloes. Or Eskimos or skin boats or furs.

"Upon an island FAR towards the west" the Norsemen found a "cornbarn" made of wood. The northern limit of corn growing in Indian days was the south shore of Lake Superior. Farther west it runs a little more northerly. But the lack of wood on the prairies seems to make them unlikely as a location for the barn. The Sioux, the records state, had to burn buffalo man-

ure for fuel. Among the Indians of Canada the wigwams and corn cribs were made of bark. Even the cabins they built for the early missionaries were of birch and elm bark. The old Jesuit Relations spoke only of corn being buried in bark containers inside the wigwams to preserve it from frost. Had the barn been built by a previous party of Norsemen?

And what does Snorri mean by "corn"? Does he mean wild rice, which in certain areas was gathered regularly by the Indians? Or was the English translation of the Norse word not accurate? Or did he use the word as Europe uses it for all grain?

The Norsemen of Karlsefne's party "came back in autumn to Leif's booths." From the west or south? From puzzling over Snorri's pages, the reader is bound in the end to be satisfied to take from them only the broad general outlines of a venture inland.

There are definite particulars of Vinland set down in the old stories: It covered a long stretch of land from a place where "no grass to be seen" to another place where there was "self sown wheat."

It extended from where there were "skin boat men" (Eskimos) on a northern shore, to a place where there was "no frost in winter" which of course was a long way south.

Thus the old records tell us that Vinland was an extensive area. Knutson lost ten men in 1362 in Minnesota who were all scalped. Eskimos have never scalped, states a missionary.

Document XII

DID THE CHILDREN JUST CRY FOR HOME?

Karlsefne's men captured two "Skraeling" children in Markland on their way back from Vinland to Greenland, and Hauksbook records four words of these little ones as the names they gave their father and mother and the two "kings" of their country.

But it may be that the little captives in using these words were only pleading to be allowed to go home.

Mr. W. Thalbitzer, of Copenhagen, an expert in the Eskimo language, assumes that the first two of these words are Eskimo and suggests the following derivation:

Uvaegi, (which the Hauksbook says is the father's name), he transliterates as uwatje and says it means "wait a little, please."

Vaetilldi (the mother), Mr. Thalbitzer suggests may be uwatille, which he translates as "wait a little."

But it is just possible that the relationship is with the Cree language, which was spoken around most of Hudson's Bay, and not with Eskimo.

For instance, Uvaegi may be not "Uwatje" but "Wachis," the Cree word for a small cave or burrow.

And the curious thing is that the context of the saga

bears this out, for it relates that the boys said that their people "lived in dens or caves."

Similarly "Vaetilldi" may be the Cree "Watekao," "he makes or digs a cave or pit or cellar."

Gathorne-Hardy comments: "Mr. Thalbitzer permits himself an unrestricted range through the Eskimo vocabulary for words resembling in sound those cited in the saga. This obviously leaves room for considerable chance of merely accidental resemblance."

Take the word "Uvaegi." Thalbitzer interprets its real sounds as "Uwatje," which in English would be "oowatchey." The English "w" carries the breathing sound "oo" as a start. Therefore the word should really be written "watchey" in English. The Cree "wachis" is very close to this.

In Faries' Cree Dictionary are these words:

Wachis: a small cave or burrow.

Weke: home, his house, abode, tent, lodge.

Oweko: he has a house.

Wate: hole, cave, den, lair.

Or take the names of the two kings, "Avalldamon" and "Valldidida." Even at a much later period, white men who endeavored to transliterate Indian languages have found it difficult. So it may perhaps not be unreasonable to suggest that "Avalldamon" may be intended for the Cree word "Awusima," above, or perhaps a shortened form of "Awusima-skowao," which means "he is above him in authority."

So, too, perhaps "Valldidida" comes from the Cree "Uwusita," beyond, or "Uwusita-skowao," which is translated "he surpasses him."

Naturally all such conjectures are just speculation,

but the similarity of the saga's word "Uvaegi" to the Cree "Wachis" and the reference in the saga to cavedwellers is, to say the least, striking and would appear to be something more than a coincidence.

And if the guess made herein is right, then Karlsefne had apparently captured two Cree children, who in terror asked to be sent home to their parents! What more likely?

It would thus seem that the Norsemen applied the word "skraeling" to all the natives they met. It is significant, perhaps, that nothing is said about the party attacked having "skin boats," which possibly may be taken as an evidence that it was not Eskimo.

It should be taken into account, too, in connection with efforts to prove that the four "Skraeling" words were Eskimo that by the time the Saga of Eric the Red came to be written down there would be no mystery about the Eskimo language to the Greenlanders, who would be thoroughly familiar with it.

Here is the reference in the Hauksbook, dealing with the children captured:

"On sailing from Wineland they (that is, Karlsefne's men) got a south wind, and came to Markland, where they found five savages, one of whom was bearded. There were two women and two children: Karlsefne's men caught the boys, but the others escaped, disappearing into the ground. But they kept the two boys with them, and taught them speech, and they were christened. They called their mother Vaetilldi and their father Uvegi. They said that the savages' country was governed by two kings, one of whom was called Avalldamon and the other Valldidida. They said there were

no houses there; people lived in dens or caves. They reported that another country lay on the other side (of Hudson Bay?) opposite to their own where people lived who wore white clothes and uttered loud cries and carried poles and went with flags... So they came to Greenland and stayed with Eric the Red for the winter."

Document XIII

WAS AMERICA KNOWN BEFORE LEIF?

THE INTERPRETATION of the Norse sagas by themselves is a hopeless job. They are in general a string of unrelated incidents. In one sentence "skin boat" men are dealt with; in the next a country of snowless winters.

But once the reader gets a foothold by the finding, for instance, of Norse relics around the Great Lakes it is possible to reconstruct at least parts of the story. We are not altogether at sea when Ontario, Minnesota, Michigan, Wisconsin and New York all give up mementoes of our Norse discoverers.

There seems to be a disturbed reliance placed on the sagas by modern students. But Nansen looks on "The Saga of Eric the Red," not as history or as even a mangled tale of old endeavor but as a hodge podge of ancient tales current in the medieval world. The many obvious myths and inaccuracies in it prevented him seeing the essential truth of some of it. He is the most outstanding skeptic, and it is a curious thing that Scandinavians seem cold to the possibility of the relics found having been lost by their gallant forebears. English writers seem to have followed their lead. When a historian condemned the Kensington Stone as

a "forgery" he set the fashion. And when some other historical critics echo this they may still be wrong.

It is advisable to review what medieval writers had to say about the discovery of Vinland. A lot of it is vague and hardly understandable,—myth and reputed sailors' tales apparently being mixed together. But it seems possible to extract some fact, and we are as much entitled to our own guesses in regard to the application of the statements made as writers in the past who insist on an Atlantic coast location for Vinland.

In considering the matter let us forget for the moment the finding of many Norse relics hundreds of miles apart around the Great Lakes and confine this part of the discussion to the Norse story tellers and writers themselves. It seems plain enough that for hundreds of years these records have been clearly indicating that Vinland was in the interior of the Continent.

G. M. Gathorne-Hardy published in 1921, "The Norse Discoverers of America," an admirable effort to get to the bottom of all the conflicting sagas. It is a very clear headed attempt. From the Landnamabok he takes this paragraph of Eric's discovery of Greenland and adds from the Hauk's Book the sentence in italic:

"He (Eric) was the first to winter at Ericsey, near the centre of the (Greenland) Western Settlement; the following spring he came to Ericsfjord (in south Greenland) and took himself a site there. He went that summer to the western wilds where he remained a long time; he gave names to places there over a wide tract."

Here we have a statement that Eric (in 983?) went west from Greenland, stayed a considerable time and named a lot of places. He must therefore have explored the continent of America. This may explain much of the puzzle of how easily Leif and Karlsefne and the rest were able to find their way to the continent years after. We may reasonably guess that Eric had previous knowledge of the "western wilds."

Greenland is spoken of by Eric as "a poor country" in Eric the Red's saga. It is stated in the Hauk's Book that the winter Karlsefne stayed at Brattahlid with Eric the Red, there was much discussion "about a search for Wineland the Good and it was said that it would be a profitable country to visit," so that Vinland was well known in Greenland at the time. After Karlsefne's return we read "the voyage thither (to Vinland) seemed both lucrative and honorable."

We possibly may be justified in assuming that the Norsemen had knowledge of Vinland before the time of Eric the Red, or Leif the Lucky, his son, and that the reason 25 shiploads of emigrants left Iceland in 986 for Greenland, was partly because Eric had brought back from Greenland definite news, not alone of Greenland, a less attractive place than Iceland, but also information concerning the pleasant land to the west of it, where life was easier than even in Iceland. For we are conscious in reading the old writers that they had long heard of "Ginnungagap" which could only be Hudson Strait, and the "outer ocean" at the end of the strait which could only be the vast inland sea we call Hudson Bay. This phase is discussed at length elsewhere.

For unless it is conceded that Eric was not the first man to know about the lands to the west, there are several points that are puzzling.

At Brantford, Ontario, a bronze axe was found many years ago. In the Smithsonian Institution's list of "Indian notes" the weapon is stated to be of Norse origin lost "in pre-Columbian days." Iron had pretty well supplanted bronze weapons before the Norsemen discovered Greenland. When was this bronze axe made and when was it lost in Ontario?

In the Trondheim (Norway) "Nidaros" on November 11, 1938, Professor Th. Petersen in response to an editorial request expressed this opinion of the Dodd sword after examining a photograph of it:

"The sword was made in the eighth or ninth century, (700-900 A.D.) Its type shows it is of Norwegian manufacture and that it came from the eastern part of Norway. It is similar to the one sent from Iceland in 1919, but it differs in the line of little rings on its surface. These rings were sometimes placed on the armor and other implements of war . . . another somewhat similar sword has been found in the northern part of Norway It is supposed to be a relic of Viking times and was probably made about the year 900."

If Prof. Petersen is right as to the age of Dodd's sword, it may have been lost in Canada many years before Leif the Lucky came to Vinland.

In 999 Leif sailed from Greenland to Norway. Nansen's "In Northern Mists" has this to comment on the feat: "It shows that this long passage was not unknown to the Icelanders and Norwegians." And we

may ponder the probability that these bold seafarers would hardly be likely to be altogether ignorant of the area just across from Greenland.

In Southern Norway a rune stone was found which Sophus Bugge, the archaeologist, thinks was inscribed about 1000-1050 A.D. It contains the first mention of Vinland. He translates it doubtfully as: "They came out (into the ocean) and over wide expanses, and needing cloth to dry themselves on, and food, away toward WINELAND up into the ice in the uninhabited country. Evil can take away luck, so that one can die." The stone, it is thought, was chiselled in memory of a man who lost his life on a western voyage.

The sagas give us much material of interest if we can only segregate the facts from the myths in them, and then arrange the facts in some sequence. But it is plain that we must go beyond these old records and fanciful travellers' tales if we would know the whole story of the discovery of America, and the truth about Vinland. Because the story of Eric, the Red, as we have it, is unreal. It doesn't carry conviction. It is said he gave the name "Greenland" to an icy waste because by so doing ne though men would be attracted by an alluring name. And when people in Iceland knew all about the rigors of Greenland they still kept coming. Why?

It may be assumed that it wasn't the intense cold of Greenland winters that kept thousands there, nor its short summers with nights close to the frost line, nor its ungrateful soil, nor its scanty scrub vegetation, nor its rough seas that discouraged the coming of ships, nor its loneliness and lack of creature comforts. It must have been something that made its thousands feel it was worth while to do so.

Greenland in Viking days was estimated to have had a population of from 3,000 to 9,000, and the latter figure receives some approval from some historians. Can we imagine these thousands of people preferring to stay in a land admittedly less attractive than Iceland if there wasn't some material reason for doing so? And this especially applies to the "western" Greenland settlement where the fjords sometimes were not free of ice in summer and the people were thus barred from the ocean occasionally.

What pull had Greenland to draw people from Iceland where the weather was less harsh, food more plentiful and communication with Europe's supplies infinitely easier, if it wasn't the lure of Vinland's trade, its summer climate, or some such attraction. You and I are as competent to decide the question as anybody, and we know that people do not stay for hundreds of years in a place without a good reason. And they will live anywhere it pays them to do so.

You say these statements do not prove that any Norsemen knew of Vinland before Eric, which is true. But they should be included in your final review of the evidence. We have to account somehow for all the Viking relics of all ages found from James Bay to North Dakota, and as far south as New York state. By picking our steps carefully between the sagas and old manuscripts, by looking over the territory around the Great Lakes, by assuming that the Norsemen did 1,000 years ago pretty much what we would have done had we been in their place, by letting the facts guide

us and not trying to make them say something we want said, we may arrive at a verdict which appeals to us as well as to others.

Unless the reader is prepared to close his mind to the state of the old world in the tenth century, (900-1000) he is entitled to suspect that Iceland had some knowledge of Greenland and America before Eric the Red's banishment from Iceland in 982.

Today we are told that archaeologists suspect that long ago there was a civilization in America,—an early pre pottery period in the Great Lakes area, and that the idea of copper implements may have been brought from Asia. It's hard to know where to begin to figuring out who came to America first to improve the red man. Our job at present deals with the Vikings.

Document XIV

HOW NORSEMEN REACHED VINLAND

See "Contents" for Page Numbers of Illustrations

To have a population in Greenland estimated as high as 9,000 (G. Storm) die out without the world being aware of the tragedy till it was all over, and to have only legend and vague tales as the only legacy left of the Norse stay together form the basis of a mystery unique in history. So complete was the disappearance of both Greenland and Vinland that for centuries the world actually doubted that there was any real basis for the mass of literature which dealt with the strange ventures.

In the maze of contradictory and improbable stories from the past about how Vinland was found by the Norse pioneers it may be worth while to extract a few of the less foggy details. Perhaps all the reader can get out of the most discreet summary is a general idea of events, for the writers and commentators usually follow their diverse fancies.

The Greenlanders and Icelanders undoubtedly reached America,—probably many parts of it. But at first they were concerned with places called Helluland, (flat stone land), Markland, (woodland) and Vinland, (wine land, or, as is now claimed, "pasture" land). Writers usually favor Labrador as the first place, Newfound-

land or Nova Scotia as the second and the New England states as the third. This book, instead, holds to Helluland probably being around or near Hudson Strait; Markland as being the wooded shores of Hudson and James Bays, and Vinland as the Great Lakes area in inland America.

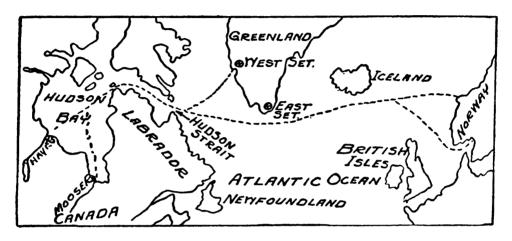


Plate 20-Norway to Hudson Bay

Bishop Adam of Bremen, writing about 1070 first mentions Vinland in a book. He says:

"He (the king of Denmark) mentioned also another island which has been discovered by many in this ocean, which is called wine. That self-sown grain is found there in abundance, we wine. That self-grown grain is found there in abundance, we have learned, not through fabulous conjecture, but through reliable accounts given by the Danes Beyond this island there is no habitable land in that ocean, but all which lies beyond is full of unbearable ice and boundless gloom. Of this circumstance we are reminded by Marcian: "Three days' sailing beyond Thule the ocean is congealed." Harald, the king of the Norsemen, a prince very desirous of knowledge, experienced this when he explored the whole width of the northern ocean with his ships, and as the disappearing edge of the earth grew dark before his eyes, he scarcely escaped in safety the great abyss by returning.

He had apparently reached the entrance to Hudson Strait, where Davis in 1587 found the water "whirling and roaring," and "saw the sea falling down into a gulfe with a mighty overfall, and the roaring with divers circular motions like whirlpools."

The next mention of Vinland is found in Are Frode's "Islendingabok," (1120-1130):

"The land which is called Greenland was discovered and colonized from Iceland. Eirik the Red, a man from Breidafjord, went thither, and took land in a place since called Eiriksfjord. He gave the land name, and called it Greenland, saying that it would entice people to go there, if the country had a fine name. They found human dwelling places both east and west in the land, remnants of boats, and stone implements, from which they could judge that the same people had wandered about here which inhabit Vinland, and which the Greenlanders call Skraelings. But he began to colonize the country fourteen or fifteen winters before Christianity was introduced in Iceland (in 1000) according to what was told Thorkel Gellisson in Greenland by one who had accompanied Eirik, the Red, thither."

Many other writers following the above tell of Vinland. Several men are given as its finders: Biarni about 986; Leif, the Lucky, 1000; Thorfinn Karlsefne (1006?) Each has his supporters and critics. Perhaps none of these was the first to land. There is really not much definite about either the finder or the date of his discovery.

The old Norse sagas differ materially in many respects concerning the early history of Vinland. The reader must puzzle out the story for himself, accepting what appeals to him as reasonable.

The "Flatey Book" version has been followed in these articles but the Saga of Eric the Red, and the Hauk's Book are fancied by some as more reliable, if that

word can be used in this connection.

The Flatey Book gives the story something like this:

Leif Ericson, son of Eric the Red, sailed from Greenland to Norway in 999. He started for home in 1000. His voyage was rough, and he missed Greenland in the fog. Finally he landed on an unknown shore. There were "self sown wheat" fields and vines, and trees. He finally got to Greenland and told his story. A little later Thorfinn Karlsefne decided to try his luck, accompanied by two other ships.

"They had in all 60 men when they sailed to the Western Settlement and thence to Bjarneyjar (Bear Islands). From there they sailed away with a north wind. They were on the sea two daegr, (a daegr is 12 hours, or possibly a week as is suggested by Brogger in his "Vindlandsferdene," 1937.) Then they found land, and rowed along it in boats, and examined the country, and found there on the shore many flat stones so large that two men might easily lie stretched upon them sole to sole. There were many white foxes there. They gave the land a name and called it 'Helluland' (i. e. Land of Flat Stones)."

"After they had sailed again for two daegr, they sighted land and sailed under the land. There was a promontory where they first came. They cruised along the shore, which they kept to starboard (i. e. to the west). It was without harbors, and there were long strands and stretches of sand. They went ashore in boats, and found there on the promontory a ship's keel, and called it 'Kjalarnes' (i. e. Keelness). They also gave the strands a name and called them 'Furdustrandir' (i.e. Marvel Strands, or the wonderful, strange strands), because it took a long time to sail by them."

They sailed two more daegr towards the southeast and south and saw forests. On an island they saw a polar bear. (One was shot on the Belcher Islands, Hudson Bay in 1938 and Newfoundland seems to be the fartheast south polar bears are seen.) Then they sailed two more daegr and sighted land. "There was a promontory where they first came . . . It was without harbors and there were long strands and stretches of sand." (A good description of the west shores of Hudson Bay, south of Churchill, and James Bay).

South of these long beaches "the land was indented by bays and they steered the ships into a bay." ("bay" at the river mouth?). "Runners" were put out for three days and they came back with "self sown wheat" and "vines." So that they must have found these a few miles from the ships. They had "all kinds of cattle with them" and they landed. "There was much grass" and mountains. They stayed the winter and ran short of food. Being Christians they prayed for food, but none came till a whale was blown on shore after a pagan appealed to Thor, a Norse god.

They set sail again "southward along the coast" and came to a river with a great sandbar across its mouth, and there they found "self sown wheat fields" on low lands and vines on the high ground. They "amused" themselves for a month, and then saw nine "skin boats." Karlsefne built houses and they stayed the second winter. There was no snow. (There would hardly be Eskimo boats in a latitude which had no snow in winter.)

Eventually there was a fight between the Norsemen and the Skraelings, which name seems to have been applied by the Norse to the Greenland Eskimos and perhaps the Indians. There had been trading in furs before the fight and the Skraelings were refused Norse weapons, which caused a battle. One Norseman died from a "flat stone in his head."

Nansen thinks the whole story a piece of fiction, and it certainly sounds disconnected and improbable. There are doubtless nubs of fact in it; the Norsemen had landed somewhere, had battled with the Eskimos or Indians or both; had spent a winter or two in a winterless region perhaps; had seen forests, and long sand beaches.

The last mention of a voyage to Vinland is in the Icelandic Annals for 1121, saying that Bishop Eric went to search for Vinland, but never returned. In 1347, a Markland ship was blown to Iceland, and it is argued that this casual reference to a wreck in the Annals shows that ships were still going to Vinland.

Considering the Flatey Book version, if Leif Ericson didn't land at the Moose River, the description of his arrival somewhere fits Moose River to a T. It was on his first voyage to Vinland:

- 1. First he passed "snowy mountains" and a rocky wilderness. (Hudson Strait.)
- 2. Next he came to a country 'flat and overgrown with wood and the strand far around consisted of a white sand and low towards the sea." (James Bay).
- 3. Leif then sailed "with an onshore wind from the north east."
- 4. Two days after they landed on an island 'to the north of the land."
- 5. He left this island and "sailed into a sound that was between the island and a ness (point) which went out northward from the land and sailed west past the

ness. There was very shallow water in ebb-tide, so that their ship lay dry and there was a long way between their ship and the water." The crew waded to shore "to where a river comes out of a lake."

This might be a description of a boat's arrival at Charlton Island bound for the mouth of the Moose River. The physical features seem to be all there, the island (Charlton) to the north of the land (south shore of James Bay,) the "sound" between the island and Hannah Bay point, "which went out northward from the land," the "very shallow water in ebb tide," and the long distance between their stranded ship and the water. This is guesswork of course, but it would be remarkable if there were another area that Snorri's description would fit as well.

Leif seems to have followed Biarni's directions on his course.

Of his brother Thorvald who next sailed to Vinland (after hearing Leif describe the country?) the saga notes "nothing is related of this expedition till they came to Vinland to the booths put up by Leif." The route to Vinland seems to have been then well known.

Document XV

DID THE VIKINGS FIND THE MANDANS?

Many writers have argued that the Mandan Indians of Dakota have had an infusion of white blood away back in their history. So much has been written about them that it is considered not out of place to review their story here. It is not needed, of course, in the tale of the Norse invasion of America. These odd tales of white evidences among the Indians are numerous. But others do not rest on anything like so solid a base as that which concerns the Mandans.

Just as doubts of the Norse infiltration among the Mandans arise in the mind, the student will find references which are disturbing enough. Take this from page 622 of the South Dakota Historical Society's fourth volume: Dr. Washington Mathews, of the U. S. army says in his introduction to the grammar and dictionary of the Hidatsa, closely related to the Mandans:

"Their legend says they originally lived under a great body of water which lies far to the northeast of where they now live. Some persons found their way out and discovering a country much better than the one in which they lived, returned and gave to their people such glowing accounts of their discoveries that the whole nation determined to come out. But owing to the breaking of a tree on which they were climbing out of the lake, a great part of the tribe had to remain in the water, and they are there yet . . . To this beautiful and good land the tribe now directed their march and guided by their messengers, reached the Mandan villages on the Missouri River."

It may be significant that the tree legend is distinctively Norse.

On February 16, 1913, children found an inscribed leadplate on a hill near Pierre, the capital of South Dakota. It turned out to be the tablet buried by Pierre Verendrye, a French explorer and trader, in 1741.

"I deposited," wrote Verendrye, "on an eminence near the fort a tablet of lead with the arms and inscription of the King, and a pyramid of stones for the General," (Governor General Beauharnois).

A portion of the tablet is unintelligible:

Anno XXVI Regni Ludovici XV prorige . . . illvstrissimo domino domino marchione . . . de Beavharnois MDCCXXXXI Petrvs Gavltier de Laverendrie Posvit . . .

("In the 25th year of the reign of Louis XV (of France) for . . .?

Most illustrious Lord, Lord Marquis (?) de Beauharnois, (French Governor General) . . .? Pierre Gaultier of Verendrye . . .?")

Verendrye was the first French explorer who had got as far west as the Dakotas. He and his sons discovered the Saskatchewan River, then known to the Crees as "Paskayah."

In 1749 Pierre met the Swedish naturalist, Peter Kalm, at Quebec, and the latter heard from him the story of his western explorations and an argument that America had at one time been inhabited by a race superior to the Indians. Kalm, in reporting the interview in his "En Resa Til Norra America" (1753-61) gives Verendyre's reasons for this claim. Pierre told Kalm that some years before he had been given charge of an exploration party by the Governor General of New France and he had travelled 900 miles west. Says Reporter Kalm of Verendrye's visit to a strange western tribe in 1738-39:

"As they came far into the country, beyond many nations, they sometimes met with large tracts of land free from wood, but covered with a kind of very tall grass, for the space of some days' journey. Many of these fields were everywhere covered with furrows, as if they had been ploughed and sown formerly. It is to be observed that the nations which now inhabit North America could not cultivate the land in this manner, because they never made use of horses, oxen, ploughs, or any instruments of husbandry, nor had they even seen a plough before the Europeans came to them.

"When they came far to the west, where, to the best of their knowledge, no Frenchman or European had ever been, they found in one place in the woods, and again on a large plain, great pillars of stone, leaning upon each other. The pillars consisted of one single stone each, and the Frenchmen could not but suppose that they had been erected by human hands. Sometimes they have found such stones laid upon one another, and, as it were, formed into a wall. In some of those places where they found such stones, they could not find any other sorts of stone. They have not been able to discover any characters, or writing, upon any of these stones, though they have made a careful search after them.

"At last they met with a large stone, like a pillar, and in it a smaller stone was fixed, which was covered on both sides with unknown characters. This stone. which was about a foot of French measure in length, and between four or five inches broad, they broke loose, and carried to Canada with them, from whence it was sent to France, to the secretary of state, the Count of Maurepas. What became of it afterwards is unknown to them, but they think it is yet preserved in his collection. Several of the Jesuits, who have seen and handled this stone in Canada, unanimously affirm. that the letters on it are the same with those which in the books containing accounts of Tataria, are called Tatarian characters; and that, on comparing both together, they found them perfectly alike. standing the questions which the French on the south sea expedition asked the people there concerning the time when, and by whom those pillars were erected? what their traditions and sentiments concerning them who wrote the characters? what was meant were by them? what kind of letters they were? in what language they were written? and other circumstances; yet they could never get the least explanation, the Indians being as ignorant of all those things as the French themselves. All they could say was that these stones

had been in those places time immemorial. The places where they stood were near nine hundred French miles westward of Montreal."

Kalm's story is an interesting one in view of the several indications of the presence of the Norsemen in Minnesota. Dakota is mostly undulating prairie land, and it is interested chiefly in agriculture. The prairies are accurately described,—the very tall grass is the familiar "prairie grass."

Verendrye told Kalm that the Mandans lived in earth houses. In Greenland the Norsemen banked their houses with from eight to eleven feet of earth.

"Great pillars of stone . . . sometimes stones laid one on another . . . in some places . . . could not find any other stones . . . at last . . . a large stone like a pillar . . . covered on both sides with unknown characters . . . Indians ignorant . . . said these stones had been in those places time immemorial . . .

Here from Verendrye, who reports that he saw these stones, is a lifelike description of the old Scandinavian burial places and also a cairn with an inscribed rune stone on top. Ancient Scandinavian graves were

"dolmens, consisting of stone slabs from the bottom of the grave to some distance above the ground, so placed as to form a circle, and a great stone slab is placed on top as a roof.—Gjerset, History of the Norwegian People, Vol. 1, page 10-12.

The building of dolmens belonged of course to the stone age,—but according to one writer they persisted sporadically in Scandinavia into the early centuries of the present era.

John McDonnell wrote an account of the Red River in 1793-97 and in it he says of the Mandans:

"These Indians lived in settled villages, fortified with palisades, which they seldom ever abandon, and they are the best husbandmen in the whole North West. They raise Indian corn or maize, beans, pumpkins, squashes in considerable quantity, not only sufficient to supply their own wants, with the help of the buffalo, but also to sell and give away to all strangers that enter their villages. They are the mildest and most honest Indians upon the whole continent, and, withal, very fond of the white people."

Before he met the Mandans, Verendyre had heard a lot about them,—so much in fact that he became very curious about them. He felt, from what he had been told that they were either whites or a race which had come from a distance as the reports gave him the impression of a very superior civilization. The Indian, of course, almost always tells the white man what he thinks he wants to hear. As a result of the exaggeration the Frenchman was disappointed when he met the Mandans.

When Verendrye reached these Indians in 1738-39 he visited a village, which it is now claimed was situated about three miles from Minot, North Dakota. Verendrye's journey from his Fort St. Charles on the Lake of the Woods to the Mandan village is described in his journals. He went up to the junction of the Red and Assiniboine rivers,—the site of Winnipeg,—then out to about where Portage La Prairie now stands and

then it is thought, south west to the Turtle Mountains and so on to the first Mandan village, the only one he visited. It was of course somewhere on this journey on the prairie that he saw the stone graves and the cairn with a rune stone. Apparently no one can give us a report on the relics today.

In Verendrye's account of his visit to the Mandan village, it is apparent that he was wide-eyed at what he saw.

"The Mandans are much more crafty than the Assiniboin in their commerce and everything and always dupe them."

This shrewdness was noted by later travellers. The testimony is that they had a very extensive farm culture and sold much to neighboring tribes. Indian corn, squashes, sunflower, a kind of turnip, a sort of bean, and several wild plants of the prairies were cultivated. The Frenchman gives particulars of their meals and cooking, so much struck was he with everything including the "cellars" for the produce, "their whole fort being stocked." Somebody stole a bag of Verendrye's with presents for the Indians. The Mandan chief indignantly denied any of his people had taken it and apparently Verendrye concluded it was one of his Assiniboin escort who was guilty. The Mandans were the "most skilful of all the tribes in dressing leather, the Assiniboins cannot do work of the same kind."

From Verendrye's journal:

"M. de Lamarque and I took a walk to examine the extent of their fortifications . . . all the streets, squares and cabins are uniform in appearance; often our Frenchmen would lose their way in going about (among

the 110 cabins). They kept the streets and squares very clean; the ramparts are smooth and wide; the palisade is supported on cross pieces mortised into posts fifteen feet apart with a lining as to the bastions there are four of them at each curtain well The fort is made on an elevation in midprairie with a ditch over 15 feet deep and from 15 to 18 wide . . . impregnable to savages . . . their fortification indeed has nothing savage about it. The tribe is of mixed blood, white and black. The women are rather handsome particularly the light colored ones; they have an abundance of fair hair. The whole tribe, men and women, are very industrious. Their dwellings are large and spacious, divided into several apartments by wide planks. Nothing is ever lost, all their belongings are placed in large bags hung on posts; their beds are made in the form of tombs, and are surrounded by skins."

Maximilian of Wied visited the Mandans and noted that "the beds stand against the wall of the hut; (2 feet from the floor,) they consist of a large square case made of parchment or skins."

Verendrye continues: "They all go to bed naked, both men and women. The men go naked all the time being covered only with a buffalo robe. Many of the women go naked like the men, with this difference that they wear a small loin cloth about a hand wide and a foot long sewed to a girdle in front only. All the women wear this kind of protection even when they wear a petticoat, so that they are not embarrassed when they sit down and do not have to keep the thighs closed like other Indian women. Some wear a kind of

jacket of soft buckskin . . . cellars, where they store all they have in the way of grains, meat, fat, dressed skins and bearskins. They have a great stock of these things . . . they do very fine wicker work . . . they use earthen vessels which they make like many other tribes for cooking their victuals . . . great eaters . . . every day more than 20 dishes were brought to me, corn, beechnuts, pumpkin, and always cooked . . . the men are big and tall, very active and for the most part good looking, fine physiognomies, and affable. The women generally have not a savage cast of features."

It is rather remarkable that Verendrye gives us no particulars of any other Indian tribe he visited; the Mandans were to him obviously the only tribe worth describing. The reader will decide how much this extraordinary tribe differed from the others, and if, in his opinion, there seems to have been other than Indian blood in it.

So Verendrye's stay among the Mandans gave him a high opinion of their sagacity in dealing with their neighbors, of their industry and provisioning for the future, of their light complexion and hair, of the superiority of their fortifications.

But Verendrye, while he felt the Assiniboines and Crees had much exaggerated the remarkable characteristics of the Mandans, can't help writing many pages about them. He was plainly puzzled by them, their fair hair of many shades, the whiteness of the skin of some of the women and their attractiveness. They couldn't talk to the Crees or Assiniboines who accompanied him. The word "Mandan" while yet unexplained, may have something to do with the Cree word

"mantao," (a stranger). Certainly the Indians near and and far looked on the Mandans as strange people. So did every writer who visited them from Verendrye onwards. He wrote in his journal of 1738-39 that he "wanted in the autumn to visit that tribe of whites that I had heard so much about."

Some Verendrye notes: The Mandans subsist mostly on grain. There were always ample supplies of food in their "cellars". The Crees said the Mandans were "descended from the French." The Cree Indians called the French "White Beards."

From all that Verendrye and others have written about the Mandans H. R. Holand has compiled a full summary. He concludes that these Indians undoubtedly were partly of white blood, and that the whites had come from across the sea. Why? Because the tribe had a legend of their ancestors arriving in a big canoe, and so strong was this tradition that in the public square of a village was a symbolical representation of the vessel, around which a religious ceremony was held annually. So relates Prince Maximilian of Wied who spent a year with the tribe a century or so ago. The Mandans had apparently vague stories of the deluge and the ark, of the arrival of a Messiah who taught their medicine men, of Sampson, the immaculate conception and other biblical fragments which seem to indicate a Christian origin. The Mandan area was not far from where the Kensington stone was found in south western Minnesota.

Messrs. G. F. Will and H. J. Spinden of Harvard University made a study of the Mandans in 1906, dealing with their culture, archaeology and language. They

apparently were impressed with the superiority of the tribe to its neighbors, and with all they could learn about its physique, light hair, progress in agriculture, courage and technical skill. Till smallpox struck the tribe a century or so ago, it held its preeminence. The authors' reaction seems to have been very much that of La Verendrye. The language is a Sioux dialect.

In the Sault Star office is a stone axe (?) very similar to the picture of No. A on plate 32 on the Mandan study of Will and Spinden, and on page 174, cuts B and C of earthen vessels have a form almost identical with that of the Port Arthur copper "vase." The markings on the Mandan pottery are very similar to the work of the Hurons of Simcoe County, Ontario, dug up by the writer.

Of course, there are skeptics. The Kensington stone is not accepted yet by many. Properly enough the function of a critic is to analyze the weak spots. But the suspicion must exist that much of the unbelief in the Norse exploration of the interior of America rests a little on indifference to work already done.

Was LaVerendrye the first Frenchman who penetrated to the west? He is the first official explorer but it must be remembered that 115 years before his journey Etienne Brule had shown Brother Gabriel in Huronia, a "lingot of copper" from an area where women lost their noses for unchastity—a custom in vogue among the Sioux when Radisson and Groseilliers came west a couple of generations after Brule. When it is remembered that New France forbade its people to do unlicensed beaver trading with the Indians under pain of death, it seems likely that the coureurs de bois had

become so busy in the west that official trade of New France was being wrecked. Thus the restless spirits of New France are likely to have preceded Radisson who came to the west in 1654.

There is a much discussed passage in La Hontan's account of his travels on this continent. It is in a letter dated May 28, 1689, from Michilimackinac, in which he recounts his trip the previous year up the "Long River," suggested by Stephen Leacock as the Minnesota River. This letter of La Hontan's has been dismissed by some critics as fiction but Mr. Leacock is inclined to accept it as genuine. La Hontan relates that when he was camping with the Gnacsitare Indians on the upper reaches of the "Long River" he came in contact with four Moozemlek Indians who were being held as slaves, one of whom had "a reddish sort of copper medal hanging upon his neck." Through an interpreter the Moozemleks told La Hontan that these medals were made by the Tahuglauk "who are excellent artisans."

As to the residence of the Tahuglauk, La Hontan was told that "the great river of that nation runs all along westward and that the salt lake into which it falls is three hundred leagues in circumference and thirty in breadth." Is the river by any chance the Albany or the Nelson and is the salt lake, despite the inaccuracy of the measurements, Hudson Bay?

The Moozemlek slaves, La Hontan reports, "assured me on the faith of a savage that the Tahuglauk wear their beards two fingers' breadth long; that their garments reach down to their knees; that they covered their heads with a sharp-pointed cap; that they always carry a long stick or cane in their hands, which is tip-

p'd, not unlike what we use in Europe; that they wear a sort of boots upon their legs, which reach up to the knee."

Making allowance for a description given at second or third hand and told through an interpreter, this may be a description of the traditional costume of the Norsemen, and it should be remembered that the Minnesota River takes its rise only a couple of miles or so from the source of the Red River, along the course of which many Norse relics have been found.

Document XVI

NORSE AND SPANISH VENTURES

Was it the daring voyages of the Norsemen before 1000 A.D. which really started the great age of discovery in the world? The Scandinavians had learned to build good shallow boats to be propelled by oars, and any ship that has to use oars cannot rise much above the water. That was the reason, don't you think, that the Norsemen stuck to a square sail which could only be used before the wind? So when the 100 cities of the Hansa League, (combined to protect themselves against pirates and bandits,) built ships that used only sails it meant that the small Norse ships were outclassed in size, safety and carrying power. Gradually Norway lost its sea leadership but the tradition of its bold Greenland voyages lived on, and helped to inspire Columbus and Magellan.

The advance of the Mongols into Asia Minor, (thus destroying the old caravan trade routes to the east,) upset Europe in the 13th century. The silks and spices of the east were shut off. People in those days had no ice boxes and food decayed quickly. So spices were needed to give it a flavor so it could be eaten. By 1300 Europe knew it had to find a way by sea to India, Cathay (China), and Zipango (an Italian form of

Japan), and the Spice Islands which were Java and Borneo and so on.

In those days just before Columbus came to America, Venice and Genoa were the chief Mediterranean powers. Spain was the great military power and Portugal the most enterprising sea power at least as far as discovery went. It is said that Columbus got his idea of sailing west to India from the tales told of Norse enterprise. It is said he visited Iceland and talked to Norse sailors. Says Van Loon in his "Story of Mankind":

"In February, 1477, Columbus (if we are to believe his own words) visited Iceland and met the descendants of those brave Norsemen who in the tenth century (900-1000) had settled Greenland and who had visited America in the eleventh century when Leif's vessel had been blown to the coast of Vinland."

In Columbus' day, no word had come from Greenland for almost a century. Only vague legends were current about vast lands across the waste of waters. The Portugese were trying to find a route to the east by sailing around Africa. Columbus' idea was to sail straight west from Europe. People had got over thinking the earth was flat and that a ship would fall over its edge if they sailed far enough west.

Columbus tried to interest England and Portugal to give him ships without success. By 1492 when the Moors had been driven out of Spain he got the ear of Ferdinand and Isabella, the King and Queen of Spain, and they started him from Palos on Friday, August 3, in three little ships, with a crew who were mostly jail-birds. He landed on Watling Island in the Bahamas on Friday, October 12. The existence of America was

not known for some time after, and North America was the last part discovered. The Genoese thought he had reached India. Thus we have the "West Indies."

So this Genoa man, the son of a wool merchant, who learned to like the sea while travelling on his father's business, achieved fame. He had studied mathematics and geometry at Pavia. The Portugese were so angered at his success in trespassing on their claimed rights of possessing a monopoly of finding the route to the east that they threatened him with prison when he touched at the Azores coming back from America in 1493.

When the Norsemen had found America 500 years before Columbus, it was the result of leaving their own country to escape conditions they disliked. But Columbus' great feat really was founded on Europe's need of a sea route to Asia to take the place of the old trade route blocked by the Mongol armies. It was the private enterprise of the Norsemen as against the Spanish sovereign's backing of Columbus.

If Leif and Karlsefne and their followers had received national encouragement, the history of North America would probably have been very different. But Norway's decadence, because of its rivals building bigger ships, caused it to give up the struggle for this continent.

Document XVII

NORSE KNEW HOW TO BUILD SHIPS

As seamen, the vikings (people who lived in bays or fjords,) were the best sailors and ship builders of their time. Their control of the sea was undisputed for centuries. Their "long ships," propelled mostly by oars, enabled them to transport bodies of men faster than their rivals. It was their sudden attacks in force which gave them their success. Besides these "long ships," designed for speed and easy rowing, they had "round ships" for cargo or transport boats.

The Norse ships had a peculiar resemblance to old Mediterranean craft which used both oars and sails. The Roman galleys with their banks of oars may have given the Norsemen the idea of the ship they developed into such a fine seagoing vessel.

The Vikings went into eclipse only when other nations developed a system of sails, thus bettering the Norse single mast and sail. The weakness of the early Norse ship lay in its design as a rowing vessel, which is not adapted for sails. The rowing vessel cannot have much "freeboard" or high sides because oar holes or thole pins must be close to the water to give the rower leverage. The capacious sailboat must have

high sides, and also a keel to prevent "drift." Otherwise the sail power is lost.

Of the Norse ships it is recorded that the largest and costliest ever built was 150 feet long, "The Long Serpent," King Olaf's war ship. The largest "funeral ship," in which the distinguished dead were interred, ever found by archeologists was 85 feet in length. But these were of unusual size. The average vessel was very much smaller and it has been stated that most of the vessels sailing to Greenland were of 40 or 50 feet. Half of the space in the hold was taken up by the benches for the rowers, so that there was comparatively little room for cargo. The "Long Serpent" had 34 "banks" of rowers, and estimating three feet for each, 102 feet was required for these. Cargo could be piled under the seats and down the centre of the boat between the men at the oars. The ships had little freeboard so that they could not carry a heavy

The "Long Serpent" had bulwarks "as high as in a ship sailing the main sea," so that it could venture out in the ocean. The largest type of the "round," ships or cargo carriers was the "Knorr" which could carry 150 men. The speed of the sailing "round ships" was, it is stated about 6 or 7 miles an hour under favorable circumstances, but their average seems to have been about half that. The oar-ships had finer lines, were much shallower, and were meant more for shore waters. It is mentioned in the Heimskringla that a ship sailed from Norway to Iceland, 750 miles, in 96 hours, or at nearly eight miles an hour. It was an extra fast run. Champlain's fastest trip during his first years in

Canada from Rouen to Tadoussac, say 2,700 miles was 30 days. So that the French ships were no faster than the Norse of 600 years before.

It is conceded by Norse writers that the Irish were in occupation of Iceland when the Vikings arrived about 850. So that there must have been good shipbuilders and sailors in Ireland to give the men from the Green Isle a century of undisturbed occupancy in Iceland.

Perhaps the Norse voyages to Greenland and Vinland were not such gruelling experiences after all. Mr. Vilhjalmur Stefansson, born of Icelandic parents, testifies that the Icelandic winters are "less cold than those of New York state," and the "capital city in midwinter has about the temperature of Milan."

Thus summer voyages to Greenland and Vinland could have been rather enjoyable journeys. These old Norse ventures in fact were sometimes quite tolerable for even women and children. Few Icelanders, it seems, "have ever seen an iceberg." In the Arctic Circle the winds are less boisterous.

The parallel meeting of the Gulf Stream flowing north, and the cold Greenland current coming south, —which occurs between Iceland and Greenland,—is productive of bad fogs. In this fog area it is easy to understand why so many ship captains were blown out of their way "for many days," without chart or compass in the Norse period.

It is stated the maximum speed for Norse ships was 6½ knots or say seven miles an hour. Under the most favorable conditions therefore these ships could travel 160 or 165 miles a day. From Greenland to Moose

River, a matter of 1,700 miles, the Norseman might travel in two weeks under the best conditions of wind and weather. As "a day's journey" was usually reckoned by the Norsemen at 75 miles, they apparently travelled at only half the speed possible.

The old Norse ships exhumed in late years show that the Norsemen were among the first sailors to appreciate the advantages of the overhanging bow for riding seas, while the easy lines of the bow and waist of the ship testified to a long experience with the sea. They were never guilty of building craft which "dragged" water. There were no "bluff" bows or chopped off sterns. Modern racing craft thus have adopted for many years the principles of naval design which experience taught the Norsemen gave a vessel speed, and if it had to be rowed, ease in propulsion.

Modern designers have noted the lines of the fish, with advantage,—a bow which doesn't "push" water, a stern which doesn't "pull" it, and long body lines which disturb the water as little as possible. The worst fault of a vessel is to have a "scow" stern,—the drag of the water prevents speed.

But the Norsemen had all these ideas 1,000 years ago, and it is easy to accept the statement that their craft were the fastest afloat in their time.

It is understandable that the Norsemen stuck to a square sail. An easy rowing craft is not suitable for a modern sail rig, which calls for a heavy keel. And a heavy keel is a heartbreak when oars are used. Nobody has ever invented a safe boat that will row easily and carry a sloop rig. They are two designs which won't mix. Thus the Norse vessel was primarily

for oars,—it used a square sail with the wind aft, just as a canoe may do today.

The America Cup racers were developed on Norse ideas, and Capt. Angus Walters, of the Bluenose, a working fisherman, is a modern Norse ship designer. Mr. G. H. Duggan in his design of the "Dominion" in 1899 to defend the Seawanhaka Cup carried the Norse idea to an extreme limit, — he had a catamaran with two hulls built on fish lines. It was the Norsemen who taught the world how to build fast, seaworthy boats. They knew that a boat which throws off bow and stern waves can't be fast,—that it is the ship which slides through the water with a minimum of ripple that is the best designed. The ships of romance which "crowded on" sail and broke their masts were probably pot-bellied tubs.

The Eskimo kyack usually from 16 to 20 feet long and two feet wide, with its double paddle can keep ahead of any canoe. The Eskimo has learned by experience that easy lines are best. So Edward Hanlan also found when he had George Warren, the one armed farmer, build his racing shells back 60 years ago. Before that oarsmen used the old row boat or a refinement of it.

Document XVIII

NORSEMEN VIGOROUS FROM 800 TO 1150

THERE IS PROBABLY no more fascinating chapter in history than the story of the Norsemen, the Vikings who swept down over the coast of Europe in the ninth and tenth centuries and left an impress on western civilization far out of proportion to their numbers.

"No Homer sang these Norse Sea-kings," says Carlyle, "but Agamemnon's was a small audacity, and of small fruit in the world, to some of them."

These men of the North, swooping out from the Scandinavian peninsula and from Denmark, occupied much of the British Isles, established a dukedom in Normandy, founded the Kingdom of Russia, gave kings to Sicily, populated Iceland and Greenland and in the eleventh century, almost five hundred years before Columbus, discovered the mainland of North America. Those who think that it would have been a physical impossibility for even these hardy adventurers to penetrate to the heart of this continent, have only to consider their other achievements.

Whence did these Northmen come? History discovers them on the shores of the Baltic Sea in Scandinavia and Denmark and their own tradition, as

recorded in Snorri Sturlason's "Heimskringla" is that under the leadership of Odin they made their way from the region of the Don to the Baltic. Some centuries later Thormodr Torfason, another Icelandic historian, attempted to calculate the probable dates and set the period of Odin's arrival at the Baltic at 70 B.C. But it seems clear that the Norsemen occupied that territory long before that date. Indeed some archaeologists now argue that the original home of the Indo-European race was in Denmark and the region of the western Baltic, and in that connection it is said that in that area there have been found relics showing "every stage of development from the earliest to the latest stone age, without break or interruption." No similar continuous development is to be found either in southern Europe or western Asia.

Be that as it may, the Goths who broke in upon the crumbling Roman Empire from the third century on were of this stock. But it is with the Viking Age, roughly from 750 to 1050 A.D., that the Norse emerged into the ken of "civilized" Europe. Not that the Vikings were uncivilized. But their civilization was distinct from that of the Mediterranean world. They had their own poetry, their own religion. They were skilled workers in iron and the type of ship they evolved was, says Nansen, "undoubtedly superior to all that had preceded it, just as they were incontestably the most skillful seamen of their time."

In earlier centuries their raids had been made overland, southern Europe having plenty of warning of their coming. But now in their long ships they appeared suddenly out of the unknown North, carrying destruction with them. "From the fury of the Northmen, O Lord, deliver us" ran the litany said in many European churches in that period. And an old French proverb, current for centuries, said: "Where the Northmen have passed the grasshoppers die of hunger."

What caused this sudden outburst of energy? "It may well be that over-population, lack of land and political grievances were the most urgent motives," says T. D. Kendrick. Certainly the difficulty of making a living on the wild fjords of the Norwegian coast made them into fishermen and so into seamen, thus fitting them for their ocean raids. And the population increase was also a factor where polygamy was the common practice. At the opening of the Christian era, for instance, the number of people in Norway is estimated to have been 17,400. By 800 A.D. it had risen to 146,000 a large population for that rocky land with the rudimentary industry and agriculture of that day. So the Sea-kings were forced to seek new wealth and new lands over the sea. Then, too, the rough nature of the country made each settlement virtually independent and when, in the latter half of the ninth century, Harold Fairhair set out to establish a single kingdom in Norway, many of the local lords, accustomed to rely upon themselves, would not submit and sought new homes beyond the ocean.

According to the Anglo-Saxon Chronicle, three Viking ships raided the south coast of England, near Dorchester, in 787 and carried off spoils. This was the first of many raids. In 793 and 794 they raided the North-umbrian coast. In the following year 100 Viking ships appeared off the south coast of Wales. Probably it

was this same party who raided Leinster in Ireland. St. Columba's shrine was ravaged in 802 and again in 806. From 812 to 814 Vikings were reported far inland in Munster, Ulster and Connaught. In 826 the Viking Torgils founded Dublin. Limerick was another city founded by the raiders.

Raids on the French coast began with one at the mouth of the Loire River about 810. In 843 a fleet of 67 ships from Norway sacked Nantes. Toulouse was attacked in 844. In the following year Ragnar Lodbrok, one of the most notable of the Vikings, captured Rouen and besieged Paris with perhaps 30,000 fighting men. Charles the Bold paid him 700 pounds of silver to withdraw, a ransom which had to be renewed many times as Paris was attacked from time to time in the next forty years. In 877 a permanent colony was established on the Loire, which acknowledged the suzerainty of the Norse Kings of Dublin.

The raiders even ventured into the Mediterranean, captured the island of Cammargue, and spoiled the city of Luna in Italy, which in their ignorance of that portion of the world they mistook for Rome. To the east of the Baltic, the Goths or Swedes had been penetrating what we today know as Russia, and in 862 one of the leaders, Rurik, established his rule over the tribes around Novgorod. Three years later two other leaders set up a kingdom at Kiev and from the union of these two principalities a few years later dates the foundation of the Russian state. But these adventurers did not stop there. In 907 one of their leaders assembled 2,000 ships on the Black Sea for one of several raids directed against Byzantium. Others joined the

service of the Byzantine emperors, constituting the famous Varangian Guard. Indeed, Harold Hardrada, the Norwegian king, who was defeated by Harold of England in 1066 at Stamford Bridge, saw service with the Byzantine forces in his youth.

Sweden had early a national navy that got its oarsmen (roddare) from its east coast provinces which then became known as Roden. When the Swedish Vikings invaded Russia in the 9th century the harrassed people spoke of Roden as Rots, Routsi and so on. Swedish settlers in Russia were therefore called "Russ" by Arabs and Slavs. The name came to include Finns and Slavs, and so the word Russia came into being. Thus the Russian Nestor Chronicle.

Meanwhile the raids on Britain had been continued. The Norse occupied the Orkneys, the Shetlands, the Hebrides and much of the mainland of Scotland. Indeed the Shetlands remained Norwegian territory until 1468 and the Orkneys until 1471. In 851 London was stormed and plundered by a Viking force of 14,000 men in 350 ships and in 886 two sons of Ragnar Lodbrok conquered large areas of England. Those were the days when the "Danelaw," the territory held by the invaders, included a large section of England, the days when Alfred the Great founded the English fleet as a measure of defence. Over 100 years later the Dane Canute became for a time king of England.

It was at this period, too, that the Norse raids resulted in the establishment of a new dukedom in Normandy, Rolf Ganger wedding the daughter of Charles the Simple and becoming duke as his vassal. It was Rolf's descendant, William the Norman, who defeated

Harold the Saxon in 1066 and became King of England. This event causes Eugene Achard of Montreal in his book "Les Northmans en Amerique" to note a curious coincidence. Mr. Achard points to the part Norse blood had in the development of the British race, then notes that when the British conquered Canada they found here a French population largely descended from the Normans who had come over with Champlain and in succeeding years. So, he says, both the French and English-speaking peoples of Canada have in their background much Norse blood, the two strains meeting once more to found a new nation.

But while all this was going on, the Norsemen were also penetrating the northern seas. Irish monks are believed to have reached the Faroe Islands about the year 700 and Norse adventurers a century later. Dicuil writing about 825, reported that Irish monks had reached what is believed to have been Iceland in 795 and Are Frode, the Icelandic historian, relates that when the pagan Norsemen arrived they found some Christians there. Who was the first Norseman to reach Iceland is a matter of dispute. It may have been Gardar Svavarsson, a Swede, or it may have been Naddod, a Norwegian, both of whom are reported to have made the voyage between 860 and 870. Then came Floki Vilgerdson, who made the voyage by way of the He it was who gave Iceland its present Hebrides. name because his cattle all died there. permanent settlement was that of Ingolf Arnarson and Leiv Hrodmarsson, who arrived in 874. Fifty six years later there were, it is estimated, some 20,000 or perhaps 30,000 people in Iceland, showing that this is one of the

great mass migrations of history. The new nation was well on the way.

One of the greatest names in Norse history is that of Eric the Red. Driven from Norway with his father about 950, he went to Iceland, where he married and His arbitrary methods and his hot settled down. temper brought him into conflict with his neighbors, however, and he was again exiled. So in 981 or 982 he set out to seek the "skerries" west of Iceland reported to have been found perhaps as early as 900 by Gunnbjorn. His voyage took him to Greenland, where he spent three years and then returned to Iceland to secure colonists for the land he had found. He called it "Greenland" on the principle that an attractive name would help to attract people. In 986 he set sail with 25 ships, only 14 of which successfully completed the But eventually the colony there grew to perhaps 9,000 people. And it was Eric's son Leif the Lucky who is traditionally held to be one of the discoverers of the mainland of North America and Thorfinn Karlsefni, who married the widow of another son, who made the first large scale attempt at colonization.

But these Vikings made a greater contribution to civilization than this brief sketch can do more than indicate. They are credited with introducing municipal organization into both Great Britain and Ireland. The cities they founded in the British Isles, says Knut Gjerset, "became centers not only of trade but of industry, as the Danes and Norsemen also devoted themselves to industrial pursuits and produced wares of their own make for the general market. The Vikings had a keen sense of legal justice and maintained

strict order in their own towns. They developed a system of city laws of which traces are still found in English city government."

This interest in trade is found wherever the Norse appear. "For the Northman," says Kendrick, "was at heart always more of a chapman than a robber, and is deemed to have played no small part in the development of European commerce."

It is perhaps worth noting by the way, that it is in the countries which have been most influenced by the Norsemen that democratic and parliamentary government has been most successful in Europe, the British Empire, the Scandinavian countries and France, and that none of these has been involved in wars with the others in over a century.

In Iceland, which in 1930 celebrated the thousandth anniversary of the establishment of its parliament, there was remarkable development. Peopled largely by Norse with a substantial sprinkling of Irish and Scots, a combination which has always been productive of brilliance, it became an outstanding center of culture. Possibly the Irish infiltration was responsible for this, for Ireland, at the time of the Norse invasions, was perhaps the leading educational centre of the world. Following the introduction of Christianity, the Icelanders were brought morely closely into touch with western learning, but, says Bertha S. Phillpotts, they were soon "showing something more than eagerness to amass knowledge. They began to build on the newly acquired foundation, to think for themselves, to apply their education to their own problems." About the year 1100 Latin alphabet equivalents for the old

runic alphabet were worked out. By 1140 an unknown Icelandic scholar wrote a treatise to show the relationship between the Anglo-Saxon, Icelandic and Latin languages, forecasting the philological discoveries made by the Germans Grimm and Rask 800 years later. In the twelfth century an Icelander, Oddi, was more accurate in fixing the time of the equinoxes "than any German or English calendar of the time," while in calendrical computation Bjarni the Mathematician was in advance of all western Europe.

Even more remarkable were their achievements in literature, both in poetry and in the prose, in legend and in history. There is a galaxy of mighty men here. Snorri Sturlason, whose "Heimskringla" is rated "one of the masterpieces of the world's literature" "For it may be said" writes Charles comes first. Marshall Smith, "that the mighty river of modern culture has been fed by two main streams. Edward Gibbon wrote of the southern one—a story of decline and fall—and his name is a household word. Sturlason wrote of the northern one—whose waters have prevailed." Then there are Saemund the Learned, Are the Priest and many others. They recorded the traditions of their race, the religion of their fathers, the story of the settlement of Iceland and Greenland, the discovery of America. Some of the literature even came from Greenland.

They were conscientious, too, in their historical writing, and while in recording events from oral tradition two centuries or so after they happened, error naturally crept in, it must always be remembered that there is a substratum of fact.

Giraldus Cambrensis the Welsh historian, who died in 1233, wrote indeed that Iceland "is inhabited by a race distinguished for their truthfulness. They know not how to lie, and there is nothing they despise so much as mendacity." Similarly the Norwegian historian Theodricus, about 1200, refers for his dating to the authority of the Icelanders, for "it is agreed without any hesitation that these have always stood out above all the tribes of the North, for their superior skill and care in matters of this kind."

So they were an intelligent and cultivated, as well as a daring, people, these Northmen, and, when their other accomplishments are remembered, it is only to be expected that, once established in Greenland, they would be sure to take the next step to the mainland of North America and to Hudson Bay.

Document XIX

THE AFFIDAVITS IN THE CASE

When the job of gathering the proof of the genuineness of James Edward Dodd's story of his finding Norse relics near Beardmore was taken up in September, 1938, the writer found virgin ground. The desirability of making an affidavit covering the details hadn't occurred even to Mr. Dodd.

Why couldn't people take a man's word for it?

The work was not completed for some months on account of the wide territory to be covered and the difficulty of locating some of the men who had first hand knowledge of the circumstances.

In addition to the affidavits many personal statements were collected. Every record has always been in the possession of the Sault Star, so that the matter herein concerning the Dodd find is founded on first hand information.

When the writer first interviewed Mr. Dodd he found him so resentful at the universal doubt thrown on his story that he was reluctant to talk. The only person who could contribute any information who was not interviewed was a Mr. J. J. Jacob, who however had told Dr. C. T. Currelly of the Royal Ontario Museum that he had seen the marks in rust of the Beardmore sword in the Dodd trench. Prof. McIlwraith, of the Toronto Museum, visited the scene of the find in September 1937, subsequently to the museum's purchase of the Dodd relics and fortunately found a small piece of rusted iron by his personal efforts. It is supposed to be a part of the shield boss. An exactly similar piece was picked up in the trench in the presence of the writer in September 1938.

Having full knowledge of the proof hunting from the first the writer does not believe that there is any possible shade of doubt of the truth of Mr. Dodd's story. No small angle of it has been overlooked in the patient search.

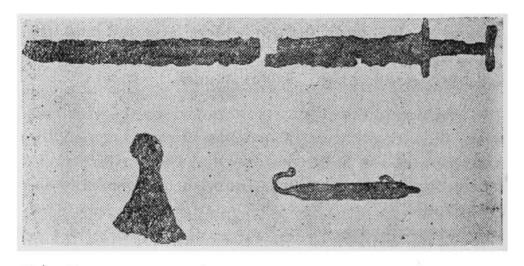


Plate 23—The Toronto Globe and Mail's picture of the Dodd Norse relics of October 12, 1938, referred to in affidavits given herewith.

JAMES EDWARD DODD'S AFFIDAVIT

CANADA
PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY

IN THE MATTER of certain Viking objects found by J. E. Dodd near Beardmore, Ontario, and sold to the Royal Ontario Museum.

TO WIT:

I, JAMES EDWARD DODD, 340 Bay Street, of the City of Port Arthur, in the Province of Ontario, Canada, Canadian National Railways Freight Conductor, make oath and say:

In the year 1925 I staked 16 mining claims in the Beardmore mining area seven miles from Lake Nipigon, having as partners Fletcher Gill, C.N.R. Locomotive Engineer, Port Arthur, and Tom Halls, Building Contractor of Port Arthur. One of these claims was numbered 48TB4895 and restaked by me in July, 1938 as TB26737. This claim lies south of the Canadian National Railways track on the Nipigon-Little Long Lac line, which runs alongside Blackwater River at that point. The claim is about 21/2 miles from Beardmore village. About the end of May, 1930, I sank a trench on the claim contiguous to a quartz vein in a 12 foot dike of rock to see if the vein continued out from the dike. My son Walter, then 14 years of age, was with me at the time. I first dug about 21/2 feet of overburden close to the dike and as I then saw the vein continued out from the dike I blasted the rock for two or three feet down. Standing in the hole thus made I loosened the overburden out from the trench with a stick and further loosened it with some dynamite. While shovelling out this loosened earth to lengthen the trench, my shovel struck some pieces of old iron, which were thrown out on top of the dump. I paid no attention to these scraps at the time, merely wondering if they were Indian relics.

A Ukrainian youth unknown to me, who had come along the C.N.R. track looking for work, asked me for food. I gave him 50c and his meals for a day's work. He was at the trench when I dug out the relics. He never told me his name. The lad was hungry and that was the reason I gave him a little work.

The relics lay on the dump for a day or two and were carried to the cabin on the claim where they lay on the banking of the cabin till I left for Port Arthur in a few days. I showed these to many people but nobody could tell me what they were. Finally

in 1936, I think it was, Dr. C. T. Currelly of the Royal Ontario Museum said they were the armor of a Norseman of the 11th century. The pieces were a sword, which broke in two as I was taking it out of the ground, a Norse axe, and the handle of a shield. I had seen in the trench also what looked like a shallow bowl but this shattered when my spade touched it. Dr. Currelly told me when I remembered about this bowl during the questioning after the sale that it was "the boss of a shield." Dr. MacIlwraith of the Ontario Museum found a small piece of this supposed "boss" when he visited the trench in the fall of 1937. I sold the relics to Dr. Currelly for \$500 and they are now at the Royal Ontario Museum. In September, 1938, J. W. Curran of the Soo and Dr. C. E. Eakins of Port Arthur, were at the trench with me when another piece of the "boss" was found. This was taken to Dr. Currelly by J. W. Curran.

While the relics were at my cabin, P. J. Bohun, C.N.R. section man at Dorion saw them, also Wm. Feltham.

I took the relics to my home at 296 Wilson Street, Port Arthur, in May or June 1930, and they were never out of my possession till I sold them to Dr. Currelly.

SWORN before me at the City of Port Arthur in the District of Thunder Bay, this 3rd day of February, 1939.

JAMES EDWARD DODD.

R. L. SEAMAN, A Commissioner, etc.

WALTER DODD'S AFFIDAVIT

CANADA

PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY

TO WIT:

IN THE MATTER of certain Viking objects found by J. E. Dodd near Beardmore, Ontario and sold to the Ontario Museum.

I, WALTER DODD, 340 Bay Street, Port Arthur, son of James Edward Dodd, make oath and say:

I was with my father, James Edward Dodd, about May 24, 1930, when he found some old iron pieces in a trench he was digging on

claim 48TB4895, which has since been restaked as TB26737. I saw the pieces thrown out on the dump. I have read my father's affidavit and can testify to its correctness. The old iron pieces looked like a broken sword, an axe and another piece of iron. They were taken to our cabin on the claim, and afterwards taken to our home at 296 Wilson Street, Port Arthur. They were always in father's possession and when he moved he took them with him. He sold them to Dr. Currelly.

SWORN before me at the City of Port Arthur in the District of Thunder Bay, this 3rd day of February, 1939.

WALTER DODD.

R. L. SEAMAN, A Commissioner, etc.

ELI RAGOTTE'S AFFIDAVIT

CANADA
PROVINCE OF MANITOBA
TO WIT:

IN THE MATTER of certain iron scraps dug up by James Edward Dodd near Beardmore, Ontario.

I, ELI RAGOTTE, of Suite 20, Birchmont Apartments, Winnipeg, Manitoba, Trainman, make oath and say:

That while I was rooming with James E. Dodd at his house in Port Arthur, Ontario, prior to the year 1930, he, the said James E. Dodd, Trainman, and I were cleaning up his cellar and I saw what looked like a rusty piece of iron on a pile of cinders, the same probably having fallen from a cellar rafter. The object looked something like a sword but it may have been something else.

In January, 1938, I read an item in the Winnipeg Free Press to the effect that it wasn't Dodd who had found the Dodd relics but myself. I only said this to the reporter as a joke and looked on the paper report as a joke.

I know nothing about the axe and shield, and when I went to Toronto at the request of J. W. Curran to view what are known as the Dodd Norse relics, I saw them at the Royal Ontario Museum on or about October 1, 1938. I never saw any of them before and

I am sure the sword is not the piece of iron I saw in Dodd's cellar. I signed a statement to that effect for the museum.

SWORN before me at the City of Winnipeg, Province of Manitoba, this 6th day of March, 1939.

ELI RAGOTTE.

W. S. McEWEN,
A Notary Public for the
Province of Manitoba.

FLETCHER GILL'S AFFIDAVIT

CANADA
PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY

TO WIT:

IN THE MATTER of certain Viking relics found by J. E. Dodd near Beardmore, Ontario.

I, FLETCHER GILL, Locomotive Engineer, of the City of Port Arthur, in the District of Thunder Bay, make oath and say:

Some time during the summer of 1931, whilst I was working out of Hornepayne as an engineer on the Canadian National Railways, I received a letter from Mr. J. E. Dodd, who was my partner in the ownership of a mining claim near Beardmore, the exact wording of which I do not remember, but which in a general way informed me of the work he had been doing on the said claim, and after mentioning the work the letter went on to say that whilst trenching on the dyke on the claim he had found an old Indian cemetery but that he had not yet come across any tombstones. I did not attach any importance to this at the time, and I destroyed the letter.

SWORN before me at the City of Port Arthur in the District of Thunder Bay, this 3rd day of February, 1939.

R. L. SEAMAN, A Commissioner, etc. FLETCHER GILL.

WILLIAM FELTHAM'S AFFIDAVIT

CANADA
PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY

TO WIT:

IN THE MATTER of certain Viking objects purchased by the Royal Ontario Museum from J. E. Dodd.

I, WILLIAM FELTHAM, of the City of Port Arthur, in the Province of Ontario, mining employe, make oath and say:

I was on the Dodd claim, staked in 1925 as No. 48TB4895 about the end of May, 1930, in company with James Edward Dodd to look over the ground with the idea of staking a claim in the neighborhood. I went there one day and went back to Port Arthur the next, staying at Dodd's cabin. On the banking of earth around the cabin I saw an old sword in two pieces and what looked like the handle of a shield with three prongs, and an axe head of some sort about 9 or 10 inches long. It was rough made. The sword was rusted to a skeleton of what it had been. I thought the objects very old. The sword had some kind of a guard as I remember it. It was about 3 feet long. I am positive it was in May or June, 1930. I fish in the spring but not before the end of May, but couldn't get a permit that year. I have read the above and it is correct.

SWORN before me at the City of Port Arthur in the District of Thunder Bay, this 3rd day of February, 1939.

WM. FELTHAM.

R. L. SEAMAN, A Commissioner, etc.

HARRY J. SCOTT'S AFFIDAVIT

I, Harry J. Scott, of 388 Arthur Street, in the City of Port Arthur, in the District of Thunder Bay, Retired Baggageman, do solemnly declare:—

That some years ago I visited James E. Dodd, who then resided at 296 Wilson Street, in the said City of Port Arthur, and whilst I was there he showed me some iron or steel articles, which he said he had found. I do not now remember whether he told me where

he had found them or not. I examined these articles, and found them very rusty, but I am unable to recall what they looked like. There was more than one article. I did not pay much attention to them at the time, as I was not interested in them.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of The Canada Evidence Act.

Declared before me at the City of Port Arthur in the District of Thunder Bay, this 24th day of January, 1938.

H. J. SCOTT.

A. J. McCOMBER,

Judge of the District of Thunder Bay.

JOHN McGUGAN'S AFFIDAVIT

CANADA
PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY
TO WIT:

- I, John McGugan, of the City of Port Arthur, in the District of Thunder Bay, Ontario, do solemnly declare:—
- 1. That I have lived continuously in the said City of Port Arthur, since the year 1921, and I am well acquainted with Mr. James E. Dodd, employed by the Canadian National Railways, having known him since the said year 1921.
- 2. About seven years ago, as near as I can remember, I was sitting in the Mariaggi Hotel, Port Arthur, one day, when Mr. Dodd came in, holding something in his hand, and he came to me and showed me what appeared to be two pieces of iron, and said: "What do you think of these" I examined these pieces of iron and found that they were what I now recognize as the sword pictured on page 5 of the issue of the Globe and Mail of October 12th, 1938. I remember taking the handle of the sword in my hand. Mr. Dodd spoke of these articles as being Indian relics, and he said he had found them on his location near Beardmore, Ontario. I did not ask him whether he had found them on or under the overburden, and he did not say, nor did he say when he had found them.
 - 3. A short time after that Mr. Dodd invited me to his home at

296 Wilson Street, Port Arthur, for dinner, and I accompanied him there. After dinner he showed me a number of mineral specimens, and then brought out the two pieces of sword above mentioned, and I looked at them again.

And I make this declaration conscientiously believing it to be true and to be of the same force and effect as if made under oath and by virtue of the Canada Evidence Act.

Declared before me at the City of Port Arthur in the District of Thunder Bay this 16th day of November, 1938.

JOHN McGUGAN.

A. J. McCOMBER.

Senior Judge of the District of Thunder Bay.

GEORGE HYNES' AFFIDAVIT

DISTRICT OF THUNDER BAY,

TO WIT:

- I, George Hynes, of the City of Port Arthur, in the District of Thunder Bay, Government Scaler, do solemnly declare:—
- 1. I am well acquainted with James E. Dodd, of the City of Port Arthur aforesaid, and I have known him for at least ten years.
- 2. About seven years ago I met Mr. Dodd in Port Arthur, and he invited me to come to his house with him. I did so, the house being 296 Wilson Street, where he then resided. After talking some time, he said he wanted to show me something, and he produced two rusty pieces of iron or steel. He said he had found an Indian graveyard, near his mining claim, near Beardmore, Ontario. I examined these articles, one of which had a sort of handle. The picture in the Globe and Mail, of the 12th October, 1938, page 5, shows what purports to be a sword, in two pieces, and these two pieces are what I saw at the house at the time above mentioned. I distinctly remember that one of the pieces had a handle.

And I make this solemn declaration, conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of The Canada Evidence Act.

Declared before me at the City of Port Arthur in the District of Thunder Bay this 18th day of November, 1938.

GEO. HYNES.

A. J. McCOMBER,

Judge of the District of Thunder Bay.

P. J. BOHAN'S AFFIDAVIT

CANADA
PROVINCE OF ONTARIO
DISTRICT OF
THUNDER BAY

IN THE MATTER of certain Viking objects found by J. E. Dodd near Beardmore.

TO WIT:

I, PATRICK J. BOHAN, Canadian National Railways Sectionman, make oath and say:

I live at Dorion. I know J. E. Dodd. Have known him seventeen or eighteen years. We both come from Quion, Quebec. I am a sectionman on the C.N.R. I did not know him when he was in Quebec.

In 1931 I was foreman at Warnford, one mile from Dodd's camp and I used to visit Dodd at his camp. On one of these visitsbetween the 15th of May and the 1st of July, 1931—(I take these dates from my staff records, which show that I was stationed at Warnford between these dates)—I saw the handle part of the sword pictured in the Globe newspaper, lying on the ground outside on the left hand side (south side) of Dodd's camp. The camp was banked up a bit around, and this article was lying on the bank. He did not show it to me, but I saw it there, and asked him who had left it there. He told me that he had picked it up on his mining claim where he had been doing some trenching. He did not seem to attach any importance to it. The article was still lying on the ground when I left. I am sure the article I saw was the handle of the sword as pictured in the Globe & Mail of October 12th, 1938. It was pretty rusty, and I did not attach any particular importance to it myself. That was the only time I saw this article. Dodd's mining claim, referred to above, is about three miles from Beardmore. I did not see the other articles pictured in the Globe, or if they were there I did not notice them.

SWORN before me at Dorion, District of Thunder Bay, this 7th day of February, 1939.

W. D. VANDERBURGH,
Justice of the Peace

P. J. BOHAN.

Document XX

"HELLULAND" OF 1000 A.D. IN HUDSON STRAIT?

ONE OF THE MANY questions that has never been answered concerning the first recorded Norse voyages to America is this:

Where is "Helluland," the area of flat stones, which Leif the Lucky named in 1000 A.D.?

What gives hope of finding the area is the number of definite leads pointing to Hudson Strait as the entrance to Vinland.

If the location of the shadowy "flat stone" land be determined it would help to solve the whole Vinland mystery. So it was decided to refer the matter to the Royal Canadian Air Force, and also to the Mines and Resources branch at Ottawa. A courteous reply came from Air Vice Marshal G. M. Croil, chief of the air staff, Ottawa, regretting that the R.C.A.F. had no information, but suggesting that the Geological, Hydrographic and Topographical Surveys might be able to give assistance. Mr. F. C. C. Lynch, chief of the Bureau of Geology and Topography, kindly referred the matter to Mr. D. A. Nichols, of the Topographical Survey, who had visited the Eastern Arctic and Hudson Bay several times, and Mr. Nichols sent in a letter full of interest.

In the Saga of Eric the Red is one of the passages referring to the "flat stones" Karlsefne saw when he sailed for Vinland some time after Leif the Lucky's voyage:

They were on the sea two daegr, (a daegr was said to be a day's sail of about 75 miles.) Then they found land and rowed along it in boats and examined the country, and found there on the shore many flat stones, so large that two men might easily lie stretched upon them sole to sole. There were many white foxes there. They gave the land a name and called it Helluland, (that is Land of Flat Stones).

White foxes are numerous around the north end of Hudson Bay.

Wrote Mr. Nichols:

"Flat stones large enough for two men to lie on them suggest large tabular limestone blocks or possibly solid limestone.

"The nearest limestone to the entrance to Hudson strait is Akpatok island, (in Ungava Bay), which rises with sheer walls directly from the sea to heights of from 100 to 600 feet. At the base of the cliffs, at low tide, is a flat shelf of limestone where probably large limestone blocks might be found.

"Occasionally along Hudson strait there are found limestone boulders, either glacially transported, or borne by ice floes and dropped towards the entrance of the strait. The largest I have seen is at Burwell, at the eastern entrance to Hudson strait. This was 100 feet above sea level and about 7 feet by 5 feet, but much shattered by frost action.

"It is of interest to note in reading one of the quotations from the press notices attached, that the description of the terrible commotion of the water answers the description of the dangerous tide rips and currents of Hudson strait, Gray strait and Gabriel strait, of which there is probably no equal on the continent. Also, the walls of water might answer the description of the bores of the reversible falls found in so many of the enclosed inlets. Having entered one of these inlets at mean tide and then returning at intermediate tide, one is met with an infalling wall of water sometimes of from six to ten feet."

In King Olaf Trygvesson's saga, by Snorre Sturlason,

the finding of Helluland is referred to as follows:

They (Leif the Lucky's ship's crew) first came to the land which Biarne had last discovered, sailed up to it, cast anchor, put out a boat and went on shore; but there was no grass to be seen. There were huge snowy mountains up the country; but all the way from the sea up to these snowy ridges the land was one field of snow, and it appeared to them a country of no advantages. Leif said: "It shall not be said of us as it was of Biarne, that we did not come upon the land; for I will give the country a name and call it "Helleland," (or Helluland, as some say.) Then they went on board again, put to sea, and found another land. They sailed in towards it, cast anchor, put out a boat, and landed. The country was flat and overgrown with wood, and the strand far around consisted of a white sand, and low toward the sea. Then Leif said: "We will give this land a name according to its kind and call it Markland," (woodland.) Then they hastened on board, and put to sea with an onshore wind from north east, (they therefore were sailing down the west coast if they were on Hudson Bay,) and were out two days and made land. They sailed toward it and came to an island which lay on the north side of the land where they landed to wait for good weather Then they went on board and sailed into a sound that was between the island and a ness (point) which went out northwards from the land, and sailed west past the ness. There was very shallow water in ebb tide, so that their ship lay dry; and there was a long way between their ship and the water. They were so desirous to get to the land that they would not wait till their vessel floated, but ran to the land to a place where a river comes out of a lake. As soon as their ship was afloat they took the boats, rowed to the ship, towed her up the river, and from thence into the lake, where they cast anchor, carried their beds out of the ship, and set up their tents. They resolved to put things in order for wintering there and they erected a large house.

Is the above a description of a voyage through Hudson Strait, down the west coast of Hudson Bay, thence to Charlton Island and afterwards to the present site of Moose Factory? What other area in the north duplicates so well the details of the saga?

It is to be noted in the Flatey Book story of Biarni's return from America that it is recorded he started back from a land "covered with wood."

"They left the land on the larboard (left) side and had their sheet on the land side." If he were sailing north (as apparently he was) in Hudson Bay, then he was sailing along the west shore. After three days "they now turned the ship's head from the land, (that is from the west coast to go east,) with a fine breeze from the south west." They thus came to a third land "high and mountainous and with snowy mountains," (Hudson strait?) . . . "and saw it was an island," (Baffin Island?) So then the ship was "turned from the land and stood out to sea." In three days and nights they reached Greenland.

Thus after passing through Hudson strait in clear weather on his return from his accidental discovery of America in 986, Biarne would be able to describe the strait, its length, and its high walls of rock.

Thus it may be guessed that the definite information Biarne brought back was used by Leif in 1000 in reaching Hudson Bay.

SECOND PART

THE ORIGINAL ARTICLES

(In the Sault Daily Star from Aug. 13, 1938, till Feb. 28, 1939.)

Three of The Star's "Original Articles" are not reproduced in this book: No. 9, "A Stranger Story"; No. 17, "Hudson Strait, the Gap"; and No. 22, "Lake Michigan Gives Up a Sword." The matter in the first two is covered in other articles, and No. 22 was withdrawn as later investigation did not bear out the statements made in it.

Some of the articles are here expanded a little and some are just skeletons of the original, but all convey the ideas as at first advanced.

The reader should keep in mind the date of the article when reading it. The progress of investigation in some cases materially affected matter in the earlier articles.

Original Article I

WHO WERE THE WOODEN BOAT MEN?

(Sault Star, August 13, 1938)

WERE THE NORWEGIANS the first white men to be seen in Canada?

It is possible that Henry Hudson, the bold English navigator who discovered and explored the bay which bears his name in 1610, was not the first white man to visit Canada's great inland sea?

Was Jacques Cartier, who ascended the St. Lawrence River in 1534 the first European the Indians in the interior of Canada had seen?

The evidence now available seems to overturn claims which have been long accepted by Canadians concerning the early history of the country.

The story which follows here seems a little fantastic at first sight. It is so upsetting to everything which has hitherto been taught about our first European discoverers and explorers that it calls for patient investigation.

The writer suggests that the first white men seen in what is now Canada were Norwegians, and not French, upon the evidence submitted. With this statement he advances the theory that the band of "white Indians" on the west shore of James Bay, just north of the Albany River may be the descendants of our first white

arrivals,—who came probably before Columbus discovered America.

When a new Indian dictionary is issued it is an event among those who are interested in the red man. The Church House, of the Church of England in Canada has just published a new dictionary of the Cree language. It is edited by Rev. Archdeacon Richard Faries, who has been a missionary at York Factory on Hudson's Bay for 40 years. The Archdeacon explains that it is based on earlier dictionaries. The previous works were the result of much erudition and a great deal of selfless labor. But in late years the church has felt that there was need for their revision, and Rev. Mr. Faries was chosen to undertake the work. He has probably made unnecessary another Cree dictionary. The language will probably be forgotten before the book is.

Champlain first arrived on the St. Lawrence river in 1603. He came back to it in 1608 to found Quebec. His accounts of the events of those days form the cornerstone of early Canadian history. These "voyages," as he called his reports, are full of incident. In his account of the year 1610 appear two items of interest:

"... and they (the Indians) used to say to me: There are many Basques and mistigoches (for so they call the Normans and the people of St. Malo) ..."

". . . the matigoches as they call us . . ."

Champlain got these from the Montagnais Indians who have inhabited the north shore of the St. Lawrence towards the Gulf of St. Lawrence as far north as James Bay as long as the white man has known them. They

belong to the Algonquin family and speak a Cree dialect. The Crees who live around James and Hudson Bays are also Algonquin and the spoken language of the two tribes is quite similar.

The writer has submitted the word to Ojibways. Ottawas, Montagnais and Algonquins.

"Misitigoche" is what Champlain set down. The Ojibway doesn't recognize it, but when pressed will hazard the guess that it may be Ojibway. He sees his word "mitig" (tree or wood) in it in an unfamiliar form. He has a word "okooz" (bill or beak), and so to him the word may mean "wooden beak."

"Why did the Indians call Champlain's men 'wooden beak'?" You ask.

"Maybe it was the wooden pipe the French smoked," he ventures.

"Do you really think 'wooden beak' is the right meaning?

"Well, it sounds like that."

Not even to oblige you,—and the Ojibway is an obliging person,—will he go farther than that. So with the others of the Algonquin group.

But Sam Chappice, a bright Cree from Moose Factory, beamed when the word was submitted to him.

"That's a Cree word, all right. That's what we call white people, only we say it "Wemistikose." He went on to explain that "mistiko" in Cree means "wooden," and "oose" means "boat." The word therefore means "a ship made of wood."

Faries' dictionary bears out Mr. Chappice.

There is no oak growing a long way south of Moose Factory. There is a little isolated white oak near Sault Ste. Marie, and red oak does not grow farther north than Batchawana, a few miles from that city, over 300 miles from James Bay. How then did the Cree of James Bay come to have a word for a tree which did not grow within hundreds of miles of his country? The name he has used for hundreds of years is "wemisti-kose-watik" the second portion of the word resembling the Ojibway "mitig," (tree or wood) and meaning exactly that. So that the Cree word for oak is literally "wooden ship wood,"—that is the oak in the ships he could have seen in James Bay gave him the name.

The Ojibway calls oak, "mitigoomeezh." It was thus from his Cree neighbors and allies that he got "wemitigoche" which has always been his name for the French,—without understanding, or perhaps forgetting—what the word meant. So with the other St. Lawrence and Great Lakes tribes.

Can it be doubted that the reason the word spread south from James Bay and imposed itself on so many tribes was simply because it described forcefully something which these southerners had never had a chance to name for themselves? The modern world has often accepted new words in a like manner. Instances will readily occur to everyone. When the French appeared on the St. Lawrence, the tribes there knew that "wemitigoche" was the current term for strangers who "came sailing" as the Swampy Crees of Hudson's Bay described them in their own name for the newcomers.

The Faries' dictionary says that "mistikose" is a shortened form of the old word "wemistikose."

Here is a striking thing: The Ojibways, the Algonquins, and the Ottawas use the old full form of the Cree

word: wemistikose. But the Crees themselves use the shortened term "mistikose," as far as the writer knows.

The Ojibway word for ship is mitigo-chemaun (wooden canoe) or Nabikwun, (vessel or sailing vessel).

There are several Cree dialects. The Swampy Crees live on Hudson's Bay north of the James Bay Moose Crees. These Swampy Crees have a different word for the white man from the Moose Crees. They knew the white foreigners as "Akuyasew," from their word "Akwayasew," which means "he comes sailing," "he sails to land," "he is blown on shore."

Thus Hudson Bay knew the white men as sailors who were sometimes shipwrecked, while the southern James Bay Crees knew them as the "wooden ship men." Both sections recognized them as coming from the sea.

Ven. Archdeacon Richard Faries wrote from York Factory, Hudson Bay, (the letter took 46 days in transit):

"The evidences seems to prove that the natives of Hudson Bay had come in contact with white men before Champlain arrived on the St. Lawrence in 1603, for the Crees had already established a name for the white men who had at some time in their history been driven ashore on the inhospitable shores of Hudson's Bay. The northern Crees called the white man "Akwayasew" or "Akunasew," i.e., he who came sailing ashore, or who was driven ashore; and the southern Crees called him Wamistikose, (long a), i.e., "the wooden boat man." You are quite right in your analysis of the word. It is derived from, "mistik," wood, or wooden, and "oosee," boat or ship. "Wa (long a), is the flat vowelled form of a verbalized noun, and may here be called a prefix for euphony's sake . . . Cree words like Mississippi (correct form Missisepe, i.e., Big River) Mississauga, Michikama, (or Cree form Missikumaw), etc., are evidence of the wide territory covered by the Cree nation,

—a territory covering the country from the Atlantic to the Pacific. The Montagnais is the hill tribe of the Cree nation, found in the Laurentian Hills from the St. Lawrence to James Bay, and the dialect is nearly the same as the Moose Crees . . . I have found Mr. Curran's articles very interesting and I can back him up in what he says about the "Strange Wooden Boat Men."

After Cortereal Cabot visited Hudson Strait in 1498, but there is no record that he ever entered Hudson's Bay. Hudson explored the bay in 1610,—112 years afterwards.

If Hudson's English crew were not the original "wooden ship" men, and his ship was not the original boat from which "wooden ship wood" was named, who were these mysterious strangers from the sea who came sailing and who were sometimes blown on shore or wrecked?

Eric, the Red, sailed from Iceland to America in 982, Norse settlers reached Greenland in 986. Note that the Norse settlements were opposite Hudson Strait. Leif skirted the coast of Canada in 999, followed by Karlsefni in 1003-6 (?). Leif Erickson it is claimed sailed along the New England coast. These Norsemen were the boldest of navigators. Much has been printed of Norse ventures into the interior of America.

Late in 1936 the Ontario Museum at Toronto bought from J. E. Dodd, of Port Arthur, an iron sword, an iron axe and a shield handle which Dr. C. T. Currelly, curator of the museum, says have been proved to be of Norse workmanship, dating from the eleventh century.

These, Mr. Dodd told Dr. E. M. Burwash, who had drawn Dr. Currelly's attention to them, had been

uncovered on a mining claim belonging to him near Beardmore in 1930.

There is a good deal of literature supporting Norse claims to a discovery of America long previous to Columbus landing on Watling Island in the Bahamas.

Living on the west shore of James Bay north of the mouth of the Albany River, Mr. Chappice states there is a tribe of "white Indians," many of whom have "fair hair and gray eyes." They speak only Cree and have no knowledge of English. Perhaps if a Norwegian investigator spent a few weeks with them he might possibly be able to find some relics of the Norwegian tongue. Because these "white Indians" may conceivably be the descendants of the men who came sailing in wooden ships and were sometimes unfortunately "blown on shore."

It's a strange sort of story and it is here only outlined. It may be somebody will be interested enough in it to spend a little time looking into all its ramifications. Because there seems to be enough solid evidence available to remodel some of our early Canadian history not only with regard to the coming of the first white man but with our hitherto unknown story before the French appeared on the St. Lawrence. The writer feels that it is the neglected Hudson Bay area that must be turned to in an effort of this kind.

Original Article II

"WHITE" INDIANS OF JAMES BAY

(Sault Star, September 6, 1938)

ALL DOUBT OF THE existence of "white" Indians on James Bay is set at rest by the statements of several residents of the Garden River Ojibway Reserve beside Sault Ste. Marie, who have personal knowledge of these white skinned, fair haired and blue and gray eyed people who talk only the Cree language. None of the Ojibways who have been to James Bay believe they are "real" Indians. Put white clothes on them and they would look like whites,—not Indians, they say.

These white Indians are pretty much bunched on the shore of James Bay, at and north of the Albany River. They are peaceable people, who keep to themselves. They are fine physical specimens and good workers. This is the testimony.

Before the railways were built many of our Algoma Indians worked on the Lake Superior-James Bay portage route via Michipicoten River, Dog Lake, Missinabi and Moose Rivers to land at Moose Factory. These young fellows of today, the elders say, know nothing about the old days. They have never been anywhere. But the old fellows are full of yarns of "the Bay" up to say 20 years ago.

The Moose Cree claim that there are "white" Indians living on the west shore of James Bay,—possible descendants of wrecked Norse sailors,—may be a tangible link in the chain of evidence which may establish Norse priority in America.

Patiently pursuing this lead, some very interesting stories, current in the Lake Superior region have been collected from several sources.

Mr. Thomas Thibault, of the Garden River reserve recalls that many years ago two women from James Bay, apparently of mixed white and Indian blood, visited the then resident missionary on the reserve. Among the stories they told, says Mr. Thibault,—corroborated by Mr. John Boissineau and his brother Jim,—was one concerning the "white" Indians of their area. They said that there was a tradition in the Albany river area that "long ago" a ship had been wrecked on the coast, with the crew escaping to shore. Having no means of returning to their own country over the vast expanse of waters these married into the tribe north of the Albany River and became absorbed in it.

"Put Soo clothes on those 'white' Indians on James Bay and you would think they were white people. Many have red hair or very fair with very light eyes, —some blue. They only talk Cree," said Dan Jones of the Garden River reserve, who has made trips to Moose Factory on one of which he went up the west shore of James Bay to the Albany River. At the Hudson's Bay Co's. post in July at the mouth of the river there were about 200 Crees living in wigwams and small houses. That was on his last trip 20 years ago. He estimated that of these about 50 were "white

Indians,"—well built strong men and none of them small.

There were some white Crees at Moose Factory and a score or more were met on the Moose River.

"I don't believe they are real Indians," said Mr. Jones. "They look like white people. They talk Muskego (a Cree dialect), and some talk a very little English. But most I ran across couldn't even say 'yes' or 'no.' Some of the women wore narrow cloth bands to tie back their hair, which is not like our Indian women. But I understood that the women would not wear dresses or clothes like white women. Those I knew wouldn't even sit on a chair."

In 1902 John and Jim Boissoneau were hired at the Soo with many other residents of the reserve to take a season's shipment of goods to Hudson's Bay for Revillon Freres. The party started from Missinabi, went down the river of that name to the Moose, led by Cree guides. Twelve miles west of Moose Factory (the Hudson's Bay post) they built a post for Revillon Freres.

John is 77 but his memory is excellent.

"We met a number of these 'white' Crees, men women and children, on the Moose River, when going to James Bay. Some had very light hair, and very light eyes. They looked a lot like whites but talked only Muskego. They were called Muskegoes."

The Swampy Crees, as the white man calls them, (Muskegoes), live north of Moose Factory, and their Cree dialect differs a little from the Moose Crees of Moose Factory. The English word muskeg comes from

the Cree word muskek, which means a wet place where muskiki (medicinal roots, etc.) grow.

"We met these people on the Moose River, in their camps and on their trapping lines, and some in Moose Factory.

"Some Cree words come close to our Ojibway," said John, "but we couldn't talk to them. So I never heard any explanation from them of why they were white. But only some were white. I would say they were not real Indians, fine big men and women and very strong."

John had been also at Fort Albany in September, 1902. There were, he thought 30 or 40 families of Crees there, mostly "white" Indians. They lived about the post at the mouth of the river. They were just leaving for their winter hunting grounds when he arrived and so he didn't see very many.

"Who were in the 1902 party from the Garden River Reserve?"

John could recall his brother Jim, Frank Larose, Billy Boyer, Mose Lesage, John P. Lesage, and Joe Lesage. It was a slow trip going down to James Bay with 20 loaded canoes, from Missinabi but they came back light to Missinabi in 13 days. Now the Crees come up and down the rivers to Missinabi. Probably some Algoma people go to Moose Factory yet.

About 1898-9 Tom Thibault was hired by a man named Amos Surette, who said he came from Maine to go to Michipicoten, to build camps for the men who were to build the Algoma Central Railway branch to the Helen Mine. Tom had been a "buck beaver" on the camp roads and was given charge of a crew. With him in the same party were Joe, John and Eli Boison-

eau, Ed and Alex Lesage, all of the Garden. They were taken north on the old Telegram, and on arrival hired a boat to go over to Michipicoten Mission for the evening. Several "white Indians" from James Bay were in the construction gang. A dance was to be held in Jack Legarde's house, and Factor Williams of the H. B. Co., gave Big Joe Boissoneau, a famous dancer, a new pair of boots so he could give an exhibition. There was a tall powerful white Cree at the dance by the name of Andersen (or Anderson) and Jack Legarde, who was reputed to be a record breaker at weight carrying on the portage got into an argument with him. Andersen was not aggressive and left the house. On the nearby high sand bank of the Michipicoten, Legarde tackled the white Indian, who grabbed him by the shoulders, swung him around in a circle and threw him off the bank. Jack, it was said got such a toss he was partly in the river when he landed. The bank was difficult to climb, and when Jack reached the top his opponent had disappeared.

"Andersen," said Tom, "had a light complexion with no dark coloring."

The mouth of the Albany, recalled John Boissoneau, was about 80 miles north from Moose Factory. He had been about 30 miles north of the river, but didn't remember seeing anybody in that distance on the shore of James Bay.

Before the building of the railroads, Garden River Reserve men did a lot of packing on the Michipicoten-Moose Factory route. But now that is only a memory. Only the older residents remember anything about those toilsome and stirring days. It must not be assumed that all "white" Crees are of one nation. There are some with English and Scotch names. These may have had ancestors who were employees of the Hudson's Bay Company, which had regular ships, annual or oftener calling at James Bay. They would thus not have to give up hope of returning to civilization. But Norsemen wrecked before the Hudson's Bay Company began business in 1670 faced an altogether different situation. They had little or no chance of leaving the coast they were wrecked on.

Original Article III

THE TRAGIC STORY OF GREENLAND

(Sault Star, Sept. 13, 1938)

PROBABLY NOT IN THE history of colonial development is there a more tragic story than that of the colonization of Greenland by Icelanders nearly 1,000 years ago. The Danish government and its researchmen have laid bare the whole gruesome tale of a 500 year effort that ended in the death of a population estimated at between 3,000 and 9,000. The world hardly realizes that Norway had actual control of Greenland colony since 1261, and that it was sheer neglect which spelled the doom of its sons across the Atlantic.

Will the now available story of the Norse settlement in Greenland help in throwing some light on the "white" Indians of James Bay, and help also to establish the identity of the Europeans who discovered America?

Surely men who sailed across 2,000 miles of Arctic seas without compass or chart would not be deterred from crossing the short distance from the Norse settlements to the nearby mainland.

Can it be assumed that Norsemen in Greenland would fail in 500 years to explore their own immediate

western neighborhood when it is known they explored far north in the Arctic seas?

To unravel the tangle concerning the identity of the white men who frequented James and Hudson's Bays before the French occupation of Canada it seems to be desirable to tell the story of the Norse settlements in Greenland,—the details of which have been revealed the past few years by patient archaeologists, chemists and research men.

The tale is documented by Poul Norlund, of the Danish Historical Museum, who took an active part in the work till 1932, now continued by his assistant, Aage Roussell.

The Danish government has recently published voluminous documents relating every phase of the work which has gone on for 17 years. It is a tragic story; the failure of sturdy and courageous people to conquer nature. Their daily life, their prodigious difficulties, their political and religious systems, their architecture, their home life, their struggles against a harsh climate, their abandonment by the Kings who held a monopoly of their trade, the possible attacks by the Eskimos,—all these and much more are brought to light. And at the end is revealed a decadent people racked by disease and dying slowly of a lack of food. It was the story of the Bounty mutineers on Pitcairn Island over again except that nature was kind to the English sailors.

The writer is indebted to the Librarian of the University of Toronto, for a loan of Mr. Norlund's book, "Viking Settlers in Greenland," printed two years ago by the Cambridge University Press, London, England.

It is stated there could hardly have been fewer than 3,000 settlers in the Greenland colonies, two thirds of whom lived at what is now known as Julianehaab. At any rate there were 16 churches, and there is a photograph of one of them given by Mr. Norlund, which shows that nature in 500 or 600 years has been able to wreck but little of its massive five foot walls. Excavation has revealed the sites of 280 farms,—all with buildings following the architecture of those of Iceland. For it was from Iceland that the first colonists came because of the overcrowding on that island.

The Greenland venture resulted from the violent temper of Eric the Red. He killed two men in Iceland in 982 and was sentenced by his local "moot,"—a district organization with court powers,—to three years banishment. There was some danger to his life apparently as his friends helped him to leave. It was known that there were islands to the far west, and his ship steered for them. Thus he ran onto the uninhabitable east shore of Greenland. But rounding the southern tip he found two fjords or inlets, where were stunted trees and vegetation. His stories back in Iceland in 985 brought many families from its more desolate parts. Cattle and sheep, goats and pigs were brought, and at first the colonists found a fairly comfortable existence. But in the end the small habitable areas did not produce enough food for the colonists and their stock. Mr. Norlund suggests that there was a progressively harsher climate and that the cold fourteenth century (1300-1400), which history records as having seriously distressed all northern Europe, was the beginning of the end. It is recorded that Britain's greatest famine occurred in the fourteenth century,—this being the result of a cold series of years.

From 985 to 1410, Greenland was in touch with the world. Then silence. In 1492 the Vatican noted that no news of that country "at the end of the world" had been received for 80 years, and the bishopric of the colony was offered to a certain ecclesiastic if he would go and "restore Christianity" there. He didn't go.

The Eskimos, it is stated, destroyed the western settlement about 1360 leaving only the eastern. The Eskimo legend is that the last Norseman was burned in his church about 1500. There is no record after 1408. About 1540 Jon Greenlander from Iceland found the body of a man in frieze clothes and hood on the shore of the east settlement. Alongside the body was a bent knife almost worn through.

The dwarfish cattle had been housed in byres, and the archaeologists digging among the ruins found stable refuse that had been frozen for centuries.

Only in Greenland has it been possible to recover the clothes of the common people of the 14th century,—gowns, coat-hardies, hose, caps and hoods. These old hoods only survive today in the monks' cowl, and in academic hoods. Few of the colonists had coffins; they were sewn up for burial in their clothes. In the cold 14th century the "ground ice" rose and enveloped the graves. Thus the clothes of that period were preserved in ice.

Mr. Norlund says the Norse sagas should be read with caution. The results he and his fellow scientists achieved tell the "truth unadorned." The photos he took of the church and farm ruins tell their own story,

—a convincing picture of an almost forgotten European civilization in America, hundreds of years before Columbus came. They found the skeleton of a bishop in the Cathedral at the east settlement with his ring of office on a finger of his right hand. A guess is even made at his identity and his death is placed in 1207.

Were Greenland's summers warm in those days? Mr. Norlund says they were, and today he says a summer's stay will stick in the memory, although on summer nights the mercury sinks to a few degrees above freezing. Perhaps the climate was milder then.

The colonists found willow scrub, dwarf birch, black crowberry, blueberry and reindeer moss on arriving 953 years ago. They were good builders as "some of the stables need only roofs to be habitable again." Their five foot walls, banked with several feet of earth are intact in many places. Lime grass now grows luxuriantly on all Norse sites.

The Norse colonists at first had wares to sell, walrus tusks, whalebones and furs. But the development of the African ivory trade through the Mediterranean and the opening up of the big Russian fur market in the 14th century hit Greenland a body blow. Ships found less profit than in former days and gradually ceased coming. The kings of Norway reserved the colony's trade as a personal monopoly, and forgot Greenland when it didn't pay to send ships. With the falling off in ability to sell their wares, the colonists found it harder to feed and clothe themselves. Nobody was allowed to trade in Greenland without the King's license, and there were severe penalties for breaking this monopolistic rule. The Greenlanders finally got

angry about it and refused to do business with the "Eastmen," (Icelanders and Norwegians) unless they brought European supplies. Underfeeding and interbreeding did their work. The men finally did not exceed about 5 feet 4 in. in stature and the women about 4 feet 6 inches. Half of the people who reached the age of 18 died before they were 30. The Eskimos to the north were better fitted to last from their exclusive meat eating habits. The physical deterioration of the Norsemen from a lack of suitable food made them an easy prey to disease and the pressure of the Eskimos.

The worn teeth of even the young people, thinks Mr. Norlund, shows that at last the population had been forced to adopt a crude vegetable fare not altogether free of the sand and earth from which it came. So the dying colonists, cut off from aid from Europe and weakened by disease and intermarriage lost their vitality. It is doubted by some authorities that the Eskimos ever attacked them. Today, the population of the two Danish Greenland colonies, begun 200 years ago, is over 14,000. But Europe does not now withhold its supplies.

So the colonies of Eric the Red passed out of history. There have been writers who say they never existed.

Could these Greenlanders in their first 300 years when it seems evident they were vigorous people, have explored the shores of Canada and penetrated into Hudson's Bay? Or did the Norway ships, which traded with them more or less regularly, venture the comparatively short distance to Hudson Strait which lay opposite the Greenland settlements?

Possibly the overcrowding of Greenland in relation to its food supply as was originally the case in Iceland, had sent some of the colonists in search of a land with more food and a less severe climate. Moose Factory, it must be remembered, has no difficulty in growing root crops. Its mean summer temperature for over 30 years,—as reported by the Hudson's Bay Company,—is only five degrees cooler than at Toronto.

We may hope that the scientists' research work which is only partly done, may yet throw some light on the voyages of the colonists and their endeavors to know the lands near them. If a Norwegian axe of iron or whalebone were found in James Bay, or if relics of the Norse tongue were found among the "white" Indians there,—or leads of other possible traces,—we might have good hopes of being able to say who were the real discoverers of this continent.

Would it not be a feather in the cap of any university in America to solve this very interesting question, which appears now to be in the realm of probability?

Original Article IV

BEARDMORE NORSE RELICS TALE PROVEN TRUE

(Sault Star, October 4, 1938)

A PREPOSTEROUS, unbelievable story that turns out to be true!

I have no more doubt that James Edward Dodd, Canadian National Railway freight conductor and amateur mining prospector of Port Arthur, Ontario, found Norse relics in 1930 at the spot near Beardmore where he says he found them than that Hudson Bay exists where people tell me it is located.

I have the profoundest conviction that James Edward Dodd and a number of men and women who testify to the details of his story are right and honest. There are no flaws in their testimony.

I have followed personally the tortuous windings of the story and have painstakingly talked to, questioned and cross-examined everybody who I considered might be able to throw some light on Dodd's claim. The ground has been covered personally from Beardmore, the scene of the most extraordinary historical find in North America, to Winnipeg and Toronto,—all in pursuit of the exact facts. Throughout the quest at all times I had the invaluable help of His Honor Judge Alexander McComber, senior judge of the District of Thunder Bay and also that of Dr. George E. Eakins,

for 32 years a practicing physician in Port Arthur and president of the historical society there.

The affair has most extraordinary features. Dodd found the relics while trenching on one of his claims near Beardmore, 127 miles east of Port Arthur. From Port Arthur to Nipigon station on the C.N.R. is 70 miles, and from Nipigon up the Nipigon-Long Lac branch of the railway to Beardmore is 57 miles. Here a short distance from the C.N.R. track, (the Blackwater river flows alongside it), is the place where a man in humble circumstances stumbled on the evidence which seems to prove that Norsemen travelled across Northern Ontario some 450 years before Columbus found America. Norwegian and other European scholars have identified Dodd's relics as of eleventh (1000-1100) century make. They are positive about it.

All that has remained to be done was to establish the facts concerning the Dodd story. Were the priceless mementoes of our first Europeans found where Dodd says they were? The available evidence of the exact truth of his statements is overwhelming.

Dodd found the relics in 1930. It wasn't till years after that the general public heard anything about them. Some three years ago, Dr. E. M. Burwash, of the Department of Mines, was holding one of his annual prospecting classes in Port Arthur. One of his pupils was James E. Dodd, now 54. Dodd told Dr. Burwash about his find made years before. So interested was Dr. Burwash after an examination that he communicated the news to Dr. C. T. Currelly, of the Royal Ontario Museum, in connection with the University of Toronto. Some two and a half years ago it is

stated the relics were purchased by the museum after the advice of European experts had been sought.

The Sault Daily Star first told the story on January 20, 1937, on authority of Dr. Burwash.

In January 1938 Mr. Philip H. Godsell, writer and Arctic explorer, made a speech in Winnipeg telling of the relics. He believed they were genuine and that Dodd's story was true. He didn't give his authority for his information but it came apparently either from Dr. Burwash or possibly The Star.

At once a storm broke over the head of Mr. Dodd. The newspapers printed the yarns of scoffers. A Winnipeg paper gave seriously the remarks of an old mining partner of Dodd who jokingly said to a reporter he had found the relics himself in "a pile of cinders" in Dodd's cellar. A former landlord of Dodd, it was reported, went so far as to say that the relics belonged to him as he said Dodd had removed them from the cellar of a house belonging to the said landlord that Dodd had occupied. Where did the landlord get Norse relics some 900 years old? From a Johann Bloch, he said, who had attended the military Academy at Oslo, Norway for about a year, who had come to Canada about 1923 and whose father was a "great Norwegian artist."

Speak to a Port Arthur man about the relics, as the writer has done many times.

"What relics?" he will ask.

"The Norse relics found at Beardmore."

"Oh, the Norse relics,—ha-ha-ha!"

In the minds of many of his fellow citizens James Edward Dodd is probably looked on as a liar and a

cheat. But the fact is he is an honest man who when the jeers broke, didn't know what to do about it. And like so many of us who find a situation beyond us he just relapsed into a silent indignation. It looked to him as if everybody had conspired to defame him, the newspapers with their "big heads" as he called them, and "silly" items, the people he met daily who smiled knowingly at him, and on top of all Dr. Currelly, the man who paid him \$500 for them, (quickly eaten up by sick bills and debt) being quoted in the papers as saying that "the collector pays no attention to the story,"—as long as the collector was satisfied as to the genuineness of the article he bought he took the seller's story with a grain of salt. And Dr. Currelly said also at the same time that he had been looking for Norse weapons of the kind Dodd had found for 30 years and had never before been able to locate them. Dr. Currelly, of course, made the remark after Dodd's old landlord and former pal had got into print,—thus justifying his purchase but not getting behind Dodd's story. But James Edward isn't resentful for long; he has forgiven the doctor.

I have talked to Mr. Dodd many times, alone or in company with Dr. Eakins. We have spent many hours going over every little detail. I have visited the scene of the find in company with Dr. Eakins, Mr. Dodd and Mr. Fletcher Gill, a C.N.R. locomotive engineer, and for long a pal of Dodd, as well as a partner in his claims.

Arriving in Port Arthur for a vacation on Sept. 12, 1938, with no faith at all in the Dodd story on account of the scornful stories in the newspapers but unable to

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keep from doing a little digging to put in the time on the off chance that the Dodd yarn was really true, I hunted up Judge McComber, on whom I had been recommended to call by Mr. John A. McPhail, K.C., the lawyer-president of the Great Lakes Power Co., of Sault Ste. Marie, and other companies. His Honor, "one of the pleasantest men in the world" as Mr. McPhail said, felt he should try to oblige a stranger. So he spoke to Dr. Eakins, who had written to me a couple of years ago to visit Port Arthur and give an address on the early discoverers of Lake Superior. The first thing the three of us knew we were up to our necks in "Dodd vs. The Public."

The doctor and I called at the Dodd home. Dr. Eakins had been the family physician for 28 years. Mr. Dodd was not at home and Mrs. Dodd very kindly told us the story of the find made by her husband. Her indignation at the doubts cast on "Eddie" punctuated the interview. She answered without hesitation every question. As the conversation progressed I found myself thinking that if she were making up the story she must have an extraordinary mind. Her directness and simple truthfulness (as it appeared to me) did not belong to an imaginative or a brilliant intellect. I left her with a great respect for her story, her devotion to her husband and her implicit faith in him. Outside I said to the doctor: "That woman is telling the truth as she knows it. She couldn't make up a long yarn like that." I felt then that the whole Dodd story was true.

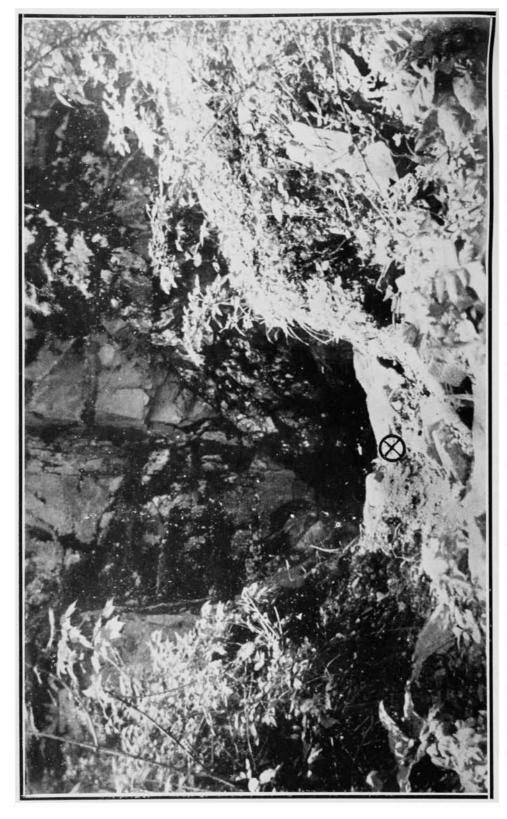
After a laborious questioning of many people I have not run across a single shred of evidence to change my opinion, and the hours I have spent with Dodd and many others have only tended to confirm this view.

I accept Mr. Dodd as a truthful man, and so accept his story as true and exact. There is no question in my mind but that he found the Norse relics where he says he did. There are important facts (to be revealed in due time) which will heighten very greatly the interest in the episode, and widen its significance. The evidence concerning these is now being gathered with care. More than the museum's three pieces have been unearthed. The probability is that there exists available evidence of Norse wanderings far beyond Beardmore.

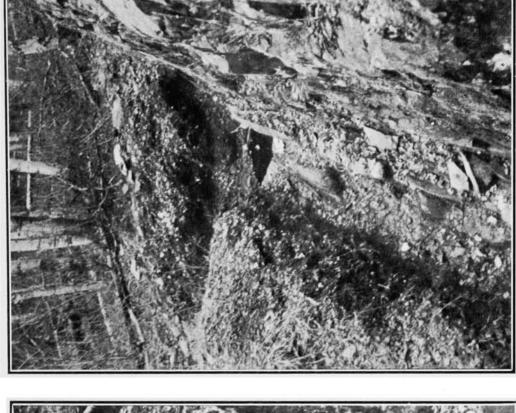
The story is epochal. For it and its ramifications I think any editor would give a leg.

The possible significance of the story is dazzling:

- (1) That Norsemen came into Ontario by James Bay probably before 1100 A.D.
- (2) That they travelled by the Albany and Kenogami rivers and thence by an easy route,—an age-old trail to Lake Nipigon which runs close to Beardmore.
- (3) That the weapons found by Mr. Dodd belonged to one man who probably died on the spot, and was buried with his warrior equipment there as was the old Norse custom.
- (4) Ontario has found a historical shrine that may rival the Dionne quintuplets as a lure for the scientist and the general public. At present there is no motor road from Nipigon, 57 miles from Beardmore, so that the traveller must visit the place by train. The whole area is primitive and difficult of travel.



The Dodd Trench—Showing where the Norse relics were found (cross in circle); the hole Dodd blasted at the base of the white quartz vein which slopes to the right from the water filled hole. (Courtesy Canadian National Railways).



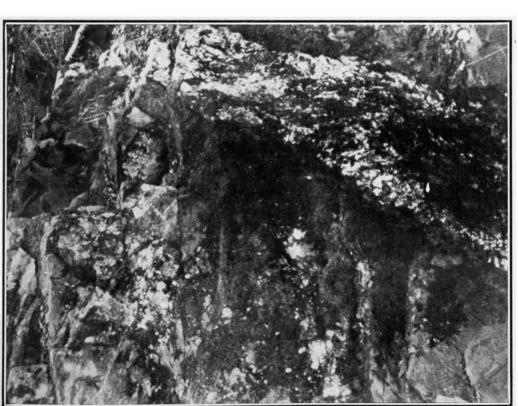


Plate 21.—The white quartz vein in the dike of rock that attracted J. E. Dodds attention. The Norse relics were found at its base. The dike is right behind the hole shown in the other picture.

The trench in which J. E. Dodd found the Norse sword, axe and shield handle is shown in front of the hole he blasted in the rock. The trench along the dike or wall of rock was made later.

Original Article V

HOW DOUBT WAS CAST ON DODD'S FIND

(Sault Star, October 6, 1938)

"IF JAMES E. DODD of Port Arthur really found priceless Norse relics on his Beardmore mining claim in 1930 how is it that he said nothing about them for some years afterwards?"

That is what the world asks.

Why didn't he try to sell them sooner than 1935? Why did nobody hear about them till then? He was a poor man,—had only averaged five months work a year during the depression,—and if he had only told a newspaper he could have sold them for the money he admits he so badly needed.

The questions and doubts are natural enough, and reasonable enough till you meet James Edward Dodd. As a matter of fact Mr. Dodd didn't keep quiet about them at all. He hawked them here and there and had people coming to his house to see what at first were supposed to be Indian relics. He had them at the Mariaggi Hotel, for long the swank hostelry in Port Arthur. His friends seem in fact to have grown a little weary of hearing him talk about them.

Mrs. Dodd found some of these visitors a little trying. Her husband was in the habit of coming home at all times with men who really didn't want very much to see old mining tools or Indian relics or whatever they were, but they liked "Eddie," as he is known to his many friends, and didn't want to hurt his feelings by refusing. His pals on the C.N.R. were claim stakers,—and what railway man in Northern Ontario isn't "interested" in a mining claim,—and wanted to talk mining more than scrap iron. "What squaw gave those things to you?" had asked Pat Bohan, section man at Dorion right after the find in 1930 when he was at the Dodd cabin on the mining claim. They joked about James Edward and his find and at last as one put it "thought he was bugs." No wonder James E. retired within himself.

Then along one day in 1936 came a "school teacher from down around the Soo,"—(he was really Mr. O. C. Elliott of Kingston,) and gave Dodd the idea they might be valuable, if only somebody could say what they were. "A man from the U.S." talked the same way. And so the owner got more interested in what people called junk, and the more he thought about the stuff the more he wondered.

Dodd kept the relics "in a box under the sink," and so Mrs. Dodd got tired moving them every time she wanted to sweep. So they were moved to the cupboard, the cellar and the good wife followed them with what patience she could muster.

"Once I found them behind the china cabinet," she told the writer. Finally, patience gone, she threw them out in the yard. But that was after she had offered to gild them and hang them on the wall where hubby could get his fill of looking at them and where callers wouldn't need to haul them out and muss up

her kitchen. Husband wouldn't let them be gilded she said as that "might spoil them." But after they landed in the yard, Mr. Dodd considerately put them in the woodshed. Even as she told the story Mrs. Dodd sighed with relief.

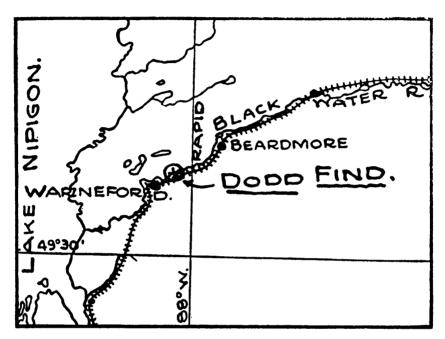


Plate 21—Seven miles from Lake Nipigon J. E. Dodd found Norse relics 200 yards south of Blackwater River and Canadian National Railway track.

"You don't know how old things like that clutter up a place and make work," she said. Of course men don't know how trying a few old iron relics can be to a housewife.

It wasn't James Edward's fault that the world didn't know about his find. And after a while he found even his friends a little bit diffident about going to see the articles or even talking about them. From indifference they began to joke, and James E. had occasionally to hear a jeer or two. Fact is he could do his part as a brakeman or a freight train conductor, but as a publicity agent for old iron articles found on mining claims he was a failure.

Having failed to get action from his friends he tried an outsider. Dr. E. M. Burwash, of the Department of Mines, was in Port Arthur "three or four years ago," (James E. is exasperatingly uncertain about when things happened), on his annual rounds as a teacher of classes for mining prospectors. Perhaps Dr. Burwash would like to see the stuff. Dr. Burwash, a mild and obliging man, would. He thought his friend, Dr. Currelly, might be interested. Finally about two and a half years ago, as is stated, Dodd took his relics to Toronto, being paid his expenses on the trip.

Dr. Currelly believed the relics were worth investigating. He sent photographs to experts in Europe and back came word that the Dodd "junk" was really a Norse warrior's equipment. The museum man had been looking for just such a set for 30 years, and Mr. Dodd had the first he had ever seen.

"How much do you want for them?" the doctor asked.

"You set a price," said James E.

"The museum is not allowed to do that," the doctor is reported as saying.

"Well," said the Port Arthur man, "after all the work and expense and trouble I have had I think they should be worth \$400."

"We will do better than that," said the doctor. "We'll give you \$500."

And as James E. now thinks he well might. For the doctor didn't buy a bit too quickly, the report goes.

Dodd probably could today get enough for his relics to keep himself and family in comfort for the rest of their lives. That is if he hadn't sold them to Dr. Currelly after having had them lie around the house for years.

Then when the deal had been completed at the museum, the doctor asked among other questions if Mr. Dodd had found anything else. Thinking the matter over, Dodd recalled that on top of the handle of the shield lay what seemed to be a shallow bowl of iron, but this was so fragile that when Dodd touched it with the shovel it just shattered into pieces. So he had paid no attention to it, and presumably the fragments were lost in the shovelling out of the trench.

Dr. Currelly expressed the view to me when relating the particulars that this shallow bowl was the "boss" on the ancient shield,—an iron protection for the hand of the man who held the shield. He showed pictures of old Norse shields with a "boss" in the centre of the front of the shield, and drew attention to Mr. Dodd's statement that the "bowl" had rested on top of the handle, the right place for it to rest as the shield lay on the ground with the face of the shield and its "boss" uppermost.

Not alone were Dodd's axe, sword and shield handle found in the trench on his claim at Beardmore in 1930, but there were also two pieces of thin rusted iron found in the same hole,—one in the fall of 1937 by Prof. Mc-Ilwraith of the Royal Ontario Museum, and the other by Dodd in the summer of 1938. These two pieces, now in the Royal Ontario Museum, are exactly similar.

The story of Mr. Dodd, regarding the finding of

pieces of old iron on his Beardmore claim, afterwards identified by experts as genuine Norse relics of 11th century make, is clear enough. As to the year of the find, however, he was a little hazy at first. When he first told me the story he said it was during the spring of 1931, "after the snow went off." On this and all other points I questioned him closely even suggesting strongly several times to him that the right date was 1930. I merely wanted to see if he would wobble on the matter. We talked the whole matter over a couple of times, and three or four days after our first meeting which was on Tuesday, Sept. 13, Mr. Dodd said that maybe the date was 1930,—he wasn't sure.

"It happened so long ago," he said, "and I have worked pretty regularly on the claim since staking it in 1925, but what happened each year since then, I am not sure I can remember."

"It is very important," said Judge Alexander Mc-Comber, "that all dates be fixed clearly."

Apparently the situation as far as Dodd was concerned was quite satisfactory up till January 25, 1938. He had sold the relics, got his money, and was resting on his laurels. Then came the Godsell address in Winnipeg with the news that Dodd had secured money for the relics. Following it J. M. Hansen, a Port Arthur carpenter, was reported in the newspapers as putting in a claim for the relics as belonging to him. He had made a loan, it was stated, to a Lieutenant Johann Bloch, out from Norway, and had been assigned the relics as security. A reporter for the Port Arthur News-Chronicle interviewed Hansen. On October 7, 1938, this reporter, Royd E. Beamish, was on the staff

of the Toronto Globe and Mail, and on that day wrote in his paper about the controversy which had flared up again over the Sault Star's articles:

"Hansen, in an affidavit, (in January) declared that he had secured some Viking relics from one John Bloch as security for a \$25 loan. He had stored them in the basement of his home, 37 Machar Avenue, and the home was subsequently rented by Mr. Dodd. Hansen charged Dodd had taken these relics and "planted" them at Beardmore. On January 27 he publicly announced he would take legal action to secure the articles."

As Mr. Beamish had been on the spot during the January dispute and had then kept in touch with both Hansen and Dodd, his summary as above is interesting. Hansen, it would seem, had left Dodd in undisputed possession of the alleged Bloch relics for eight years, for Bloch had left Port Arthur, it is stated, in 1930. But Dodd immediately countered with a warm denial, and resented, he says, the diluted form in which the local paper printed it. The papers did not print the affidavit Hansen made at the time, but reported him as saying in it that he had left "similar articles" to the Dodd relics in the cellar of 37 Machar Street into which Dodd had moved. In justice to Hansen it should be said that when he was interviewed by Judge A. J. McComber, Dr. G. E. Eakins and the writer in Sept., 1938, he expressly said that he did not know if the Dodd relics were the same as Bloch's; that he had only claimed the Bloch relics were "similar articles": that he had never seen Dodd's, and for that reason had

asked the Royal Ontario Museum for a photograph of them in May, 1938, to see if they looked like those he had secured from Bloch,—a request Dr. Currelly had refused "as long as the ownership of the relics was in dispute." The newspapers had apparently not reported Hansen accurately. The note Hansen holds is for \$45 and only \$10 has been paid on it. The promised legal action to recover the relics has not been taken.

On January 20, 1937,—a year before the Godsell speech,—the Sault Star had printed the story and this was copied by the Port Arthur News-Chronicle. Thus Mr. Hansen had had an opportunity to enter a claim then.

Dodd told the writer in September, 1938, that the first he ever heard of Hansen's story of Lieut. Bloch's Norwegian relics was in January, 1938,—almost eight years after he had found the relics on his Beardmore mining claim, and over a year after he had sold these to the Royal Ontario Museum. Corroboration of this is contained in an affidavit by a friend of both Hansen and Dodd. The writer is convinced from the evidence that however "similar" Bloch's relics were to Dodd's, the two sets were in no way related.

After living at No. 37 Machar Avenue from June 19, 1931, Dodd moved on Sept. 18, 1931 to 33 Machar Avenue which Hansen also owned, and which he had just vacated. These dates are taken from the phone installation records.

But Dodd says that the relics were brought to Port Arthur to his home at 296 Wilson Street, before he moved to 37 Machar Avenue, and that when he moved into the Hansen houses (37 and 33 Machar Street) he took them with him from 296 Wilson Street which wasn't owned by Hansen.

It would appear from the records and other testimony that Dodd is correct. It seems to be established that he found the relics about the end of May or beginning of June 1930; that he didn't move from 296 Wilson Street to the first Hansen house till June 29, 1931, or over a year after he had found the relics at Beardmore.

It was first established by rent records that the Dodds had lived at 296 Wilson Street, owned by the Ruttan estate in 1930. The following table shows the several addresses since 1928 of Mr. Dodd on the Port Arthur city voters' list:

1928-1931-296 Wilson Street.

1932—37 Machar Avenue.

1933—33 Machar Avenue.

1934-1937—74 South Algoma Street.

As a railway man always on call for duty, Mr. Dodd had to have his telephone moved promptly when he moved from one house to another. The phone company's records show that his phone was shifted as follows:

From 296 Wilson Street to 37 Machar Avenue on June 29, 1931; thence to 33 Machar Avenue on Sept. 18, 1931; to 74 South Algoma Street on March 9, 1933; to 354 Bay Street on Oct. 2, 1937.

The city directory gives these addresses:

Year 1929—296 Wilson Street.

Years 1930-31, (one directory was issued for these two years)—296 Wilson Street.

Year 1932—No directory available.

Years 1933-1937—74 Algoma Avenue.

The most accurate and the most important of the above records is that of the phone company, kindly furnished by Manager Chandler of the Public Utilities Commission of Port Arthur. It shows that Mr. Dodd moved from 296 Wilson Street (owned by the Ruttan estate), to 37 Machar Avenue, (owned by J. M. Hansen), on June 29, 1931; that he moved from 37 Machar Avenue to 33 Machar Avenue (also owned by Hansen), on Sept. 18, 1931; and that he moved from 33 Machar Avenue to 74 South Algoma Street (not owned by Hansen) on March 9, 1933.

According to people whose testimony has been secured the relics were first brought to Port Arthur when Dodd lived at 296 Wilson Street. (The affidavits covering Mr. Dodd's story are given on other pages of this book).

About 1923, a young man came to Canada from Norway. His name was Johann or John Bloch, and he was known to his friends there as Lieutenant Bloch. It seems he had spent a year at the military school in Oslo, Norway, but, it is suggested, didn't make a success of his studies there. He said that his father was an artist, and J. M. Hansen, a carpenter, 40 years out from the northern part of Norway, was one of the Norwegian colony and became acquainted with Bloch. The first Port Arthurite apparently to meet Bloch was Mr. Carl Sorenson, Royal Norwegian Vice-Consul at Fort William.

As the strange story of Dodd's find involves John Bloch it is well to relate what is known of him.

Mr. Sorensen says that he first met Bloch in Win-

nipeg in the winter of 1922-1923, and Bloch went to Fort Frances from there, but couldn't get work there. Later he came to Port Arthur in 1925 and stayed in Port Arthur six or seven years.

"He would be living in Port Arthur in 1928. I methim in Winnipeg," says Sorensen, "I think in 1923 and he told me he was going to Fort Frances. I had been out west and when I came back to Port Arthur in November, 1926, he was there. He told me he had been out in the bush for a couple of years working for contractors. I met him around Christmas in 1926 in Port Arthur. He was clerking at the Mariaggi Hotel about 1930, and that was the last job he had. He was rooming in the Ruttan block a year or two before he left Port Arthur. He was just a short time at the Mariaggi Hotel. Then he went to Winnipeg and was there a year or two and got married. He then went to Vancouver and died there. (The Vancouver Daily Province, at the request of the Sault Star, tried to find Mrs. Bloch in that city, but failed to do so). He used to come up to my rooms. There were five or six young Norwegian engineers working for the C. D. Howe Co. who used to meet in Bloch's rooms in the Ruttan Block, Port Arthur, and I would go there often too. He used to visit me in my rooms in Fort William quite frequently. I never heard of his having any relics whilst he was here and I never heard from anyone that he had any."

Mr. Sorensen said that Lieut. Bloch was about 27 years old when he came to Canada from Norway, after attending the military school there for about a year.

"I was frequently in his rooms and he visited me

often. We talked over everything imaginable, including his own experiences and prospects. He was of the student type,—a very nice man."

"Is it possible that he had any Norse relics in his possession at any time during his stay in Canada?" the writer asked.

"I can hardly believe it," said Mr. Sorensen. "I can't believe that he would not have mentioned it to me if he had. No, I don't believe any of the stories now told about that. Some of Lieut. Bloch's other friends and myself have discussed these reports and we all think them utterly without foundation."

"Lieut. Bloch certainly had nothing of value in his possession. He had been compelled to sell some little personal possessions to live," said Mr. Sorensen. "No relics at all. All he possessed was a college cap and a belt outside of his few necessities."

"Neither myself nor any other of Bloch's friends ever heard of him having Norse relics till after his death."

Mr. Sorensen produced a photograph of a Viking ship which he and some other Norwegians had built as a float in a local street parade. Bloch had taken a leading part in its construction as he was intensely interested in old Viking days, ships and history. The float conformed to accepted pictures of these old ships, with a number of shields hung along the side. "We got some tall Norwegian lads to stand behind the shields," said Mr. Sorensen and the photo showed all the features he spoke of as well as the committee who had carried out the scheme. In the group were Mr. Sorensen himself and Lieut. Bloch.

It was the Hansen statement which clouded the situation and caused the newspapers to take Dodd's story with a grain of salt.

Unbelief was helped by a story in the Winnipeg papers about January 25, 1938, that a fellow C.N.R. employe of Dodd's named Eli Ragotte who had at one time boarded with him on Machar Avenue was said to have claimed that it wasn't Dodd but he himself who had found the "sword" on "a pile of cinders" in Dodd's cellar while the two were cleaning up the place.

I saw Mr. Ragotte in Winnipeg on Sept. 20 and asked him about the story.

"I only said it as a joke," he said.

"Then you looked on the report in the newspaper as a joke?"

"Yes, of course. As a matter of fact I had seen what looked like a sword or just an old piece of rusted iron in his cellar,—I wouldn't be sure which it was—and am sorry I got into the yarn. I never saw the shield or axe. Of course it was my own fault. I didn't know it might hurt Eddie, and I have no desire to hurt him or anybody else. He has a heart as big as a house."

Mr. Ragotte gave me an affidavit to the above effect and through the kind offices of Vice President Warren of the C.N.R. at Winnipeg, and Vice President Kingsland, at Toronto, went to Toronto at my suggestion to the Royal Ontario Museum, where we met Dr. Currelly and Prof. McIlwraith. Ragotte was shown the Dodd sword and relics there and at once signed a statement that the sword, or "piece of iron" he had seen in Dodd's cellar was not the sword in the museum. He also gave me a second affidavit covering this matter.

Original Article VI

"BOSS" OF SHIELD BROKE

(Sault Star, November 8, 1938)

How did James edward dodd happen to dig at exactly the spot where the Norse armor was found? I have done enough amateur gold hunting myself to understand the reason,—any prospector would be likely to follow Dodd's example.

A "dike" of solid rock extends east and west on the "Norse" claim. At the spot where the relics were found this dike is about 12 feet high. A white quartz vein a foot wide runs straight up from the ground in it. The prospector couldn't miss seeing it. I would say that from its appearance it looks promising for gold. When Dodd saw it, the first question that occurred to him,as it would to any prospector,—was this: Does this vein continue in the rock on which the dike appears to stand? The only thing to do was to find out by removing some three feet of overburden that covered the ground at the base of the dike. So Mr. Dodd got busy with a pick and shovel. He cleared a trench above solid rock for about four feet out from the dike. Then he blasted out the rock beneath this, and also went a foot or so into the vein on the face of the dike.—this excavation in the dike beginning where the overburden had covered the vein. Thus he cleared off the overburden and then blasted out the rock beneath this to a depth of three feet.

The vein was found extending out from the dike. When Mr. Dodd had completed the four foot long excavation in the rock out from the dike, he naturally wanted to know how far the vein extended out from the dike. Standing in the hole in the rock he had made, he took a stick and shoved it into the overburden along the top of the rock on which it rested. This was to permit him to use dynamite to extend the vein.

"Why did you use dynamite in this soft overburden of black mold, gravel and small stones?" I asked, and he explained that in his opinion digging was easier when earth is shaken up by a blast,—a view nobody will disagree with. On the overburden was a partly rotted stump (12 to 18 in. thick) of a birch tree about 6 or 7 feet high with the roots still in the earth. The stump seemed to have been partially blown over but dynamite would render the job of getting rid of the stump and roots easier.

When the dynamite had gone off, Dodd began shovelling out the loosened earth, throwing it up on each side of the trench he was making.

"Did you hit any of the relics doing this?"

"Yes, I struck two pieces of old iron but paid no attention to them. I remember just wondering if they were old mining tools or Indian relics."

At the bottom of the trench Dodd's shovel hit what looked like a "shallow bowl." It fell into small pieces when the shovel touched it. Mr. Dodd never gave it a thought and in fact had never reported this particular item till he was prodded into doing so in a long

questioning by Dr. Currelly who first told me about it. This thin, rusted, fragile "bowl" rested right on top of the handle of the shield, and its badly decomposed fragments must now rest in the piles of earth thrown out from the trench. The sword, the axehead and the grip for the shield were all thrown out then. The only people with Mr. Dodd were his son Walter, now 22, and a Ukrainian youth of 18 or 19 years of age who had come along the C.N.R. track close by and asked for food. He spent two days with Dodd and was given 50 cents and his meals for the little work he did.

John J. Jacob, of the Ontario Fish and Game Department, saw the trench shortly after the find from which Mr. Dodd took the relics (while following a vein). The rust of the sword at the bottom of the grave was still plainly to be seen where the old fashioned weapon had lain for possibly 1,000 years. He has given this story to Port Arthur friends.

When I visited the spot on September 16, with Mr. Dodd, Dr. G. E. Eakins, of Port Arthur and Mr. Fletcher Gill, C.N.R. locomotive engineer and mining partner of Dodd, I came away with a piece of rusted iron less than an inch wide and about $2\frac{1}{2}$ inches long. Mr. Dodd had previously told me that Prof. McIlwraith, of the Ontario Museum, had found a small piece, and that about June of this year (1938) he (Dodd) had uncovered another.

"Where is it?" I asked.

"I left it where I found it," he said.

Asked for the reason, he added:

"There has been so much criticism and fault finding,

and so much doubt expressed by people, I just thought I would leave it for somebody else to pick up."

When we reached the trench Dodd got down into its three foot depth and began to carefully remove the soft earth at the east side of the rock bottom of the earth trench extension. He had apparently forgotten the exact spot as he found it 6 or 8 inches from where he first began to disturb the earth.

As he uncovered it, I suggested that Dr. Eakins would himself pick it up and take charge of it. But the doctor thought it would be better for me to take it to Toronto and hand it over to Dr. Currelly. This I did. When the museum curator examined it he remarked:

"This is the same as the other piece." I left it with him after getting a receipt for it as Mr. Dodd's property.

Just up the Blackwater River from where Dodd found the relics "rapids" are marked on the map of the Nipigon area issued by the Dominion government. Did the dead Norseman, with his companions, take the shore because of the rapids?

The Norse relics were found only seven miles from Lake Nipigon with an easy approach to it via the Blackwater River. The lake has for long been a favorite resort for Indian tribes, as appears from the Jesuit Relations of the 17th century. When the Iroquois devastated the Lake Huron and Algoma region in the middle of that century, the Relations record that the Indian residents of the Soo and many other tribes fled to Lake Nipigon. For many years a carload of fish has been shipped daily from the lake. The Hudson's Bay Company has a post on its eastern shore, and commercial fishermen have drawn on its abund-

ance for many years. On its western shore there exists or did exist a favorite gathering place of the Indians in times past,—at one of the lake's few good beaches. Were the Norsemen heading for this place?

The Albany River which is the easy eastern entrance to the Nipigon area, is yet the finest sturgeon fishing ground in America. It and the excellent hunting up the river were the magnets that have always made the river a haunt of the Indian. The sturgeon fishing has now been commercialized, the caviare being shipped to New York. In Port Arthur I was told the price was \$1.50 a pound.

Original Article VII

WAS JAMES BAY THE NORSE VINLAND?

(Sault Star. October 11, 1938)

When samuel champlain recorded the word "mistigoche" in 1610, after having got it from the Montagnais Indians on the St. Lawrence River as their word for "Frenchman," he failed to explain why these Indians chose the word. As Cree and Montagnais possess much in common apparently it is extremely likely that the Montagnais adopted the word from the Moose Crees. And if they did where does the fact get us?

It makes it almost absolutely certain that the Moose Crees had seen wooden ships on James Bay long before Mr. Champlain's French appeared on the St. Lawrence. That is to say there must have been white men frequenting Hudson's and James Bays so long before the French came to the St. Lawrence, that the word "mistigoche" had time to spread from James Bay through Indian tribes, till finally it was used on the St. Lawrence River by the Montagnais. How long would it take for a James Bay word to seep through to all the southern Canadian Indians, and be used by all of them to describe men who came from the sea?

Now let us come to the crux of the thing. A Norseman died seven miles east of Lake Nipigon and was buried

there, so long ago that the armor came out of the ground in fragments. Finally the genuineness of the armor was vouched for by European experts as of 11th century make, (1000-1100 A. D.) and it has been proven this fall (1938) that Dodd actually found the relics where he had for eight years claimed he had,— on his mining claim between Warneford and Beardmore, two stations on the Canadian National Railway.

Put these facts together:

The Moose Crees of James Bay called Europeans by words meaning "wooden ship" long previous to 1610, when the French had established themselves on the St. Lawrence by founding Quebec in 1608;

Two—The Montagnais Indians on the St. Lawrence in 1610 used a Moose Cree word to name the Frenchmen;

Three—A Norseman died near Lake Nipigon wearing Norse armor of the 11th Century,—at a spot 350 miles west of James Bay as the crow ffies,—probably meaning a river and portage journey of 500 miles from the bay.

What do you make out of these items? Are they related? Was the Moose Cree word invented in the 11th Century? Was the dead Norseman at Lake Nipigon one of the crew of a ship which gave rise to the Moose Cree name?

After the find near Lake Nipigon may the world's disbelief in the old Norse sagas which described voyages to America 1,000 years ago be justified? Must we not consider these old records in a spirit of belief in them and thus perhaps find there was some truth in them after all?

Was the Helluland (flat stone land) of the old sagas the rocky eastern shore of Hudson's Bay? Was their Markland (wooden land) the forested shore of James Bay, and Vinland the Great Lakes area. For Vinland was a pleasant land where food grew plentifully. Even Moose Factory's mean summer temperature is only five degrees cooler than Toronto's and it grows fine root crops. At any rate Vinland had eight hours of sunlight on its shortest day.

Preposterous notion this. But so was the finding of a warrior's armor of the 11th century at Beardmore. Fantastic, — of course, it is, — the idea that this one Norseman died almost in sight of Lake Superior!

In John Beveridge's edition of "The Olaf Sagas" in Everyman's Library, there is a passage about Vinland:

"... for on the shortest day the sun was in the sky between the Eyktarstad and the Dagmalastad." A note appended says: "according to Vigfusson this means a day of seven hours." If it does then Vinland was north of the 57th degree of latitude,—that is north of the Belcher Islands in Hudson's Bay or in the area 70 miles south of Hudson Strait on the Atlantic Labrador coast, which is manifestly absurd as there are only bleak rocks to be seen in both of these locations, and Snorri's description of the climate, soil, and environment do not fit a seven hour day latitude. Unfortunately the many translations of these sagas disagree unmercifully with each other on many points, and the notes of the translators are also often contradictory.

There was a man named Snorri Sturlason who was born in 1179 A.D., and wrote about 1225 his chronicle of King Olaf or Olaus.

In his saga he tells of one Biorn, of Iceland, while sailing to Greenland, being blown far to the south west. As Snorri wrote long after the event he had of course to depend on reports second or third hand and therefore the story could hardly be accurate except perhaps in its general outline. All writers and theorists assume that Biorn had reached Newfoundland or the Gulf of St. Lawrence. Let us assume that it was Hudson's Bay he had reached,—we have as much right as others to make a guess,—and Hudson's and James Bays fit Snorri's description better than the Atlantic places.

Let us take some liberties with old Snorri as he wasn't accurate anyway. For instance, if Biorn sailed northeast in returning to the Greenland Norse settlements, he must have started from the middle of Labrador, and there are no trees or grapes or anything there but rocks. If Biorn and Leif sailed southwest from Greenland to Vinland, they must have changed their course some time, to avoid that desolate shore. In returning home they can't have steered north-east even from the Straits of Belle Isle, as the Greenland settlements are almost due north. But it is unkind to criticize a man who got his story of a voyage generations after it took place. Probably the only facts to be depended on are that a better land than Greenland was found, and that it was worth while trading there.

Well, Leif the Lucky bought Biorn's boat and left for Vinland, so he must have known where it was. He found a rocky and sterile island (the whole Labrador peninsula he may have thought was an island), and Hudson's Bay is rocky or sterile. He called this rocky shore Helluland, (flat stone land) and that fits the eastern shore of Hudson Bay and Hudson strait. He found beyond this a low sandy forested shore and he called it Markland, (wooded land), all a perfect description of the west shore of James Bay, along which the water is so shallow even canoes have to paddle a long way from shore. The marshes there provide the greatest duck feeding grounds in America as Jack Miner's charts show. Then two days after, (he would sail possibly between 100 and 150 miles in that time) they came on a continuance of the shore with an island to the north of it (Akimiski or Charlton?) This last place he said was fertile, well wooded, and produced fruits and grapes. The latter they knew nothing about but a German with them told them, so they named the locality Vinland (wineland).

Suppose we suggest Vinland began at the Moose River area. The mouth of the Moose is the most popular place to live on James Bay.

Then says Snorri, Leif and a party went up a river.

One—(The Moose?) well stocked with fish and came to a lake from which the river took its origin (Lake Missinabi?) where they passed the winter. The climate appeared to them mild and pleasant, they being accustomed to the rigorous Arctic climate. On the shortest day the sun was above the horizon eight hours at the wintering lake. Hence it is concluded the lake was above the 49th degree of latitude. Lake Missinabi is 48 1/3 degrees.

Two—Or suppose we send them up the Albany River, near Akimiski Island, some 80 miles north of the Moose, and down the Kenogami River, a tributary, and thence by a few days' easy journey to Lake Nipigon, say a 500

mile river journey from James Bay. Daylight on the Albany is 7 hours and 45 minutes on the shortest day, as compared with Moose Factory's 7 hours and 56 minutes. And Lake Nipigon on the 50th parallel has just eight hours and four minutes. Rossport on the Lake Superior shore is a shade south of the 49th degree of latitude and has 8 hours and 13 minutes of sun on the shortest winter day.

So may we not be justified in coming to the conclusion that the wintering lake of Leif the Lucky, was probably between the latitude of Lake Superior and the Albany River, with Lake Nipigon as the place where there is almost exactly eight hours of daylight.

The spot where Dodd found the Norse grave is in latitude 49.38 degrees, and the daylight there is 8 hours and six minutes.

We know from Snorri that the voyages to Vinland took place about 1000 A.D. The make of Dodd's Norse relics is given as the 11th century, with the guess that the actual era of the weapons found ranged from 900 A.D. to 1100 A.D.

Perhaps we are entitled to guess (as everybody does about Saga dates and places) that Beardmore's dead Norsemen belonged to Leif's expedition, and that the apparent good order of his grave indicates that he was a respected member, perhaps an officer, of the party,—one who merited the carrying out of all the formal Norse obsequies of the time.

There is this to our guess about Vinland: It meets Snorri's details better than Newfoundland and the North shore of the St. Lawrence. For there isn't any low flat sandy land there. The "boreal" range of trees does not begin till you get a little west of Belle Isle Strait. In that section there are few furs, but the Moose River and Albany River country was so rich in furs it drew the French and English into a century of conflict over its spoils.

And above all, our Moose and Albany area has given up an actual Norseman in armor after 900 years of burial.

You don't agree with this at all? It's too overdrawn and fantastic? It's absurd to suppose that Hudson's and James Bays knew Norsemen first of all America, you say?

Well, then settle these points with yourself:

One: The Crees of the Moose River invented the first American name for "whiteman," and it spread all over the Great Lakes and St. Lawrence River region, being used today just as it was recorded 328 years ago.

Two—A dead Norseman has lain for about 900 years with his armor almost in sight of Lake Superior.

Original Article VIII

DODD'S NORSEMAN NOT SO IMPORTANT NOW

(Sault Star, October 13, 1938)

CAN WE ESTABLISH the location of the legendary Vinland of the old Norse sagas? It would seem so.

We do not have to depend on the fact that it was the Moose River Crees who invented the first American name for the white man by calling him "the wooden boat man" after the ships he came sailing in. Nor on the fact that the Cree word for "oak," which doesn't grow within hundreds of miles of him is "wooden ship wood."

And neither do we have to altogether depend on the fact that a Norseman was buried seven miles from Lake Nipigon 900 years ago, and that his rotting iron armor was dug up by James Edward Dodd in 1930.

These are very interesting facts and if it were not for the outrageous mistakes in old chronicles of Greenland and Vinland, the story would almost tell itself. It has been spoiled and made more difficult, too, by our learned men who are so scared of being caught on the wrong side of the fence that they hem and haw and express grave doubts till somebody like you or me comes along who is full of credulity and we just swallow a story and not wait for somebody to warn us it isn't true. You see as you and I have no scientific reputation or prestige to lose, we don't mind saying yes if the thing appeals to us as reasonable and natural and likely.

So we swallow the Kensington stone story at one gulp, because we don't think that the world is so full of fakirs that a man would go to the trouble to cut a Norse message on a stone and let a tree grow over it for several centuries on the chance that somebody might then find it and read it and come to his help if that's what he did it for. You and I like to believe a thing unless we can see some sense in it being wrong. And these old Norsemen seemed to like to carve messages on stones. Rummy idea, of course, to us, but not to them.

So when a farmer out in Minnesota in 1898 found a stone with queer marks on it, and a man put in 25 years figuring it out (with help) and he seemed honest, and his helpers seemed honest and pretty smart, you and I saw no harm in taking the message seriously. And what was it that was written on this stone in 1362? Just that a party of Goths (Swedes) and Norwegians had lost 10 of their number by an attack by somebody and that they had left 10 men "at the sea" to take care of their ships.

Being a little softheaded and trusting is sometimes a help.

Because in this case there was confirmatory evidence all round the circle if we only had looked for it. Paul Knutson had been sent to find the lost settlers of Greenland who had mysteriously picked up and left without notice or by your leave. And King Magnus of Norway being worried about it sent Paul. Paul apparently never returned himself and his ship-carers "at the sea," (maybe it was at the mouth of the Hayes River on Hudson's Bay) do not seem to have been among the few of the party who are guessed to have returned.

What became of them?

Nobody knows, but you and I can guess either that they were lost at sea, or just joined their countrymen they had been looking for who were probably safe up the Albany or the Moose River. But anyway the stone said that Paul's party was "from Vinland thro the west," Paul must have landed on the coast of Hudson Bay to get where he was south of Lake Winnipeg from which the Nelson River flows.

So Paul thought the Hudson Bay coast was somewhere in "Vinland." And he hadn't been there before, and had got his sailing directions either in Norway or Greenland or both. People in those days seemed to know where Vinland was and the 1,000 folks from the lost western settlement must have had an idea. The strange fact about the whole thing is that the men who pretended to write the books about it didn't seem to know. When a writer doesn't know the facts and wants to fill up his pages, he draws on his imagination for his facts, and lots of times it makes a better story that way.

Old Snorri must have been up against it for the low down, as he lived 2,000 miles away from Vinland and besides that he wrote over 200 years after the things he tried to record happened. He had nothing to do with the Kensington stone or Paul (say 1350 A.D.) But he did try to reproduce the doings in Vinland when Leif

the Lucky came along about 1,000 A.D. and actually built houses as likely as not at where Moose Factory now stands. And also put in a winter either at Nipigon Lake or possibly Missinabi (Big Lake) lake, though there are a heart breaking lot of portages from where the Missinabi River runs into the Moose right up stream to Missinabi Lake. It was very much easier going to Nipigon as the Pugwa ("it is shallow") and the Albany are nice and quiet going down anyway or if you want to switch over into the Kenogami it is good going. (Please note "Kenogami" is just "Long Lac" in French and "Long Lake" in English). There's a half a dozen good routes from Kenogami to Nipigon. Also the Ogoki is a favorite route today to that haven of fish and Indians.

Well if we are half inclined to accept Paul and his inscribed stone let us consider Snorri and his inaccurate guesses about Vinland. First you come to a stony bleak land (Helluland), and then you hit Markland (wood land) and at last you come to a long sandy shore (wonderstrand) and that's apparently where Leif went up a river to a lake it flows out of. The place sounds like James Bay and the Moose, and not like Nova Scotia or the New England states or the mouth of the St. Lawrence. At least not anything like as much as James and the Moose or Albany.

And if the Greenland colonists never came back they must be there yet,—their descendants anyway. And we enquire around and find nobody answering the description except at James Bay, where the "wooden boat men" are still named and Mr. Dodd's Norseman in his armor is located, and Mr. Knutson's Vinland is close

by and there are people who say Indians are there with light eyes and light hair, and if a tall strong powerful Indian I saw at the Cree settlement up the river from Chapleau hasn't Norwegian legs, I don't know anything about legs,—long, straight and powerful.

So let us follow up the idea of Vinland being located in the Great Lakes area. The Greenland Norsemen had been trading with it for long, and knew it well before they went to it in large numbers.

Was the Nipigon area the centre of Vinland? From James Bay there is 100 miles of sluggish rivers, swamp and little tree growth except along the higher river banks. Seventy three per cent. is muskeg. North of the clay belt which begins about 100 miles south of Moose Factory little is known of the country and only seven per cent. of the trees are looked upon as merchantable. It is more a soggy soil than a climatic condition for Moose Factory has 80 days of growing weather to Sudbury's 73. But the Norsemen would find that the farther they travelled the 350 miles toward Nipigon, the better the ground was and the more numerous the trees. And just about where Dodd's Norsemen lay the hardwood from Algoma and Lake Superior began to be met. And just west of Lake Nipigon is good agricultural land.

We may be sure Vinland did not extend north of the Albany River. Except for a very narrow fringe along the James Bay and Hudson Bay coast up to the Churchill, (Nelson, Albany and Moose River mouths furnished good shelter), most of the coast was of little use to them. In fact that country back from the Hud-

son and James is practically unknown today it is so swampy and uninviting.

Snorri is translated as speaking of maple. He would have to skirt the southern edge of Nipigon to find an occasional tree or go to the west of Fort William to get the good maple on the small Loch Lomond watershed. The whole of the James Bay region is mostly a poplar country, with spruce, birch, and jackpine as secondary trees. At Lake Missinabi there is some hardwood, but it is along the Lake Superior shore from the Soo to Michipicoten that hardwood grows, gradually dying out as Nipigon is reached.

Thus we have a picture of what the Norsemen found.

A low coast, then 100 miles of very sluggish rivers, and a very attractive country as they approached Lake Nipigon with good drainage, usually good forests (particularly south of the lake), and lakes literally teeming with fish. It was a paradise to the famished Greenlanders. Their friends, the Indians, and they hived up together around Lake Nipigon and on the Lake Superior shore. The Ojibway farther south and the Cree were always friends. Only the mouths of the Moose and the Albany, 80 miles north of it, would be occupied. There was no need to stay there for the James Bay fishing is doubtful.

At their Nipigon home they had a lake one-quarter the size of Lake Ontario, and the rivers were full of even speckled trout as well as the lake itself. You wouldn't think of going back from Nipigon to Greenland yourself.

And they ranged a friendly land south at least as

far as Michipicoten River and Lake Missinabi, with the likelihood that they even went as far as Lake Nipissing, which it is recorded had a regular trade with Moose River back 300 years ago. All the northern tribes pulled together against the Iroquois and the Eskimo, who was a "raw meat eater" as the Cree says. Barbarians, like!

And westward about out to the Lake of the Woods possibly.

There is much more to investigate. Perhaps you and I are convinced now. But we have to consider others. We must lead them gently to it.

Original Article X

DID NORSEMEN ALL LEAVE VINLAND?

(Sault Star, October 18, 1938)

What is the significance of the Dodd Norseman having been buried 900 years ago exactly in front of, and only four feet away from, a white quartz vein a foot wide running straight up in a dark rock dike a dozen feet high? Surely there is a meaning in it. Was the man buried there so his grave could be easily found? Nobody could miss the lone broad white mark in the straight wall of dark rock.

Did the vein mark a community burial ground? Is there a runic inscription close by? Are there other graves on each side of the grave found? The spot was carefully chosen. It is on higher ground than the damper ground 30 feet away. There should be a scientific examination of the place before it is disturbed.

It's a strange thing about human nature that it doesn't change. If you are a teetotaller in the Soo, you are not in much danger of succumbing to the demon rum in Toronto. People stick to old habits and ways and methods of living.

So that in our chase of the Norsemen who left Greenland and settled in the Great Lakes area long before Columbus came across the Atlantic we can safely assume that they would follow the habits they acquired in Greenland. They got along all right with the Eskimos in Greenland, though they spoke of them as "skraelings" or inferior people. Being used to these in the old home they probably found no difficulty in also living on some sort of terms with the Crees of the James Bay and Lake Superior region, when they were forced out of Greenland by dwindling trade with Norway and starvation.

In Norway, Iceland and Greenland, the Norseman followed the sea. He was principally a fisherman with occasional fits of trading or grabbing other people's property. So he occupied bits of England, the north of Scotland, the Irish coast, some of France and Spain and so on. He even put a king on the English throne who failed to stop the ocean wetting his sandals. He was in fact a pushful and vigorous man with a light complexion and he had nerve to burn. A good many of us have Norse blood in our veins even if there is no legend in the family to that effect.

When you come to think of it, can you imagine a Norseman lacking everything, staying in Greenland to starve when in handy sailing distance of him there was a nice place with a better climate, lots of fish, abundant wood, and nobody except bow and arrow savages to keep him out. A lesson or two on the folly of trying to resist men with iron armor and weapons would settle matters, and lay the ground for good feeling all round.

So the Norseman slipped over to Northern Ontario and the Crees of James Bay gave him a name hundreds of years ago, "the wooden ship man." They call the white man that today.

If it had only been one boat load of Norsemen who were wrecked on the Moose River coast, the incident would have left no lasting impression on the tribe. But all along the James Bay coast and the Hudson Bay coast, the old names persist: "He comes sailing," "he is blown on shore," "the wooden boat man,"—what can you make of it except that there was a large sized persistent invasion that covered a wide area and it kept up for long enough for the queer names to spread to other tribes and to stick to our own time?

Have we anything else but supposition for all this? Quite a lot in addition to Mr. Dodd's dead Norseman still wearing his 11th century (1000-1100) armor beside Lake Nipigon. We will have a lot more also when we seriously look for vestiges of the wooden boat men in likely spots they chose for habitations,—Lake Nipigon, Lake St. Joseph, Lake Missinabi, the bays of Lake Superior, the Moose River and its tributaries, the Abitibi, the Kenogami and so on. They have found four Norse axes in the valley of the Red River, which flows into Lake Winnipeg and an old Norse spearhead,—the Hayes River gives easy access from Hudson Bay.

What did the Norsemen do in this old Vinland of Leif the Lucky? He fished of course because he was a fisherman, and where did he fish? In the good fishing places of course. And that would mean Lake Nipigon and the Albany river first, because they have always been grand places to throw out a net or a line. Today after all the exploitation Nipigon gives up a car of fish every day and now they are "commercializing" the abundant sturgeon caviare on both Nipigon and the Albany and other fine fishing spots. Queer how the modern promoter knows where to fish and ship out. Maybe a Norseman told him.

Well, he fished first and then he trapped fur and having no European connection to sell his stuff, he eventually got tired of things as they were and went out west probably past Lake Superior. (He would do exactly what you would do with too much time on your hands). He saw a lot of nice looking Indian women and eventually there were Norse children with light hair and blue eyes,—the Mendelian law says positively that such marriages would produce a certain proportion of fair children and a certain proportion of darker skinned children, and Mr. Mendel's sayso has been accepted "in principle" by everybody,—though we do have backward gentlemen who pooh-pooh its universal application. In the case of the white Indians some pooh-pooh yet,--no such thing as evidence of a Norse infiltration, etc. Well, who are we to contradict men who do a lot of reading and heavy thinking. But you and I who tramp the woods and have hob-nobbed for a lifetime with Indians and seen things nobody could give a reason for, we have our own notions. And after all isn't our education mostly just the things experience knocks into us even if it jars some old notions we have read somewhere.

You will be yawning by the time you get this far so let us hurry to a snap conclusion now,—while waiting for some folks to make sure of some promising finds.

And this is our tentative stand:

The lost Norse colony of Greenland, which has never

been heard of since it picked up its goods and left for parts unknown some 600 years ago came to Northern Ontario and a lot of the second and larger Greenland colony followed them,—not in crowds, but gradually, through the years and centuries.

Take a look at the map of Hudson and James Bay. Poul Knutson's search party in quest of the lost Greenland settlers seem to have gone down the Hayes River to Lake Winnipeg. Why the Hayes? Probably because it was a river which lay in a country which answered the description of Vinland Knutson had been given in Greenland. His men left in charge of his ship at the mouth of the river waited a reasonable time for the party to return and then left for "headquarters? Where? The Churchill as the best harbor on the Bay? They were never heard of afterwards. Did they go to the Moose River and join the colonists in the interior, —say at Lake Nipigon, or were they wrecked?

At any rate Knutson knew that the place to look for the colonists was somewhere west of the great bay, and the Runic stone says that that was Vinland. But he didn't find the colonists; he was too far west. There is no record of Knutson ever returning.

Wouldn't it be queer if we could prove a lot of queer things, some of them seeming to be quite obvious?

Original Article XI

DID KNUTSON USE ALBANY RIVER?

(Sault Star, October 22, 1938)

Of Course I am depending on the people of Northern Ontario to lend a hand in proving that this section of Ontario was really the mysterious Vinland of the Norsemen. We have always pulled together and always shall. I know without being told that they will let me know if there are any more Norse axes or spears above or below ground once they get tidings of these, and perhaps somebody might even report finding the ruins of a solid stone building far back in the illimitable forests of the north. Thus they will help to solve a mystery that has intrigued the world for a thousand years, and undoubtedly do the north a good turn.

And in the meantime for all the encouraging letters which egg me on to rescue from the mists of legend a stark fact in human history I wish to return thanks. I am grateful to Mr. Holand, who wrote a book on his 25 year study of the facts surrounding the "Kensington Stone," for his help and confidence. And to other university folks, and archaeologists, and conscientious prodders of things time has swallowed up, I am indebted, not to speak of encouragement from many people I have never met, but who take the trouble to

write and say helpful things. And to the many doubters and critics whose ideas furnish pegs on which to hang a little pleasant work. If I convince myself of what I suspect to be a tremendous historical fact, I will feel repaid for what many good people think is a doubtful essay into something I know very little about. Perhaps some day in the future we all may know more if we deserve it.

Mr. Holand, whose very interesting book on the "Kensington Stone" found in western Minnesota in 1898, suggests that Paul Knutson's party used the Nelson River to reach the Red River country. Knutson was sent out by the pious King Magnus of Norway in 1354 to find the lost western colonists of Greenland, He was told to bring them back to Christianity, so that he must have had priests in his party. He spent nine years in the search. In Minnesota ten of the party were killed, as is recorded on the Kensington Stone (see picture), which reads:

On the Face of the Stone

("We are) 8 Goths (Swedes) and 22 Norwegians on (an) exploration journey from Vinland over the west (i.e. through the western regions) we had camp by 2 skerries (i.e. by a lake where are two rocky islets) one day's journey north from this stone. We were (out) and fished one day. After we came home (we) found 10 (of our) men red with blood (scalped?) and dead. Ave Maria, save us from evil.

On a Side of the Stone

("We) have 10 of our party by the sea to look after

our ship (or ships) 14 days' journey from this island, year 1362."

Some of the words in brackets were added by Mr. Holand to make the meaning of the message clear, and the word "scalped" by the writer.

Did Knutson really use the Nelson River to reach Minnesota? There is a shorter and better route,—one which was always used by the Hudson's Bay Company to reach Fort Garry, (Winnipeg), from James Bay. It was the main highway of the old days between the two points from its ease of travel and if there was anybody in Knutson's party who had knowledge of the water routes in that territory, he would have inevitably used it. All the waters in it are navigable.

This is the route suggested by Mr. J. A. McPhail:

From JAMES BAY the regular route is to take the ALBANY River which is pretty free of portages.

To LAKE ST. JOSEPH, the source of the Albany, from which the ROOT river leads to

LAC SEUL, which is the Ontario government's storage basin for the waters of the Lake of the Woods.

From Lac Seul to the ENGLISH RIVER, which connects with a series of lakes with

WINNIPEG RIVER, (fed by Lac Seul and Lake of the Woods) which furnishes power for Winnipeg, to LAKE WINNIPEG to the

RED RIVER where four Norse axes, a piece of a Norse spearhead, and another relic have been found.

The above was the most used and most logical route to the west. The Moose River, compared to the Albany, was more of a local route.

Mr. Holand estimates that the distance from the

mouth of the Nelson River on Hudson's Bay to Kensington, Minn., is about 1,000 miles. The Albany river route is shorter and much easier to travel. The Hudson's Bay Company's canoemen travelled about 50 or 60 miles a day on it. So that the "14 days" distance spoken of on the Kensington Stone would be a good guess.

"From Wineland of west" says the Kensington stone inscription in runic characters of the 14th century. Mr. Holand suggests this means "from Vinland over the west." The stone was found in Minnesota about 40 miles east of the Red River in the river valley in which Norse axes, a piece of a Norse spearhead and another relic were found. Who placed these Norse relics in the same area as the Kensington stone was found? Surely not a trickster.

Original Article XII

ADDRESS BEFORE EMPIRE CLUB

(By J. W. Curran before the Empire Club, Toronto, November 10, 1938)

This is not a scientific address but a recital of the facts concerning the Norse invasion of Ontario almost 1,000 years ago together with some thoughtful comments by historians concerning the possible location of Vinland.

All the commentators have argued that Vinland was located somewhere from Labrador to Florida. None of them has ever entertained the idea of the Norse Eden having been anywhere else but on the Atlantic seaboard.

So that the idea of it having been located in the interior of America is something new and unheard of, and it will require pretty solid proof to anchor it around the great lakes. But this is not a hopeless task by any means.

Let us consider what evidence there is already at hand in support of a Great Lakes location:

(1)—The Crees of the Moose River area invented the first known American names for the white man. These James Bay Crees knew our earliest European visitors by the name "wamistikose," wooden sailing ship (men). This is the word used today by all Indian tribes at least north of the St. Lawrence and the Great

Lakes. The Moose Crees themselves have today shortened this word to "mistikose." The principal root words are "mistik" (wood); and oose or ose (boat or ship).

- (2)—The Ojibways, Algonquins and Ottawas still retain the original full form of "Wamistikose" (long a) though they spell it "wemistigoche."
- (3)—The Moose Cree name for "oak" is "wemistikose-watik" (wooden ship wood). No oak grows near James Bay.
- (4)—The Swampy Crees of Hudson Bay, north of the Moose Crees, call the white man "akuyasew," from their word "akwayasew" (he comes sailing, he sails to land, he is blown on shore).
- (5)—England is known to the Swampy Crees of Hudson Bay as Ukamuske, (land across the water) and Akuyasewuske (sailors' land). But the Moose Crees of James Bay call it "Wemistikose wuske" (wooden boat land). As Champlain recorded the word "mistigoche" in 1610 it is plain that the word was transferred to the English from the original sailors for whom it was coined. These words also apply to any white man or European country.
- (6)—James Edward Dodd found the armor of a Norseman seven miles from Lake Nipigon in 1930. The armor has been pronounced of 11th century make.
- (7)—In Minnesota there has been found in 1898 "the Kensingtone stone" with a runic inscription telling of a Norse encounter in 1362 with natives. In the state have also been found four Norse axes of the 14th century (1300-1400) and a Norse fire steel.
 - (8)—In Wisconsin has been found a Norse spearhead

of the 14th century. The area of the finds in the two states was 360 miles long.

(9)—At Gros Cap in Ontario, on the shore of Lake Superior, 12 miles from the Soo, there was found on August 10, 1938, a Norse spearhead possibly older than the Wisconsin spear.

As against these tangible evidences of Norse occupation in the Great Lakes area, there has not yet been reported a single genuine Norse indication of any kind on the Atlantic coast.

"Tomahawk" is a corruption of the Cree word, OTAMUWHUK (I strike him). (Faries' Dictionary.)

It would be of interest to know how a Cree word came to be used as the whiteman's historical name for an Indian war axe.

As to the contention of all the experts that Vinland was on the Atlantic coast, they have overlooked the Sagas' statement that the first Norsemen sailed south west from Greenland to Vinland. James Bay is south west of Greenland and Newfoundland is south. Likewise to get back from Vinland the Sagas say the direction was "north east." Again James Bay is in the right location and Newfoundland, and Nova Scotia are not.

The Encyclopaedia Britannica thinks it "strange" that navigators following Leif to Vinland could always find his "hut" without trouble. It is more than strange if it were located on the Atlantic coast, unless they coasted close to the shores all the way from Greenland for the 2,000 miles to the most southern area favored by the experts. But if we locate Leif's house at the mouth of the Moose River it would be easy. All it was

neccessary in that case to tell a new ship captain was to keep on till he reached the bottom of James Bay and then turn west till he came to the mouth of the Moose which he couldn't miss. He would find the hut on the low shore there. No sailer could mistake the Saga's description of the low shore, "the trees are back a long way from the water." Stand on the shore there today and when the tide goes out, "you can hardly see the water," a recent writer says in "Fishing & Hunting in Canada" magazine. The ebb tide leaves a bare shore a mile or more wide.

The "skin boats" seen by Karlsefne were of course, Eskimo kyacks. That is to say these were seen on James Bay which the Eskimos have frequented as visitors as long as the white man has known them. The Moose Cree Indians expelled them and the memories of the old hostilities still are green at Moose Factory. Sam Chappice, of Moose Factory, told me: "The Iroquois used to come up and kill us, and then we would go north and kill the Eskimos."

The "skin boats" must have been Eskimo "kyacks." There is no record of the Indians of Canada using anything but bark canoes, and canoes hollowed out of logs.

All of the writers on Vinland who discuss the "self sown wheat" reported to be found by Leif Ericsson in 1000 and Karlsefne later have overlooked the fact that no wheat grew in North America till a Negro in Cortez' army in Mexico accidentally brought in a little in a jar of rice in 1519, or 519 years after Leif's arrival in Vinland. Therefore it wasn't wheat which the Norsemen found but something else.

"Self sown wheat" was undoubtedly just the "blue joint" prairie grass which resembles wheat till it matures. It grows luxuriantly in Manitoba and Minnesota. The buffalo lived on it. There was no "wheat" of any kind on the Atlantic coast before the 16th century, so that the Norsemen could hardly have seen it there,—if they visited that coast. Neither were there ever any Buffalo except on the western plains. Thus the Norse visitors must have been out west and probably the reason Knutson went west in 1362 was because his Cree friends had told him where the lost Greenland colony might be found,—in the Red River valley with its grapes and self sown wheat. So that the Kensington stone and the old Norse axes and spear and fire steel were all naturally found in that area.

Consider the Great Lakes region and all the problems of the location of Vinland pretty well vanish. Stick to the Atlantic coast and nothing fits.

Perhaps the evidence seems to favor the Hayes or Albany Rivers more than the Moose, as the original landfall in James Bay.

Thus the sagas make it pretty clear that Vinland extended from an area inhabited by Eskimos (Hudson and James Bays) to a land where cattle were able to feed all winter in the open, (the prairies).

As to "vimber," Fernald, Harvard's chemistry professor, as authority in Encyclopaedia Britannica, 11th edition, says it wasn't grapes but "mountain cranberry."

The mention of "grapes" in the Sagas had puzzled all commentators. But we have only to consult the Encyclopaedia Britannica, 11th Edition (Vol. 17, page 584) to read that grapes are indigenous to Manitoba (and

Minnesota?) So we may dismiss the statement of many authorities that grapes grow only up to latitude 45. The southern boundary of Manitoba is 49 degrees. Note that the narrows of Lake Manitoba was "a sacred place" to the Crees. Therefore these Indians who lived also on the north shore of Lake Superior and out to James and Hudson's Bays knew all about Manitoba and Minnesota with their grapes, their buffalo and the prairie grass on which they lived. We can dismiss cranberries and all the other guesses about the grape supply.

The commentators will have it that only grapes grown on the Atlantic coast will fit into the Saga records. But wild grapes also grow in Ontario up into Muskoka at least.

King Olaf's Saga speaks of Leif Ericsson's party: "They did not want for salmon; both in the river and in the lake; and they thought the salmon larger than they had ever seen before." The Hudson's Bay Company's officers speak of the excellence of the salmon in the 17th century; and the Ontario government's handbooks in recent years also bear testimony to the fine salmon fishing in the Moose area.

The old Vinland of the Norsemen possibly extended over the Great Lakes region of America. With what evidence is now available, there can remain no reasonable doubt that the colonists of Greenland navigated the Great Lakes long before Columbus discovered America. Vinland seems to have extended at least as far as Manitoba and Minnesota on the west, the shore of Lake Huron on the south, the Ottawa River on the east and as far north as the Albany River. Actual finds

of Norse relics have not been made on all these boundaries, but the inference from what facts are now known can lead to only one conclusion,—that the first white man in America roamed pretty much over the territory indicated.

The best results in a case of this kind must come from a personal inspection of areas which are possible locations. The old records of the early exploration of North America are often made intelligible to the reader by a personal trip over the ground described. Champlain, for instance, said of the French River in 1615 that there weren't more than ten arpents of good land on that stream. Think of a river say 60 miles long with practically no land on its banks. But the canoeman who takes the trouble to paddle down its banks discovers to his surprise that the old chronicler was right. The only land worth considering on the river is now used as a golf course at the C.P.R.'s bungalow camp.

People have puzzled over many things in the Sagas, which commentators have made even more foggy. Take the word "massur," which till recently was translated as "maple." Now it is held to be "birch," so that when Leif Ericcson got half a gold crown from a Saxonland man for the piece he had brought from America and is supposed to have been using to bar his door in Norway he got a good price for a piece of wood which grows up to James Bay in great quantities.

The Norse armor found by J. E. Dodd near Beardmore in 1930 was definitely of 11th century (1000-1100) make, say scholars. Prof. Petersen of Trondheim, dates it in the 9th or 10th century. Poul Knutson's ex-

pedition to Minnesota did not take place till about 1350.

Norsemen landed in Ontario in the 11th century,—apparently their first visit was about 986. Poul Knutson's exploration party was in Minnesota in 1362.

The French founded Quebec in 1608,—330 years ago.

Thus up to the time that Knutson landed on the shore of James (or Hudson) Bay, (360 years), the Norse had been in touch with Ontario longer ago than the French have had settlements on the St. Lawrence.

Is it reasonable to suppose that the Norsemen would show less enterprise in exploration than the French? The Norsemen's history is that they were bold explorers and navigators.

So that it is hardly conceivable that these hardy souls had not explored the great lake region in their first hundred years in Vinland.

It would be surprising if there were not evidences found of Norse travel in the great lakes region, and I suggest that we may look forward with confidence to turning up Norse axes, spears and equipment especially on the shores of Lake Superior and Lake Huron, both of which are within easy reach of James Bay waters. Perhaps we may even run across vestiges of stone or wooden buildings.

There were several favorite routes south from James Bay up till the railroad era. The Ottawa, the Sturgeon into Lake Nipissing, and the Spanish into Lake Huron were all in use for ages. Then to travel west from James Bay, the Albany was the easiest northern route to Lake Nipigon, Lake Superior and Lake Winnipeg. Farther south, from Lake Superior, the Michipicoten

and Missinabi and Moose have been in use to get to Moose Factory almost till yesterday.

So that if we see the picture as it existed up till recently for transportation to and from James Bay, we are entitled with reason to expect to get additional evidence of the Norse occupation of Ontario. There is nothing improbable in all this. It would be surprising if it were not so. The finding of more Norse relics is next to inevitable.

Radisson in 1662 (?) speaks of seeing an old house "all demolished" at James Bay (?) on his first visit there: He had been told of the better beaver there on the south shore of Lake Superior. When he came to start the Hudson's Bay Co. he erected a fort a Rupert's River at the south end of James Bay. "They tell us particularities of the Europeans," he wrote. I do not know who put up the building.

These historical jokers are queer people. See how much trouble they go to just to fool people. They took the trouble to plant nine Norse relics hundreds of miles apart, and did it so deftly that it was by the merest chance anybody ever discovered any one of them. Some of us have been fooled by these curious planters of relics.

Take the "assistant keeper in the Department of British and Mediaeval Antiquities at the British Museum," who must be a pretty good judge of relics. He says the "Kensington Stone" is a forgery. If it is then the man who did it probably planted the four Norse axes and the Norse fire steel in Minnesota also, and for good measure slipped a Norse spear into the ground in Wisconsin. This energetic fooler spread his fakes over 360 miles of bush, plain and river,—the man was a terror for careful, complete and tedious fooling. He did all this before there were airplanes, or motor cars, or even roads!

And in addition to all his manual labor and leg work he arranged it so a tree grew on top of one relic to clasp it in its roots, and shoved others so deep in the ground that it was unreasonable to expect you or me to ever find them. That is to say he must surely have planted a tree so long ago that he knew he wouldn't be here to hear of you and me finding the thing, and beginning an argument about it. Most jokers like to hide around the corner and enjoy the outcome of their joking. But not the Norse relic man. All he wanted to do was just his duty,—plant her and run.

Well the Norse relic joker didn't stop with Minnesota and Wisconsin. He came over to Ontario and fixed it so a great sandstone rock 100 feet high on Lake Superior would gradually crumble and hide a Norse spear in its rubble,—a planting that was so badly arranged that the spear was resting on a rock ledge a foot below the surface, where it couldn't go down any farther and hide itself. All a boy had to do on Aug. 10, was to lift a stone off the rubbled shore and there was the tiny point of the spear looking at him. The joker, you see hadn't arranged things right as the spot he chose was a little around the point of rock where Superior's waves couldn't get in their full force, 'and so the spear wasn't given a fair chance to sink down out of

sight. The waves on the shore wouldn't allow debris to hide it deeper.

Mr. Dodd's Norseman at Lake Nipigon may have been the joker. If so he first planted his armor of the 11th century right in front of a white quartz vein running up in a 12-foot dike of dark rock and then to completely fool everybody the joker must have crawled into the hole beside his axe and shield and died. The, only thing you and I can't explain is just how the joker's grave was filled in after he died. There must be an explanation if we could only think of it.

But there was one feature of this Norse business the joker overlooked. He forgot to arrange with the Crees not to invent the first American name for the white man. These fellows who arrange to fool people usually overlook a detail that shows them up. "Wemistikose" gave the joker away.

A joke is like a crime,—you can't plan it too carefully.

Original Article XIII

NORSEMEN FIND MISSISSIPPI RIVER

(Sault Star, November 25, 1938)

THERE CAN HARDLY be a doubt that the Norsemen were the first white men to cross the Mississippi River. Relics of their presence in Minnesota have been found on both sides of the Father of Waters. On the Minnesota side at Thief River Falls, Kensington, Erdhal, Brandon and Norway Lake. On the Wisconsin side at Whitehall.

It may be argued of course that all these relics may have been taken by the Indians from the Knutson party in 1362 when ten of its men were killed as recorded on the Kensington Stone, now generally accepted by experts as genuine.

All of the accumulating evidence tends to bolster up the old sagas if a James Bay entrance to Vinland is accepted. In 1708 John Oldmixon wrote the first account of the happenings in the James Bay headquarters of the first Hudson's Bay Company's post there,—Rupert's House. Note that John wrote only 38 years after the company had established this post. He relates that there had been placed at his disposal all the records of the company kept by a Mr. Gorst at Rupert's House at the direction of his superior officer, the factor. Mr. Oldmixon states that most of the entries were too

trivial for him to use in his story, and lets the reader understand that he had been at much pains to retrieve a few facts really worth anybody's attention. But John does set down a thing or two that bear on the theory that Vinland was somewhere in that northern area.

The old saga of King Olaf is quite explicit in recording that the first Norsemen one day happened to see three skin boats on the shore, and that each of these boats concealed three men. The Norsemen for some reason or other killed eight of these,-probably the old hostility between the Eskimos and themselves in the old Greenland home was the cause of the killing. The Indians did not seem to have been around at this time, and James Bay was apparently in possession of the Eskimos. The sagas, at least, do not mention that there were other natives in the vicinity of the Norse camp. The commentators have suggested that the "skin" canoes were really made of birchbark. Eskimos did not use birchbark canoes for the very good reason that an Eskimo fishing vessel can not very well be made of it. The Eskimo technique demands a vessel which will allow the occupant to upset and right himself without trouble. So far as is known this vessel is made of skins today as it apparently alwavs has been.

Oldmixon here comes along to tell us the interesting fact that Mr. Gorst recorded that it was against the Eskimos that the Hudson Bay Company's men had to raise defences. No mention is made at first of barricades against the Indians, and that there were a few Indians at least not far away,—the "Cuscudidahs" John calls them,—because Rupert House had some

little trading with this wretched people. These may have been the Crees as we call them, and it may be hazarded that if they were they then bore a name probably derived from the black duck of the region which the Crees now call "Mukutasip." "Kenishtinaw," our formal name for the Crees today is "a kind of wild duck" and it is from this we evolve the word Cree, set down first by the French as "Kilistones." As the letter "L" is only used at Moose Factory, the French version is allowable.

Thus we first have, about 1000 A.D., men killed under skin boats and in 1670-1710 the fact that the only troublesome people in James Bay were the Eskimos, still using skin boats, (kyacks). It was not till the Hudson's Bay Company established trading posts in Hudson's and James Bays that the Creés moved in any number from their usual residence around the northern shores of Lake Superior. With the arrival of the Crees, the Eskimos were driven north and there are tales told today of the former hostility of the two races. The 100 miles or so of muskeg between James Bay and the Lake Superior region was a barrier between the two till Hudson's Bay Company days. Thus it would appear that the Eskimo held James Bay in 1670 as they had in 1000 A.D. In passing it may be noted that there is no record of a skin boat ever having been used on the Atlantic coast,—at least the writer has never run across it.

Original Article IVX

DID EUROPE JUST "FORGET" VINLAND?

(Sault Star, December 12, 1938)

By What STRANGE circumstance was Europe's extensive knowledge of Vinland in the middle ages practically lost to the world?

How was it that the long list of its old records and references have only lately been rescued from oblivion and presented again to a world that for centuries actually doubted that Vinland ever existed?

In all the strange story of the old Norse eden, perhaps the most mystifying part concerns the fact that mankind had given up a belief in it and that it has been left to recent times for archaeologists and plodding research men to partly disinter the story of its discovery and its history and present these to a world that is yet only half convinced. For hundreds of years, —such is the fact,—Vinland disappeared almost as if it had been swallowed up by the sea, till men actually wrote that its story must have been just a version of Plato's fabled Atlantis or was founded on the Fortunate Isles of the ancient dreamers.

What mysterious cause blotted out Vinland from men's minds, leaving only vague wisps of tradition that in recent generations have been theorized about and debated endlessly. Not even Nansen, the most distinguished son of modern Norway, thought the old sagas were anything but fables, and Norlund, the Danish recoverer of Greenland's Norse ruins, warns us now to put little faith in these essentially true tales. Still in groping in the dark patient plodders have rescued a thrilling human chapter that bids fair to become as fixed a fact as anything from the past can become.

Napoleon said that history was a lie agreed upon. The story of Vinland, as we perhaps know it now, almost justifies the view of the man who almost conquered the world. For the modern world has come to suspect that Vinland was lost sight of as much because it was convenient for the world politicians of the time to forget it, as through the lapse of time.

Historians of the future will puzzle over the fact that from the 16th century till the 19th the world had apparently forgotten the numerous records and references that had been made concerning the discovery of the continent hundreds of years before Columbus landed on Watling Island in the Bahamas.

Not alone Norwegian, but old German, English, Portugese, Italian and other writers referred to the land "at the end of the world" as the Pope wrote it in 1492. Probably no fact in mediaeval history is better authenticated than the discovery and settlement of Greenland in 982 (and to a lesser extent) Vinland around the year 1000.

Adam of Bremen introduced Greenland and the mainland of North America to the learned world through the Historia Hammaburgensis Ecclesiae about 1070, and charts appeared about 1424 from the hand

of a Dane working in Italy named Claudius Clausson Swart. These maps were only found in 1834.

Today you can see in Poul Norlund's book "Viking Settlers in Greenland," a photograph of the west end of Hvalsey Church built in Greenland back in Norse days. Its five foot stone walls are largely intact. Here in 1408 a marriage ceremony took place and the records of it still exist, with the names of some of the persons present as well as of the bride and groom, the officiating clergyman, and details are given of the wedding ceremony. Few weddings probably are documented so well. The young couple, (the girl's name was Sigrid Bjarnidaughter) sailed away from Greenland in 1410 and that was the last time Icelanders visited Greenland's Norse settlement. Here the record of the colony ends in silence.

So the fugitive references to Greenland run throughout the years its Norsemen lived.

But it would be tedious to print the many references and authorities Vilhjalmur Stefansson lists in his introduction to the "Voyages of Martin Frobisher," recently printed. He piles proof on proof of the fact that Europe knew Greenland (and the continent of America) in pre-Columbian days.

And yet the old pretence has been kept up almost till yesterday that the first the world heard of America was in 1492.

Regarding the curious silence that descended on Europe about America, it is now suggested that this was partly from a political cause.

When Columbus found America he created an international difficulty. "In 1454 Pope Nicholas V had given

the Portugese the exclusive right of exploration and conquest on the road to the Indies," (Encyclopaedia Britannica). In 1493 Spain applied to Pope Alexander VI, a Spaniard, for confirmation of the rights Columbus had won for them. He thought he had reached India. The Pope fixed a line 100 leagues west of the Cape Verde Islands, and Portugal protested. At a conference in 1494 "the line" was fixed at 370 leagues west or about the 50th degree of longitude which left to Portugal the eastern part of Brazil. At that time the existence of North America was not known.

Portugese efforts to reach the Indies by sailing around Africa for a generation or two before Columbus crossed the Atlantic made America's discovery inevitable. "The Cambridge Modern History," planned by a Cambridge university group, has this to say in its review of the state of geographical knowledge in Europe before Columbus sailed: "Greenland was known, and in northern and western Europe the discovery of Vinland by Norse adventurers 500 years previously was still a familiar tradition." Bristol merchants and "pirates" had sent ships to Greenland for generations. Men had talked of the "New Isle," "New Land" and "Vinland" for long. Many had tried to find these and it was Columbus' plan of sailing straight west that showed his real greatness, says Payne. Others had zig-zagged all over the Atlantic. England, France and Portugal had rebuffed Columbus' appeals and he at last had turned to Spain.

When the Spaniards having speedily depopulated the West Indies wanted black slaves to develop their American mines and labor on their American plantations, the Portugese, whose portion of the Atlantic included Africa, turned a deaf ear to Spanish requests for these which indicates that Portugal was not exactly satisfied over the "line" division. And thus it was that the French and English and Dutch went into the slave trade to supply Spanish America. And that is how it is that the West Indies are all but black and the Caribbean sea washes South American nations whose populations have a large dash of Negro blood. Jamaica, the British Island, is 98 per cent. colored, and the people of Haiti, San Domingo, Dominica, Martinique and so on are practically all of African descent.

Why didn't Norway dispute the Latin claims to America? Because by the fourteenth century the Norsemen were in eclipse, and their trade practically taken over by the Hanseatic league. Bristol merchants, British "pirates" and the bold of other nations. The British were so slow in getting an American foothold that it wasn't till 1620 the Mayflower landed at Plymouth Rock, with the first notable English settlement. Cortes had conquered Mexico a century before. Henry IV, of France, had only made a timid move towards Canada about 1600. It was the collapse of the Norsemen about 1300 which changed the whole world picture.

And why was it that the Pontiff was chosen as arbiter to divide the world when Columbus enlarged it? Because the Vatican, in the troubled and disorganized state of Europe, had a prestige and spiritual domination which made it the natural arbiter. Spain was the leading military power and won the Vatican's good will by a refusal to join a hostile combination against

the Holy See. Spain claimed to be the first discoverer of America, and no nation was willing to enter the lists as actively disputing this. In the interests of Spain there was, it is now claimed, a tacit agreement to forget old stories of previous discovery, and these in time faded from man's memory. Probably they would never have been revived if there had not been a dozen indications found in recent years of the Norse penetration of the interior of this continent. So that the finding of Norse relics in Ontario, Minnesota and Wisconsin, and the discovery that a small Indian tribe at Moose Factory had invented the first American name for the white man have been responsible for disinterring a story of gallant effort buried for many centuries.

And may we not guess that men's intimate know-ledge of Vinland, so apparent from the Sagas, was conveniently, efficiently forgotten also when Spain's claims were recognized as American suzerain some centuries ago? It wasn't till 1588 or a century later, that Drake quit his game of bowls at Plymouth Hoe to smash the "invincible" Spanish armada to end Spain's domination of the world. And that was curious too, because up till about 40 years before England and Spain had been on very friendly terms.

Perhaps future historians may even justify Stephen Leacock's championship of La Hontan's derided story of his voyage up the "Long River." The theory of James Bay having been the entrance to Vinland may tend to release men's minds from a shackled past in regard to the pre-Columbian history of America. The venturesome Norsemen may have even reached the Gulf of Mexico and the Pacific Ocean. Nansen hints his belief that the Vatican holds old records that would clear up many obscure points. Stefansson apparently thinks likewise. Perhaps old Norse records still hold their secrets. The growing interest in America in Norse relics is widening our knowledge constantly. Hitherto neglected finds are being investigated.

Original Article XV

FOR 700 YEARS SAGA HAS SHOUTED "INTERIOR"

(Sault Star, December 17, 1938)

FOR NEARLY 700 YEARS the Saga of King Olaf Trygvesson, written by Snorri Thurlason of Iceland about 1225-1241 A.D., has been telling all and sundry that Vinland lay in the interior of America.

The reason Snorri's explicit directions have been ignored has been the obvious fact that probably none of the many writers dealing with the subject had ever visited the Hudson Bay area.

In Nansen's splendid book "In Northern Mists," in which he gropes in the sagas for their meaning in an endeavor to fix the location of the fabled Vinland, he finally comes to the conclusion that the whole story is mostly a myth born of imaginative dreamers. The trouble with Nansen was that he had never penetrated America beyond Greenland. He had never visited Hudson's or James bays, or even the Canadian Arctic. He just pored over the stirring tales written by his Norse forebears and vainly tried to find on his charts some place that would justify him in accepting them as essentially true tales of a mysterious episode in human history. Nansen was proud of his people and we can imagine the disappointment he felt in not being

able to put his feet on solid ground. And so with all the seekers after Vinland who have struggled to solve a problem that has interested mankind for 1,000 years. They all looked at the matter from their studies and vainly tried to work a reasonable solution from well worn pages and charts. They couldn't visualize a location anywhere else but on the Atlantic Coast of America, and some of them indeed managed to torture the old records and modern maps into giving up a narrative which bore some resemblance to a possible solution. But in the end they gave up the job as a disappointing and incomplete one. There was always at last a clash somewhere between the tale told by the sagas and the known physical characteristics of their proposed locations.

Thus it seems all that is necessary to identify Vinland is to first get a personal knowledge of its topography and then to read the Sagas with an open mind, letting the facts lead whither they will.

Preconceived notions are fatal to aspiring seekers. In the search for Vinland it must be considered an extraordinary fact that even when the Kensington stone was found in Minnesota in 1898 students just shrugged their shoulders and said it couldn't be a genuine Norse runic record. And all it was necessary to do to discredit James Edward Dodd's finding of a Norseman's armor near Lake Nipigon in 1930 was for a man to make a joking remark about it and another man to claim that he once had "similar articles." Not a student of Norse history raised his voice in defense of Dodd's story. They doubtless feared to be connect-

ed with a fraud. Half a day's investigation would have relieved them of this fear.

A mild hint in The Star that perhaps Vinland was somewhere in Northern Ontario or the Great Lakes area, and that perhaps the "White Indians" of James Bay might indeed be descendents of the old Viking discoverers of America brought cautionary letters from here and there. And yet the reasonable conclusion from the distribution of the relics was that the old Norsemen had navigated Lake Superior from north to south and had gone farther west than the Mississippi River.

So the old Sagas were closely read and the paper proposed to its readers:

- 1. That some of the White Indians of James Bay probably were the descendents of Norsemen.
- 2. That the Norsemen were the original "wooden boat" men.
- 3. That Northern Ontario and the Great Lakes area was the old Vinland of the Norse sagas.

Here are just a very few things taken from Snorri's references to Vinland, with what seems to the writer as reasonable comment on them as applied to James Bay and the Great Lakes area. You have the privilege of applying them to any other area.

- 1. Leif "came to the land that Biarni had last discovered" (in 986). "No grass to be seen." The directions for sailing must have been clear.
- 2. "Very shallow water in ebb tide." Fits James Bay perfectly.
- 3. "A long way between their ship and the water," when the tide ebbed. Fits James Bay to perfection.

The tide goes out some places between Moose and Albany rivers ten miles, leaving a muddy shore.

- 4. "No frost in winter and the grass was not much withered." Fits in with the cattle feeding out all winter (on the prairies?)
- 5. "The country was flat and overgrown with wood and the strand far around consisted of white sand, and low towards the sea." The west shore of James Bay doesn't rise more than three feet from the water. The whole area is swamp.
- 6. "I found grapes and vines." Grapes are indigenous to Manitoba (Encyclopedia Britannica), and to States to the south of it.
- 7. "Self sown wheat" was likely blue joint prairie grass on which buffaloes lived. There was no wheat in America till the 16th century.
- 8. "Booths put up by Leif" alongside good fishing. Lake Superior, Nipigon and many others in the area are fish famous.
- 9. "Some men should proceed in the long boat westward along the coast." Possibly the north shore of Lake Superior. Thus the Norsemen may have been exploring towards the west in 1006.
 - 10. "Very shallow water." James Bay again.
- 11. "They came back in autumn to Leif's booths." (Had been west on summer exploration?)
- 12. "Upon an island far towards the west they found a cornbarn constructed of wood." The Indians practically lived on corn when the white man arrived. "Far towards the west" is significant.
- 13. "In the spring Thorvald with his merchant ship proceeded eastwards and toward the north along the

land" when sailing to Greenland. That's what he would have to do on Hudson Bay (from Hayes River?)

- 14. "Three skin boats with three men under each boat." Eskimos with their kyacks.
- 15. "An innumerable multitude . . . came in skin boats." The Eskimos controlled James Bay till Hudson's Bay Company days.
- 16. "Aware of Scraelinger being there." The name the Norse had applied to Eskimos in Greenland also.

The nine genuine Norse relics found in Ontario, Minnesota and Wisconsin should never be lost sight of, of course.

Original Article XVI

MISSISSIPPI A CREE WORD

(Sault Star, December 27, 1938)
MISSISSIPPI IS REALLY a Cree word, says
Archdeacon Faries.

In the 13th article it was stated that as Norse relics had been found on both sides of the Mississippi River, the Norsemen had apparently seen that stream. Now comes the suggestion that "Mississippi" is actually a Cree word. It is claimed that its root words label the word as Cree. And if the linguists finally decide that this is the case, does it mean that the Crees held Minnesota and other states south of it before or at the time of the arrivel of the Norsemen in America. Otherwise they could hardly have had their name for the river accepted.

The Indian languages vary to a greater or lesser extent even between bands speaking the same tongue. Bands invent some words of their own. As between the Algonquins and Ojibways the difference seems to be something like that as between a Texas man and a Canadian. Each knows at once the other speaks English, but the intonation differentiates them. The Cree will put an "s" where the Ojibway sees no particular use for it.

The word "Mississippi," leans more toward Cree

than Ojibway. In Ojibway one of the words for big is "meche". But the Cree form of "meche" is "misaw," frequently represented says Faries, by "mise."

Ojibways claim "Michipicoten" as Ojibway because it starts with "meche". They are not sure about Missinabi (big lake) which they suspect is Cree. Mistissini (big stone) is Cree.

It may be worth noting that the Cree dislikes the letter "B" and prefers the sound of "P". Faries' Cree dictionary ignores "B" altogether. Other tribes speaking Algonquin dialects prefer the "B" sound, as in our Ojibway words for water, half, bird, rabbit, the Indian name of the Soo, etc. In Ojibway the word for river is sibi (or seebee) and for lake is nibi (or neebee) so that the linguist has something to go on in contending that "Mississippi" is at least not Ojibway.

What makes the linguist's job more difficult is that the Ojibway at least does not seem to differentiate between the sounds of K and G, T, and D, and sometimes B and P. He seems to be unaware that there is a difference.

The question arises: How is it that the Crees may have given a name to a river in a territory they have not dominated since the 15th century at least?

When we see words like Michipicoten, or Michigama we may guess they are Ojibway. But in Mistasinni, Missinabi, and Mississippi we seem to be justified in suspecting a Cree form. In Cree, misi-cheman is a large boat, micipashkisigun is a cannon, (a large gun), and misisip is a large duck. In the last word "mise" is blended into "sesep," the word for duck.

Thus we have terms truly characteristic of two "languages":

Ojibway: meche-seebee.

Cree: mise-seepee.

Both of these combinations mean the same thing, "big river."

Somebody who can apply scientifically the rules of language building will have to look into this and the other linguistic features that crop out all through the Norse episode.

When the Frenchman first knew the Mississippi it bore its present name. Neither the Crees nor Ojibways occupied territory near it at that time. Did the Crees occupy the area during the Norse period, and did they thus bring back the word to Canada long before the French arrived on the scene to learn that the river bore a name that showed it had been formerly bestowed by a Canadian tribe? Did a northern Ontario tribe then hold Minnesota and was that how Knutson visited that area in 1362?

The Mississippi was originally named and thus of course dominated by a northern tribe. The writer read a statement many years ago that this name was not known to the people of the "lower half" of the river. These claims, if true, must have considerable historical significance, as the Sioux, a non-Algonquin tribe, were in possession of the northern area of the river when the first Frenchman paddled on its waters.

Original Article XVIII

GINNUNGAGAP, THE TERRIBLE ROCK GORGE

(Sault Star, January 5, 1939)

There is an interesting paragraph in Poul Norlund's book "Viking Settlers in Greenland" concerning geographical knowledge in Europe in the middle ages. People were not ignorant of the round shape of the earth. The idea that westward there was continuous ocean was wrecked by the discovery of Greenland and the vague hints about great islands far across the water. The world was getting over the notion that a great ocean encircled the known earth and barred all progress westward. Let us quote Mr. Norlund, of the Danish National Museum, Copenhagen:

"Thus the ring was closed about the Atlantic Ocean, which from being a world encircling sea, became an enormous lake. A new wide perspective was opened up, with tremendous continents beyond the sea. But the old conception of an ocean surrounding the countries lived on; stronger brains were wanted to draw the right conclusions. A new ocean was placed on the far side of Greenland and Vinland. Between these two countries was Ginnungagap, the gate to 'the sea named mare oceanum and encircling the entire earth,' the gap through which the tidal currents are forced in

and out. 'Greenland lies at the end of the world' asserts a papal missive in 1492."

We now suggest that this word Ginnungagap was the earliest word for Hudson strait. The last syllable is our old English word "gap" that comes down to us from the old Norse language direct, and it means "gorge." And gorge in English means a rocky passage, or opening.

"Mare oceanum" are two Latin words. "Mare" is "sea." "Oceanum" is from the Greek "okeanos" (ocean),—in Homer, the great river which is supposed to encompass the earth. The use of the two words in combination in medieval times had a reference to the old belief that water surrounded the earth west of Europe. The Norsemen's discoverey of Greenland and Vinland tended thus to shatter a long held tradition.

Webster's dictionary defines "gap" as from Old Norse meaning "a mountain pass, cleft or ravine, an opening in anything made by breaking or parting; breach," and "gorge" as a narrow opening usually with a stream.

From Zoega's Old Icelandic Dictionary:

Gap, (n.,) gap, empty space.

Ginnunga-gap, (n.) the great void, primeval chaos; -himinn, the heaven over ginnunga-gap.

The Oxford dictionary defines a gap as a gorge or pass, from an Old Norse word meaning "chasm." A gorge is given as "a narrow passage as a defile," etc.

If historians had allowed themselves to consider the possibility of Vinland not being on the Atlantic coast the paragraph quoted would have been a beacon light to them!

"Ginnungagap" comes from Old Norse mythology. It describes the impassable opening between the world of light and warmth, and of darkness and cold,—a way so difficult and full of terrors that no man was ever able to travel it. The writer is indebted to Mr. Carl Stenbol for his help in getting the meaning. Ginnungagap describes Hudson Strait.

And how applicable the word is to this rocky passage! Four hundred and fifty miles of "violent tides," (Encyclopedia Britannica) enclosed in walls of rock rarely less than 1,000 feet high, through which the second highest tide in America runs, actually reaching a height of $38\frac{1}{2}$ feet, racing "violently," and calling for the greatest skill on the part of masters of sailing ships to avoid disaster. What saved many wrecks there in the old days was the fact that there are no rocks or shoals in the entire passage and the water is 100 fathoms deep.

Thus here it is apparent that the old Norsemen knew of Hudson strait and its dangerous passage to a great sea beyond it, (Hudson's Bay).

And where did they get the information about the awesome passage flanked by gigantic walls of rock with a sea beyond it that appeared to be another ocean? The answer is simple: From the Norse sailors who went to Vinland which lay at the southern end of this inland "ocean."

The Norsemen who knew how to sail through the rocky gorge were real sailors. Even without the rushing tides the high walls on each side of the passage would make sailing dangerous. Sailors hate to get

close to high shores where heavy gusts are sometimes inevitable. Accidents are frequent in such waters.

It has been guessed that Poul Knutson's expedition in 1362 came to Lake Winnipeg via the Nelson River. But this suggestion overlooks some well known facts. For it was the Hayes River that was first used by early voyageurs.

The Hayes River enters Hudson Bay only a few miles south of the four mile-wide mouth of the Nelson, up which the tide runs far. It was on the Hayes, comparatively a narrow river, that practically every trading post was built. It is where the Hudson's Bay Company has always had its forts. The French in their day also built on it. It is true Port Nelson is on the Nelson River, and that Ben Gillman in 1633 camped far enough up its stream to avoid the tides. But the Hayes, in addition to having smoother water at its mouth also had a very good spruce forest convenient to its southern bank. The superior merits of the Hayes have always caused it to be recognized as the site for trading.

The Hudson's Bay Company in early days chose the Hayes as a route to Lake Winnipeg because the nearby Nelson was a more difficult river to navigate as well as being a very much longer route. The Hayes route has a string of lakes in a fairly flat country. Thus it was early recognized as the more convenient. The portage from its waters into Lake Winnipeg was not long, and when Lord Selkirk as head of the Hudson's Bay selected a site in 1817 for a trading post at the head of Lake Winnipeg, "Norway House," he chose the place where the Nelson leaves the lake with the end of the Hayes route close by.

The Knutson party could make quicker time by taking the Hayes river. From its mouth to Norway House is 300 miles as the crow flies, and from Norway House to Kensington in Minnesota where the rune stone relic was found is 550 miles. By the travelled route the distance from the mouth of the Nelson to Kensington was about 1,050 miles. At 75 miles a day (the Norse estimate of a day's journey) it would take exactly 14 days, which is what the inscription on the Kensington stone gave as the time taken by Knutson's party to reach Kensington from "the sea," where their ships lay.

It is interesting to speculate just what Knutson's party did in Minnesota. Ten of his men were killed by somebody at Cormorant Lake (?) some distance north of Kensington. Thus the party kept on travelling south after the fight. The Norsemen had dropped a fire steel near Climax, about 70 miles north of Kensington, and axes in three different locations not far from Kensington. At Whitehall, Wisconsin, say 200 miles southeast of Kensington they lost a spear head. They were then only about 160 miles from Green Bay on Lake Michigan, with convenient river communication to it.

It will be remembered that Thorvald's western exploration expedition in 1002 (?) had found an "island far to the west" on which was a wooden barn for "corn," which may have been the "wild rice" of Green Bay. The name "Indian corn" wasn't invented till the 17th century by the English. It would seem that the "corn" of Thorvald was grain of some kind. At any rate it seems the Norsemen had begun to acquire knowledge of the west 350 years before Knutson came

along. By this time they must have known a good deal about it.

The Norse colonists must have known almost from the first that the battle against nature was a hopeless one. A soil that gave a very scanty return, boisterous seas that made the visit of outside ships a matter of chance, a climate that for ten months was harsh,—how could a colony so situated succeed?

When the King of Norway took over the Greenland trade as a private monopoly in 1261, he may have done it for the reason that foreigners were making all the profits from it. The Hanseatic league's big ships and the Bristol boats were able to carry larger cargoes and thus sell cheaper than the small Norse ships that were rowed as well as sailed. If the King's Norwegian subjects had not been losing the Greenland trade there was no reason why he should step in and forbid all competition. That was in 1261. By 1342 the western colony in desperation at the shortness of food partly caused by the King's own failure to send ships, left for Vinland. In 80 years the Greenlanders had found that the King's ships could not be depended on for supplies.

It is stated that Greenland possessed many cattle. Where did the fodder come from for these? It certainly wasn't all raised in Greenland. There lyme grass (a sand binder,) cranberry, willow twigs and other scanty shrubs of little food value were about all that we hear about. Hay may have been brought in from Norway but it wasn't baled in those days. Its bulk would render transportation difficult. But oats and wheat could have been brought for bags of these could

have been stored under the rowing benches, which took up possibly two thirds of the space in the boats. But by 1300 the Norsemen were finding it very hard to produce anything to barter. They were in those days not very capable traders. So their more enterprising neighbors in Europe absorbed more of their business, the constant internal feuds in Scandinavia contributing in some measure to decay.

Over in Greenland as Norway's neglect was realized people lost heart. The supreme evidence of this was the departure of the entire western colony for America, where for ages there had come stories of a land that grew plentiful food and a great variety of it.

Original Article XIX

NORSE SPEAR ON LAKE ONTARIO

(Sault Star, January 7, 1939)

PROBABLY OVER 900 YEARS AGO, the Norsemen lost a spear at Sodus Bay on the south shore of Lake Ontario, near Rochester, N.Y. It was found in 1929 but not identified till a few days ago.

Thus relics of the first discoverers of America who also widely explored its interior, have been found north, east, south and west of the Great Lakes—thus proving that the Great Lakes area was the actual location of the Vinland of the old Norse sagas.

The fact stands out that ten Norse relics have now been found over 1,000 miles of the Great Lakes area. These cover in age from about the 9th century up till the 14th. Vinland's discovery is set at 986, and the last recorded date concerning the Greenland Viking colony from which Vinland was settled, was 1410.

The Sodus Bay spearhead has for nine years been in the custody of Mr. Saxon B. Gavitt, for 50 years a banker in Lyons, New York, a pleasant town some 40 miles from the city of Rochester.

I had been in correspondence with Mr. Gavitt for some months concerning the relic. He had sent me a drawing of it and its measurements, but could express no opinions as to what the relic was. Immediately on receiving the sketch a couple of weeks ago, I formed the opinion that it was a genuine Norse spearhead. It was nine and a quarter inches long and its badly rusted blade was just over an inch in width.

I called on Mr. Gavitt on Dec. 30. He courteously told all he knew about the find. An upstairs room in his bank has been converted into a local Museum where were shown many objects of interest. I didn't look at anything but the spear, and ventured the opinion to Mr. Gavitt that it would probably turn out to be one of the most interesting historical relics on the continent. Oxidation had proceeded far, and I suggested that two things should be done about it: Electrical treatment to stop the rust ravages, and a spectrographic examination for composition of its iron. I offered to take it to the University of Toronto, where Dr. C. T. Currelly, the curator of its Royal Ontario Museum would have these things done at no cost. Mr. Gavitt at once commissioned me to do so. Needless to say I appreciated greatly the trust he put in a stranger.

In the summer of 1929, a great storm on Lake Ontario destroyed the breakwater on the west side of Point Charles which protected a row of boat houses belonging to the summer residents of the point. Among these residents is Mr. A. L. Hoffman, 141 South Main Street, Newark, N.Y., which is a short distance from Lyons. Mr. Hoffman found it necessary to dig a trench about two and a half feet deep and fill it with timbers and bags of cement before he could build a new boathouse. It was while making this trench that he found the

spearhead. He gave it to his friend Gavitt, for the Lyons Museum.

I called on Mr. Hoffman after seeing the Lyons banker and got from him the details of the finding. Mr. Hoffman, a courtly man, has retired from business. He told the story in detail and drew a sketch of Point Charles and Sodus Bay to help me understand the story.

The boathouse is about 1,000 feet inside Sodus Bay from Lake Ontario.

"To rebuild our boathouse," said Mr. Hoffman, "we first tested the shore from the lake inwards. inside the bay we were able to sink iron test pipes without trouble, but as we approached the lake the ground became harder. On the lake shore the ground seemed like granite. At the place where our boathouse was located, 1,000 feet from the lake, we found it so hard we couldn't sink a pipe. When I began to excavate the hard pan it was so difficult to deal with that I just had to scrape out the trench—the ground was too hard to allow it to be dug. I would say the relic was found possibly a foot below water level and about 20 feet from shore. Nobody else was present when I found it and I attached no importance to it. So far as I know nobody here knows what it is, but it has been guessed to be an Indian tool of some kind."

"The ground was like rock, but still it looks like earth," said Mrs. Hoffman.

Sodus Bay is a famous shelter for sailing craft. Summer visitors find it an attractive resort. It is one of the safest havens on the south shore of Lake Ontario, and its yacht races get much publicity. There is good anchorage and the area is broken by hills. The Point Charles shore protects the east side of the bay.

One curious similarity in the finding of the Norse spear at Gros Cap on the Lake Superior shore, near Sault Ste. Marie, Ontario, and the Sodus Bay spear is that they were both recovered in hard pan rubble. At Point Charles the ground rises to a maximum height of about 20 feet back from the shore.

The present rusted dimensions of the Sodus Bay spearhead are less than in its original state:

Total present length: 91/4 inches.

Length of handle: 2 1/16 inches.

Widest part of blade: 1 1/16 inches.

Width of handle: 7/8 inch.

The relic is but a skeleton of its original size.

The handle is of lapped iron—not tubular. It is so badly rusted that a small hole has been eaten in it and some of its width and length has also been rusted off. The spear conforms in all regards to those reported in Norwegian and other museums.

What is the historical significance of the newly reported fiind?

In the first place it is the tenth genuine Norse relic uncovered around the Great Lakes, with two more under investigation.

Secondly is adds New York State to Minnesota, Wisconsin and Ontario as areas in which relics have been found.

Thirdly, it gives evidence that Norse explorers had gone much farther south than has hitherto been thought likely, and adds Lake Ontario to Lake Superior, in the list of inland seas visited by them. From what is now known it seems reasonably certain that Lakes Huron and Michigan will be included in the list.

Thus the probable area covered by the Norsemen's Vinland may extend south of the Great Lakes, and patient search may turn up Norse indications on rivers flowing into these.

Original Article XX

DID GREENLAND SEND COWS TO VINLAND?

(Sault Star, January 14, 1939)

Supposing you and I were members of one of the early Norse expeditions to Vinland? We thus knew Greenland's shortness of food from harsh experience, its ungrateful soil that gave such meagre returns, its fjords that in some summers were not free of ice and barred us from the sea, its awful winters that lasted for eight or nine months, its summer nights that were barely above freezing point, its rare visits from European ships, its lack of fuel and every human convenience. Then in Vinland we saw billowing forests, plentiful food for man and beast, a gloriously warm climate, "grapes," "self sown wheat." Would we ever want to go back to our cold Greenland home? The answer you and I or anybody else would give is obvious. We would stay and learn the language of Vinland's friendly people and possibly marry one of the attractive native women, just as thousands of white men did later. We would quickly learn all about the vast continent where life was so pleasant and easy, and we would, of course, explore it, as white men did later. There was nothing in Greenland to go back for and Vinland offered us everything.

Visitors to Vinland were astonished at its "self sown

wheat" more than at any other of its miracles. Why was this? Because in Greenland the sandy-peaty soil could not be depended on to grow anything no matter how much labor was given it. If there was any growth, it was in danger of destruction by a cold summer or lack of rain. At the best the return was very poor. So when the Vikings came back from Vinland and reported that cattle feed actually grew of itself without man's labor, we can guess that the story was at first received as a fantastic concoction, a traveller's tale, an impossible thing. Self sown wheat! Greenland probably first heard of it with a shout of laughter, because didn't it know that even with laborious days the ground couldn't be depended on to give even the seed back. These sailors do spin such silly yarns!

Snorri Sturlason, who wrote King Olaf's saga, says that Karlsefne took "all kinds of cattle" with him on his first voyage from Greenland to Vinland,—about 1006 A.D.

Poul Norlund, of the Danish National Museum at Copenhagen, who formerly had charge of the Danish government's archaeological research party in Greenland, and wrote "Viking Settlers in Greenland" in 1936, pays a good deal of attention to the cattle of the Vikings in Greenland and speaks of the "relatively large number of cows that were kept on the large farms." He says these animals were no smaller than those of Europe in the middle ages and estimates their length at two meters (or about 79 inches). He notes that there was a "dwarf breed" at the western settlement only a meter high, or 39.37 inches.

Mr. Norlund, while saying there were many cows in

the Viking colonies, sounds a doubtful note here and there. The matter is of importance as bearing on the Saga's statements about the importation of cattle from Greenland into Vinland.

And why should there be doubt that the Vikings took "all kinds of cattle with them" to Vinland?

For several reasons.

In the first place it seems to the writer that Greenland would have the greatest difficulty in supporting many. In Algoma cows have to be fed in the barn about 200 days in the year, and Greenland had a much shorter summer. Every Algoma cow eats $2\frac{1}{2}$ to 3 tons of hay in winter.

The soil of Greenland is poor,—a sand base with a peat top. Lyme grass, a "sand binder" was its best crop. Some hay was brought in from Norway or Iceland, but the very small Viking ships in which much of the space was taken up by the rowers could bring little loose hay across 1,000 or 2,000 miles of ocean. Goats and sheep could live in Greenland on the moss, the little shurbs and the sparse grass that grew in little patches among the rocks. But on such provender a cow could hardly be worth keeping.

Leif Ericsson (1000) noted that "the country (Vinland) appeared to them of so good a kind that it would not be necessary to gather fodder for the cattle for the winter." The saga does not say he had taken any cattle with him. But Karlsefne is stated to have taken "all kinds of cattle," and a bull is specifically mentioned This was only 30 years after Eric the Red began his Greenland colony, and six years after Leif had first landed in Vinland. When Karlsefne left Vinland after a three years stay, he apparently abandoned the cattle he is stated to have brought there.

The writer has suggested that instead of bringing cattle from Greenland Karlsefne's sixty men (or 160) and five women had domesticated the prairie buffalo in Vinland during their three years' stay. How could the Norsemen have transported in river craft Greenland cattle to the grape country where there was "no frost in winter?" On rafts, you suggest. Not up rapids, nor across lakes. There would have to be new rafts made at every portage. The job would be interminable, and wouldn't repay the immense labor required. Karlsefne may have taken goats, but hardly cows and a bull.

So that we may question that Greenland had cattle to export in the first few years of its settlement. A significant fact is Bardsson's statement that the western colony disappeared in 1341 and left its cattle running at large. The reason these were not taken must have been that it wasn't thought feasible to do so.

If we take up Mr. Norlund's statements our doubts must grow. The cow byres were 13 feet wide on the inside with "great regularity." These contained "two rows" of cows, and to get through these the cow-tender had to zig-zag between the rumps down the gutter in the centre. With only 13 feet between stable walls we may doubt that two rows of six and a half foot cows could be fed from stalls and tended in the space. The annexes to the cow byres are supposed to be hay barns

but Algoma experience with a much shorter winter feeding season would make doubtful that these barns were large enough to supply "cattle," even if their small bones (recovered by archaeologists) indicated small cattle. Of course, if these "cattle" were only goats, the case is more understandable. Goats can eat almost anything and the animals which found something to eat on the hills of rock can't have been cows. The whole pasturage picture favors the idea of goats as the Norsemen's barn animals. They have digestive powers a cow lacks.

It may be argued that cattle were sent to Vinland because it was seen Greenland did not suit them. But the probable explanation is that while there possibly were some cattle in Greenland the tales Snorri retold about them had been changed in the generations of retelling.

If we assume that practically all of the "cattle" were goats or sheep our difficulties pretty well vanish. Goats could forage for probably half of the Greenland winter, so they would need less hay and other imported fodder. They and sheep could eat and thrive on the scrub grass, scanty shrubs, and the moss, which cows couldn't eat. Then the problem of a water supply in the barn would almost vanish, as goats drink little. Mr. Norlund couldn't find any holes for ventilation in the byres. How could cows exist under conditions which crowded them so badly and gave them no opportunity of escaping from unhealthy quarters for months together? In our own pioneer days before there were clearings made to grow hay, cows were removed from barns "on the lift" as the saying was,—that is the starv-

ing animals had to be carried out. Mr. Norlund reveals that this practise was common in Greenland. He further states that the settlers there today would prefer not to raise cows at all.

The Norse byres had stone walls five feet in thickness banked by about nine feet of earth to keep out the intense cold.

Says Mr. Norlund:

"How they have been able to breathe in these closed in byres is a mystery. The only air-hole was a doorway barely 75 centimetres wide (less than $2\frac{1}{2}$ feet) in front of which there was a passage several metres, (meter equals 39.37 inches) in length, so that the cold air could not come straight into the byre. At Brattahlid . . . the entrance passage is seven meters (say 23 feet) in length."

The cow-byres in Greenland were 13 feet wide inside the walls, and Mr. Norlund says the evidence is that two rows of cows stood in them. The cows were some 78 or 79 inches long, say $6\frac{1}{2}$ feet. The stall stones were 40 inches apart. The byres had a gutter down the center. The figures seem to indicate that these byres were for goats and not cattle.

Take a look at the picture. The two rows of 6½ foot cows standing end to end would take up 13 feet. The two mangers of two feet each would take four feet. A gutter would be not less than two feet wide. But Mr. Norlund suggests the cows overlapped, and the attendants zig-zagged behind them.

Imagine the difficulty of milking in such an arrangement. The cows couldn't help being in a filthy condition,—unfit to milk,—even if the milker could squeeze

into a 40 inch stall beside a cow that overlapped another cow. How could the chore of cleaning the stable be done with animals overlapping? How could a normal arrangement which would call for 19 feet as shown above be squeezed into 13 feet?

Then there was no air hole for ventilation. A cow needs four pails of water a day. It exhales about half of this. Thus an unventilated byre would speedily become damp and uninhabitable. A cow would probably not live a month under such conditions, and in Greenland it probably had to stay for eight months. In Algoma seven months is reckoned.

But with goats it would be a different matter. A goat drinks little water, would not take up more than 4½ feet of room and would be able to lie down in a 40 inch stall which a cow could not do. Then it wouldn't need to stay in a stable in winter for more than half of the time a cow would find necessary. Where 28 pounds of hay for the cow had to be provided, the goat would need only a portion of this amount in rough food the cow could not thrive on.

Greenland could hardly have had more than a very few cows. It was a goat and sheep country.

"The winter food has been just sufficient for the very sparsest of starvation diets" according to Mr. Norlund. Eventually even this scanty supply failed, and with this the plight of the people became desperate. It is clear that they simply had to move to Vinland or some other place, or die of starvation, when the ships from Europe stopped coming. A cold summer or a dry one meant death at any time, for then the meagre crops would fail. Most of our immigrants from Europe

came to Canada to better their condition,—the chance to earn enough to buy the food we are used to.

Even with the finding of some bones of small cows in Greenland, and assuming that a little hay was grown there, the difficulty of accepting the statement of the sagas that there were "all kinds of cattle" to export is obvious. Unless much more definite proof is adduced of their presence, there must always be doubts of the colony ever possessing enough to send a number to Vinland.

Of course, your opinion will be as good as anybody's in a matter of this kind.

Original Article XXI

VIKINGS KNEW HUDSON STRAIT AS GINNUNGAGAP

(Sault Star, January 21, 1939)

IF THE VERY FEW extracts in this article out of many available can be accepted as identifying the "Ginnungagap" of the Norsemen with our modern Hudson Strait, then all doubt must vanish that Vinland lay in the interior of America and not on the Atlantic coast. There are many confirmatory details that Vinland was the Great Lakes area available to historical writers. To refer to all of them would prolong this series of articles longer than readers of The Star would be likely to find interesting.

This article is based on these propositions:

- (1)—That the "Outer Ocean" of medieval writers was Hudson Bay.
- (2)—That Ginnungagap was Hudson Strait, through which Vinland was reached.
- (3)—That the "whirlpools and "abysses" of the ocean in medieval records were in the dangerous Hudson Strait, caused by the "violent tides," $38\frac{1}{2}$ feet high, and rock walls seldom less than 1,000 feet high. Through this chasm the water ebbed and flowed "violently."
- (4)—That Adam of Bremen (about 1070 A.D.), Snorri Sturlason (about 1230) and other writers were well aware of the "Outer Ocean" beyond Greenland, and

that it was connected with the Atlantic Ocean by a difficult passage.

- (5)—That the knowledge of this passage must have come from Norse ships having used it, as an entrance to Hudson Bay and Vinland.
- (6)—That today the tides flow swiftly past the rocky islands of Hudson Strait.
 - (7)—From the "Historiae Norvegiae":

"This country (Greenland) was discovered and settled by the Telensians, (Icelanders), and strengthened with the Catholic faith; it forms the end of Europe towards the west, nearly touches the African Isles, where the returning ocean overflows."

The last three words seem to be meaningless unless they apply to the swift "overflow" of Hudson Strait into the Atlantic Ocean. The idea of the land in the west extending towards the Canary Islands persisted till the time of Columbus.

There are innumerable references in Fridtjof Nansen's impressive study of early Norse voyages "In Northern Mists." Only a very few of these are quoted herewith.

Medieval writers were on sound ground,—though they apparently didn't know it,—in vaguely sensing that there was a difficult passage west of Greenland into another great sea or ocean. So the word "Ginnungagap" crept into their gropings,—the word that in Norse mythology described the impassable rocky gorge between the worlds of light and darkness. Somehow the Norse world had learned of Hudson Strait and its rushing tides and high rock walls. There isn't a hint of how the knowledge came. The sagas were written,

—haltingly, meagre of dependable sequence, with a jumble of sailor talk and myths,—and somehow the significance of the essential facts survived the fog of hundreds of years to back up the finding of Vinland relics in the interior of the continent.

So far in this series the Flatey book version of the discovery of America (found on Flatey, an Iceland island) and believed to have been interpolated in Snorri's text has been used as the basis of the story of what happened in Greenland and Vinland so long ago. But Fridtjof Nansen's "In Northern Mists" expresses the view that the unknown writer of "The King's Mirror," (before 1250 A.D.) is by long odds "the most important geographical writer of the medieval north," and he suggests that the whole of his work is based on an earlier record.

Mr. Nansen devotes much attention to "The King's Mirror." We may profitably consider what he extracts from it about Ginnungagap, with the idea of showing that the medieval world knew more about Hudson Strait and Hudson Bay than ever has been realized.

Nansen himself never grasped the significance of what he wrote about the gap. To him the references to the rocky gorge were so much meaningless patter,—the refuse of old tales based on nothing tangible. Instead they may be yet accepted as the outstanding geographical guide to Vinland,—possibly the one thing the Norse sailors were the means of contributing to definite evidence that Vinland was not on the Atlantic coast, but inland.

In the extracts herewith it is Nansen who is speaking and the quotations are from the "King's Mirror."

There is also mention in the Greenland seas of the strange and dangerous "sea fences," which are often spoken about in the sagas. The author does not quite know what to make of this marvel for

"It looks as if all the storms and waves that there are in that sea gather themselves together and become three waves. They fence in the whole sea so that men cannot find a way out, and they are higher than great mountains and like steep summits," etc.

It is probable that the belief in these sea-fences is derived from something that really took place... But it is curious that in the "King's Mirror" these waves are connected with Greenland....

We leave out Nansen's guesses and substitute our own: The reference is to the "violent tides" which "race" within the rock mountains confining Hudson Strait.

The "King's Mirror" says: Greenland lies on the extreme side of the world on the north, and he (the author) does not think there is land outside "Heimskringla," (the circle of the world, orbis terrarum) beyond Greenland, only the great ocean which runs around the world; and it is said by men who are wise that the strait through which the empty ocean flows comes in by Greenland and into the gap between the lands, and thereafter with fjords (bays) and gulfs it divides all countries where it runs into Heimskringla.

That is to say there was a strait near Greenland which connected the Atlantic and the ocean yet farther west, which surrounded the world. Here Hudson Bay is mistaken for another ocean. Nansen says:

"This is, as we see, the same idea as already referred to, that the Outer Ocean runs in through a sound between Greenland and another continent to the south.

The "other continent" is, of course, Labrador, and the "sound" is Hudson Strait.

Discussing the ancient ideas of the earth, Nansen writes:

"... But at the same time one finds, often far on in the Middle Ages, the former conception of empty ocean encircling all, and of the "oecumene," (the habitable world), swimming in it as an island. Occasionally we meet with a vast unknown continent

beyond this ocean, belonging to another world, which no one can reach. Together with these theories, though not very conspicuously, the belief in the immeasurable gulf at the edge of the world also persisted, and this became the Ginnungagap of our forefathers."

Adam of Bremen, the first historian to refer to Vinland, tells of "certain noblemen of Friesland" making a voyage into the unknown western ocean and we may guess that this reference is made to Hudson Strait and its "violent tides":

The stream of the unstable sea there ran back into one of its secret sources, drawing at a fearful speed the unhappy seamen who had already given up hope . . . into that profound chaos (that is said to be the gulf of the abyss), in which it is said that all the back currents of the sea, which seem to abate, are sucked up and vomited forth again which latter is usually called flood tide . . . this backward running stream of the sea caught some of their fellows' ships, but the rest were shot out by the issuing current far beyond the others . . . they saved themselves upon the waves by rowing with all their strength.

This seems to be a description of an actual experience at the Atlantic entrance to Hudson Strait at its narrowest part. The sailors recognized that it was a tide which caused the ships to become unmanageable.

Adam continues:

"... they landed unexpectedly upon an island which was fortified like a town with cliffs all about it."

The familiar high rocky shores of Hudson Strait are here indicated:

Nansen writes:

But the medieval learned idea of the Outer Ocean surrounding the whole disc of earth also asserts itself in the north and appears in Snorri's Heimskringla and in the "King's Mirror," amongst other works. This ocean went outside Greenland, which was connected with Europe, and made the former into a peninsula. In Gripla (only known in a late ms. in Bjorn Jonsson, of Skardsa, first half of the 17th century) we read:

"West of the great ocean from Spain which some call Ginnungagap, and which goes between lands, there is first towards the north Wineland the Good, next to it is called Markland farther north thereafter are the wastes (of Helluland) where Skraelings live, then there are still more wastes to Greenland. Between Wineland and Greenland is Ginnungagap, it proceeds from the sea that is called "mare oceanum," which surrounds the whole world."

To which Nansen adds:

"At least as old as the Norsemen's conception of countries beyond the ocean in the north was probably the idea of the great abyss, "Ginnungagap" which there forms the boundary of the ocean and the world," etc. . . . And G. Storm is certainly right in thinking that it was for this reason that Ginnungagap was located in the passage between Greenland and Wineland; since, no doubt, the idea was that this 'gap' in some way or other was connected with the void Outer Ocean. But this view is first found in the very late copy (17th century) of Gripla, and of the somewhat older map of Gudbrand Torlaksson of 1606, where Ginnungagap is marked as the name of the Strait between Greenland and America. What Ginnungagap really was never seems to have been quite clear . . . but when as here, it is used as the name of a strait through which the Outer Ocean enters, it cannot any longer be an abyss . . . On the other hand, we have seen that ideas of whirlpools in the northern seas appear to have been widely spread in the Middle There is a possibility as already hinted that when in Ivar Bardsson's description of the northwest coast of Greenland, "the many whirlpools that there lie all over the sea," are spoken of, it was thought that here was the boundary of the ocean and the world, and that it was formed by the many whirlpools or abysses in the sea. In that case these cannot be regarded merely as maelstroms like the maskenstrom, but more like the true Ginnungagap.

So Nansen, not knowing about the violent tides and high rocky shores of Hudson Strait, can't get his bearings. If he had only once sailed through the strait he would have recognized the "abyss" of the 38½ foot

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tides rushing in and out of the Outer Ocean (Hudson Bay) and the Atlantic, a ceaseless ebb and flow through a rocky chasm dangerous to sailing ships. Hudson Strait never froze over because of the "violent tides," which caused its waters to rush alternately east and west.

Original Article XXIII

MYSTERY OF THE COPPER TOOLS

(Sault Star, January 30, 1939)

What did the norsemen do for weapons when they lost so many? The answer may lie in the 13½ inch copper spear found by Mr. Earl Alton in 1932 on the old Duncan mining location, near Echo Lake, Ont. He picked it up on an old logging trail there and its partially shown point above ground "looked like a piece of horse strap." But its workmanship seems too good to have been turned out by the rude tools used by the Indians. It has a discernible ridge down the centre of the blade,—which is a feature of Norse The writer asked Mr. Chas. E. Brown, of the Wisconsin State Museum, who has had 35 years' experience in copper artifacts and he replied that the suggestion was new and in his view worth considering. Because so far as is known all Norse weapons were made in Norway, Iceland or Greenland. With the plenitude of Lake Superior native copper, and no iron to use to replace lost weapons it may have been that the excellent spearheads found were really made by the Viking visitors. Or possibly by the Indians from Norse models. Mr. Brown had often wondered at the excellent workmanship on some of the copper relics he has seen.

Mr. Alton's spear blade is long with an unusual shape. The handle and back of the blade (see picture) are in a straight line. The edge starts at two inches wide close to the handle and tapers to a point. And how account for the excellent work on the copper "spud," found near Portlock by Mr. Chas. Grasley, (a "hoe" for use in planting?), which weighs 3¾ pounds, a most unusual size? The spear and "spud" must have been made by experienced workmen, as they are not like the average copper relic found in Algoma, which are very numerous in the Lake Superior copper area. Once French iron arrived about 1670 the copper artifacts fell into disuse.

If the Norsemen in their stay here in Vinland for hundreds of years were driven to use copper spears and tools they had apparently good reason for doing so. Because it is quite clear that from about 1300 they had difficulty in getting anything from Europe. King of Norway had agreed to send his ships regularly to Greenland when Greenland in 1261 gave up its republic and became a part of the Norwegian realm. But it is recorded that the last King's ship, the "Snorren" was lost about 1378 and after that Greenland fared badly for imports. The settlers there did a little blacksmithing but their supplies of iron must have been meagre and they had practically no fuel. even read of whalebone axes being used. What could be more natural than that the Vikings should use the native copper that existed in such quantity on Lake Superior. The Indians, according to the Jesuit missionaries with them, regarded pieces of copper in the 17th century, as something sacred,—household gods

more than anything else. It may indeed be argued that till the white man came along with his tools, the Indians lacked the means of making some of the copper articles now recovered hereabouts.

Thus a possibly new angle of the Norse influx may develop. It can be assumed that the Norse discoverers of our Great Lakes did more than drop spears and axes around them.

The sword never was used by any Indian tribe,—it connotes an open approach to an enemy that is foreign to Indian strategy. The Indian word that we translate "warrior" really means "scout." They always made a stealthy approach from cover or ambush with the bow and club as the principal weapons and an avoidance of personal combat till it seemed propitious. But the Norseman and his sword were never backward about coming to close quarters.

The Norsemen can hardly have failed to use the handy copper they found here for some purposes,—knives, principally perhaps. A critical examination of copper relics in our museums might tell us something about the Norsemen who came from Greenland after iron got so scarce there that they even built ships with wooden "bolts," and the one thing they always took from a wreck was the iron nails in it.

At any rate it may be depended on that the Norse relics around the Great Lakes were not deliberately thrown away. They were lost and doubtless the disappearance of a sword or spear was looked on as a calamity. We may possibly infer that these losses took place at more or less permanent camps, though,

of course, such grievous occurrences might take place even on the shortest stay.

Archaeologists have a job on their hands to figure out all the implications of the Norse stay, the need for more weapons, hunting and fishing equipment, tools for the cultivation of the soil and so on. Perhaps through this we may learn something of what the Vikings did in Vinland, what kind of a life they lived here, where they settled and other things that should throw light on the whole Viking incident.

Original Article XXIV

BRANTFORD BRONZE AXE THE PRIZE PUZZLE

(Sault Star, February 9, 1939)

This is the first article in which correspondents' letters have been made use of. This is my excuse for not noting before an interesting communication from Deputy Minister G. Lanctot of the Public Archives sent on August 16 last, with which he was kind enough to enclose some bibliographical notes on early Norse visits, from the Smithsonian Institution. Among these is:

"Harrington, M.R.,—"A Norse bronze implement from Canada"; Indian notes, Vol. III, No. 4, October, 1926, pp. 288-293. This article describes a bronze axe-head with end socket, and apparently the remains of a loop for attachment. To judge by the description it appears unquestionably to belong to Epoch IV of the European bronze age. The axe was found on the surface of an old Indian site near Brantford. The author considers it was probably brought to America by Norwegian seafarers in pre-Columbian days; this may be the case, but it is possible it was a later import unaccountably lost in this locality. Such an implement would have great bearing on the question of the Norse discovery of America if it could be proved that it had been

buried in a pre-Columbian site. Such proof is lacking and the matter must remain sub-judice."

Indian notes, Vol 4, No. 3, July 1927, pp. 281-283: "In Indian notes October, 1926, the author described a bronze implement from Ontario, and expressed the opinion that it might have been brought by some Scandinavian explorer of the tenth century. European experts, whose comments are quoted, agree that the article is of much earlier date."

The bronze axe could hardly have been brought to Ontario in the tenth century, as it would seem Leif, the Lucky, did not discover Vinland till 1000 A.D. Historians will doubtless be inclined to take more interest in the axe, now that a dozen other Norse relics have been found in the Great Lakes area. May we not be justified in adding this bronze Brantford axe as our 13th Vinland relic? It seems to be highly worth investigating. Who found it, and exactly where?

Mr. George W. Broomfield, the obliging director of the Brantford museum, has forwarded pictures of a bone figure of a man about three inches in length, which he suggests may be an Eskimo carving of a Norseman. It was found near Brantford many years ago. No doubt the Danish National Museum at Copenhagen could give an expert opinion on it.

From a distinguished student comes this:

"From the standpoint of world history one might well ask what was going on in Europe in the tenth century that made it worth while for the Northmen to go so far afield for furs. I think I can throw some light on it.

"From the ninth to the twelfth centuries the Moslem

kingdoms of South-Central Asia were at their height. During this period there was a flourishing trade route from the Baltic and the Scandinavian countries across Russia by the Volga route to the Caspian region and beyond. Moslem coins are still found in Scandinavia and not rarely. An Arab geographer gives this list of articles that passed by this route: 'Fine furs, high fur caps, fish-glue, fish-teeth, amber, tanned horse-hides, honey, hazel-nuts, falcons, swords, armour, maple wood, slaves, and big and small cattle.'

"You note the items with which this list begins: fine furs and high fur caps.

"What brought all this trade to an end was the conquest of Central Asia and European Russia by the Mongols under Genghis Kahn in 1223 following.

"After the revival of trade the Volga route to the Caspian was no longer used. The new trade followed the Dnieper to Constantinople.

"Now, if you take this interval of Moslem domination. 900-1200, roughly, you have the outer dimensions also of the activity of the Northmen in America.

"It seems extremely probable, therefore, that the motive of these voyages was the quest for furs, just as it was with the later Europeans when they tired of the quest of a route to Asia.

"The Baltic countries enjoyed a sort of Golden Age in the early Middle Ages. Moslem coins are found even in England and one Anglo-Saxon king struck a coin of his own on a Moslem pattern. You will note also that this was a one-way traffic, paid in cash, as the coins prove, which is precisely the sort of trade that arouses the most enterprise. This modern barter

system is a makeshift. No one prefers it. It might be added too that it was this trade that brought into existence the commercial cities of Northern Germany."

Above is offered the first explanation of why the Vinland fur region was explored almost as soon as Greenland was discovered.

And it may thus be guessed that the great fur country of Hudson and James Bays was not unknown to the Norsemen even before the "discovery" of Greenland by Eric the Red in 982.

Was this probable knowledge of furs in America the result of Norse voyages to the interior of the continent previous to Eric's time?

It is curious that the Snorri saga refers to fur trading on Karlsefne's first voyage about 1006. The natives had "bundles of furs" to trade. How did these aborigines know Karlsefne wanted these, unless through previous sales to white men?

And was it the sailors who came before Karlsefne who had taken back to Iceland the vague knowledge of Ginnungagap, (Hudson Strait) the terrible rock passage of "violent tides" and "whirlpools" and "abysses" in the sea that led to a supposed ocean (Hudson Bay) beyond the Atlantic?

Mr. W. G. Smith, 318 Court Street, Sault Ste. Marie, Michigan, writes:

"In your Articles of the Norse Sagas and the probable location of Vinland being in the Superior, Manitoba, or Minnesota country, and the finding of the various relics that support that theory, is it not queer that some racial imprint would not be left by those

early colonists? That fact seems to be the crucial point in the final proof of the Vinland story.

"Colonies could disappear by one of four ways: massacre, starvation, disease, or assimilation. Raleigh's lost colony on Roanoke Island must have perished by one of the first three causes. If they had been absorbed, some trace should have remained in the nearby Virginia natives, allowing for the short period of time before the permanent settlement.

"In the Vinland stories, the evidence certainly points to the Hudson Bay passage as the probable route to Vinland, and keeping that theory in mind, it is only reasonable to assume that they would follow the easiest route to the interior, the Hayes river to Lake Winnipeg. There is no richer land on this earth, than the Red River valley and the adjacent lands of Minnesota, or the river bottoms of the Dacotahs. The colonists would travel there, unless prevented by enemies.

"During the time of Verendrye, and of the later explorers, this country was occupied by the Mandan Indians, who were in every way different from the plains tribes. These differences were the cause of much comment by early visitors. Today the Mandans are practically extinct. The smallpox epidemics which swept the plains from 1789 to 1837 almost exterminated them. The few remaining have reverted to the Indian type. In view of a possible early Norse settlement in this country, it would seem to me that these early differences should be further studied. In 1805 Lewis and Clarke found them to be almost a different race, so did Catlin in 1831. Vaughn, Edward Everett Hale, Coutant, Agnes C. Laut, all commented on these pecul-

iar differences, though these writers seemed to be obsessed by the possibility of Spanish influence from Florida or Mexico.

"Bancroft states emphatically that there was no Spanish penetration that far north, but he made no effort to explain the iron tools, lance heads, scrapers, sinkers for fishing lines, nor the circular stone enclosures.

"Lewis and Clarke describe the Mandans as the most civilized tribe they found in their travels, their domestic habits were nearer those of white people. They lived in permanent villages, slept on bedsteads with buffalo robes for mattresses, used pillows and blankets, they cultivated corn, squashes, pumpkins, and that many were remarkable for the whiteness of their skin and the light color of their hair.

"Vaughn writes in a similar vein; he said they received the whites with graceful and dignified hospitality. A stranger in a Mandan village is struck with the different shades of complexion and various shades of hair, and is almost disposed to exclaim 'These are not Indians.' There are many whose complexions are as light as halfbreeds, and among the women particularly, are many whose skins are almost white, with hazel, grey, and blue eyes.

"Catlin, who visited them in 1831, states that they are acquainted with the Mosaic account of the Deluge and have an annual religious ceremony, which is fixed at the date when the willow is in full leaf. He adds, that in the vicinity of every village, there would be some high point where the Indians insisted the "big canoe" landed, and that the twig that the bird brought

home was a willow bough and had full grown leaves on it, and the bird to which they allude is the turtle dove which is not to be harmed or destroyed and even the dogs are taught not to do it injury. One cannot help but wonder where these people learned that story, or who taught it to them.

Coutant, in his history of Wyoming, is positive that Lewis and Clarke. Vaughn and Catlin have shown conclusively that there was white blood in the Mandans, but he was doubtful as to its source, he hesitated to believe it came from the Spanish.

"Agnes C. Laut writes of the Mandans as a people with fair hair and blue eyes, which neither they themselves nor the whites can explain, nor whence they came with their fixed dwellings, agricultural life, with language, habits and physique entirely different from the wandering plains tribes.

"In the Verendrye expedition of 1731 to 1738, his journal speaks of his being told of a fair white people, but when he met the Mandans he did not find them so. Verendrye was interested in exploration and fur trading, he was not a student of races, yet to the present day reader this discrepancy between the early explorer's accounts must be examined. Sometimes two writers will give a different version of the same story. Radisson, in writing of a visit to a certain Company Post, found the Officers of the Post very drunk. The Hudson Bay Journals, in reporting the same visit, found the gentlemen of the post pre-occupied. When Verendrye later met the Swedish Naturalist Kalm in Quebec, he told him that he had found a stone tablet on the Western Plains, and that he had forwarded it to Paris.

Agnes Laut tried to get trace of this stone through the Paris Archives, but was unable to do so.

"Anyone who departs from the orthodox manner of acceptance in various beliefs renders himself or herself liable to criticism and even to ridicule, yet if imagination and conjecture had been denied the human race, we would still be living in the stone age.

Original Article XXVI

EXPERTS DISCUSS THE BRANTFORD AXE

(Sault Star, February 28, 1939)

MR. E. K. BENNETT, assistant to the director of the Museum of the American Indian, Heye Foundation, Broadway at 155th Street, New York, has kindly forwarded full information regarding the bronze implement found on the Iroquois reservation near Brantford, Ontario, which adds to the puzzle of the Vikings in North America. Mr. M. R. Harrington referred to the implement in Vols. three and four of his "Indian Notes" issued in 1926. The two articles are given herewith:

"A Norse Bronze Implement from Canada"

That a curious corroded implement of bronze, now in this Museum, may have come to America in a "dragonship" sailed by Norsemen four or five hundred years before the days of Columbus, is the opinion of Mr. L. H. Kylberg of Stockholm, Sweden, who has made a special study of the subject. At least, he says, the object is of distinctly Scandinavian style, and was made between 600 and 1000 A.D.

This object would have attracted little attention if picked up in Norway or Sweden, but such is not the case. It was found in Canada, near Brantford, Ontario, which makes it at least possible that it formed part of the equipment carried by the Norse discoverers of America.

The specimen is a wedge-shaped tool of bronze, of the kind known to antiquarians as a palstaff, and measures 334 inches in length, with a width of 28/10 inches at the edge of the blade. It is provided with a socket in the base, by means of which it could be fitted to the butt of a pike or a spear, or to one end of a staff. On one side may be seen the remains of a ring or loop for the reception of a cord, the other end of which was doubtless attached to the shaft to prevent loss of the implement should it have worked loose. Along each side may be seen faint ridges left by the mold in which it was cast.

Such an implement, outside of its possibilities as a weapon, would have been useful in chopping ice, in digging, or perhaps in breaking up or splitting firewood.

The story of its finding is a rather unusual one. In the fall of 1907 the writer was making some investigations among the Iroquois tribes on Grand River reserve, near Brantford, Ontario, when he received word that a certain Cayuga Indian known as James Jamieson had died, and that his family wished to sell his Indian costume and ornaments. I visited this family on October 5, and after I had succeeded in buying a number of specimens of ethnological interest, the Indians brought forward a rough box containing flint arrowheads and other ancient stone specimens, asking me if I wished to buy "some real old Indian things" which Jamieson had picked up on the surface of plowed fields in the

Indian reservation along Grand River, presumably on the sites of ancient Indian villages. I looked over the dusty contents of the box and found the bronze implement among the arrowpoints, pottery fragments, and broken stone celts. When I told the family that the object was NOT of Indian origin, they seemed much surprised, and stated that the old man had picked it up with the other things, and they had naturally thought it to be of Indian make. I bought it for seventy-five cents.

The specimen is clearly not of American origin, but is of ancient European—Mr. Kylberg says Scandinavian—make, which leads to the question, How did it get there? How could an ancient European bronze implement of a type that had passed out of use long before the discovery of America by Columbus, find its way to a prehistoric Indian village-site now occupied by cornfields of modern Indians on an Indian reservation in Canada?

Several possibilities present themselves. Perhaps, for example, it was brought over by some white man in modern times and lost on the field where found. This does not seem probable on account of the remoteness of the spot and the rural character of the white people adjoining the reservation. The land has been Iroquois property for more than a century, and it seems most unlikely that a modern white man who would be interested in acquiring such an object should lose it at a remote ancient village-site on a modern Indian reservation.

Or, possibly some Indian trader, noting that the tribes liked copper, may have brought a number of

such objects from Europe to trade with the Indians in the early days of colonization, and it may have fallen into native hands in this way. This is rendered doubtful from the fact that the Indians obtained implements of iron at an early date from the whites, and very soon perceived its superiority to copper implements, and bronze looks very much like copper. For this reason it seems doubtful that the Indians could have taken enough interest in such goods to make it worth the traders' while to import them. Another important point in this connection is the fact that the object seems to have been found on a pre-Colonial village-site occupied by people who still used stone-age implements, presumably before the day of the traders.

Then there is the possibility that the specimen was not found where claimed, but had been given or sold to the old Indian by some white man. This seems very unlikely from the fact that it was regarded as an Indian implement, was kept in a box full of flint arrowheads, potsherds, and fragmentary stone implements, considered of little value, and was sold for a pittance.

Perhaps more plausible than any other explanation is the possibility that some early Norse explorer along the coast may have lost it or traded it to the Indians, and that it was traded in from tribe to tribe until it reached the village on Grand River where it was finally lost by its native owner, to be found again perhaps a thousand years later by the Cayuga, James Jamieson.

M. R. Harrington.

Indian Notes: Vol. III, pp. 288-293

New York; 1926.

"The Age of the Norse Bronze Implement from Canada"

The publication of "A Norse Bronze Implement from Canada" in Indian Notes for October, 1926, has given rise to considerable discussion and some criticism, the gist of which is that the implement in question belongs to a period at least a thousand years earlier than we had supposed, and that consequently its connection with the known Norse visits to America about the Tenth Century becomes very doubtful indeed.

For example, Dr. Gudmund Hatt, of the National Museum in Copenhagen, writes:

"The bronze palstaff (Plate 13) may very well be of Scandinavian origin, as far as can be seen from the picture. It is, however, very much older than 600-1000 A.D. It is decidedly of later Bronze Age type. If you would put B.C. instead of A.D. you might be right. The implement would have been quite as much of a curiosity in Lief Ericksson's day as in our own."

This opinion is supported by Mr. Louis C. G. Clarke, Curator of the University Museum of Archaeology and Ethnology at Cambridge, England, who writes our Director:

"By the bye, I cannot agree with Dr. Kylberg's dating of what Harrington calls a 'palstaff' or what we would call a socketed axe or celt. The palstave is shaped to fit into a split handle. The date 600-1000 A.D. is absolutely ridiculous, as the same type was used here and in Ireland 600 B.C. at least. Without seeing it, it is difficult to say exactly, but it is extraordinarily Irish looking. Could it have been brought to America as waste metal in early days—as old metal pots were sent

to West Africa, and so the campaign in Ashanti produced a number of fine bronze vessels dating from the XIV Century with arms and emblems of Richard II now in the British Museum?"

When two such experienced students of European archaeology agree on a point, it is time for a tyro like myself to retire. It certainly appears as if Mr. Kylberg were mistaken in his dates, or that I misunderstood him.

Mr. Clark also criticizes my use of the word "palstaff," and in this he is technically correct. I had understood this word to cover metal celt-like implements so modified as to fit them for attachment to one end of a staff or pike. But Murray's New English Dictionary derives palstave, also palstaff, from Danish paalstav, Icelandic palstaf-r, from pall, hoe or blue; staf-r, stave or staff, and defines it as "a form of celt of bronze or other metal, shaped so as to fit into a split handle, instead of having a socket into which the handle fits." This definition explicitly rules out our speciment from Canada, which is provided with such a socket.

The fact remains, however, that the bronze socketed celt of European origin was actually obtained by the writer as stated, and the mystery of its presence in the hands of a Cayuga Indian is now even deeper than before, especially since, according to Dr. Hatt, "the implement would have been quite as much of a curiosity in Leif Ericksson's day as ours."

M. R. Harrington.

Indian Notes: Vol. IV, pp. 281-283

New York; 1927.

This extract from T. D. Kendrick's "A History of the Vikings" may bear on the Brantford implement:

"Towards the end of the Bronze Age a few small trifles made of iron appear among the grave-goods in Scandinavia, and it is certain that the use of the new metal was introduced only gradually into the north. No conquering invasion of an iron-using folk demonstrated its advantages to the peoples of Scandinavia, and they were left undisturbed to exploit the new metallurgy. The first period of the Iron Age was therefore a continuation of the Bronze Age . . ."

APPENDIX

BIRDS IN HUDSON STRAIT—(See Plates 11A and 11B)

Mr. J. Dewey Soper, chief federal migratory bird officer for the prairie provinces, has a most interesting article in "The Beaver," the Hudson's Bay Company's paper for June, 1939, on "Bird Life in the Eastern Arctic," which may help to explain references in the sagas. An extract:

"This astounding abundance (of sea birds) may be observed at many points. We may take for example the great colony of Brunnich's Murres at Cape Wolstenholme, near the western entrance to Hudson Strait. Like many species of sea fowl these birds are very gregarious. They feed in the sea and nest on the ledges of high cliffs that overlook the water. The promontory is one of the boldest . . . and upon this gigantic rock face with its narrow ledges the murres congregated closely in tens of thousands to lay their eggs and rear their young . . . one of the most spectacular bird exhibitions in the Canadian Arctic. Other Arctic sea birds which nest in large colonies are species of gulls, terns, Mant's guillemot, and eider ducks. Some of the finest colonies of (Eider) ducks are located on some of the myriads of islands along the south coast of Baffin Island . . . Breeding begins the latter half of June . . . tens and hundreds of thousands . . . but in that section of Smith Sound from Cape Parry to Etah the little dovekie may be conservatively referred to in terms of millions."

BRETON FISHERMEN FOUND NEWFOUNDLAND

It seems almost beyond doubt that in the year 1000 Norsemen from Iceland discovered and visited the shores of Canada, though their landfall has not yet been definitely ascertained. Their attempt at colonization having failed, they departed never to return,

and for centuries the western continent remained enshrouded in distance and mystery. But documentary evidence exists which points to the presence of Breton fishermen in quest of cod on the Grand Banks about the latter part of the fifteenth century. In 1511, when Queen Joanna of Spain planned to send two vessels to the northern land, she expressly stipulated that the pilots should be Bretons who had been there. As early as 1514, the monks of Beaufort in Brittany claimed that the fishermen of Brehat had been paying them, for sixty years, the tithes on fish caught on the coasts of Iceland and Newfoundland. Again a Portuguese portolano, probably of 1514, reproduced by Kuntsmann, already displayed a Canadian coastline with the words "Land which was discovered by the Bretons." In 1565 the Queen of France, Catherine de Medicis, wrote to Forquevaulx, her ambassador in Spain, that the country and coast of the Bretons "had been discovered by French fishermen" over one hundred years ago. But the fishermen, who were not interested in territorial expansion, precious metal, or oriental spices, kept their knowledge and modest profits to themselves, which explains why no individual name has survived or any benefit accrued to the outside world from their many trips. In 1472, twenty years before Columbus' first voyage, took place the expedition, still imperfectly elucidated, of John Scolp, a Dane, the first man from the European mainland to reach Canadian territory in the region of Labrador—an expedition which is the more remarkable as it was undertaken with the idea of finding a short route to the Indies. -Gustave Lanctot in Cambridge History of the British Empire, Vol. VI, "Canada."

NORTHERN VINLAND TODAY

Only yesterday the age-old route from Lake Superior to James Bay by the Michipicoten, Missinabi and Moose Rivers, was used by Indians and voyageurs. And only yesterday the last of the "brigades" floated down the Pugwa and Albany. The glamor of the past is still with northern Vinland,—which is northern Ontario in Canada,—vast stretches of primeval forest, the low swampy lands of James Bay, and great rock areas that have given Canada second place as a gold producer.

The whole territory is pretty much as the Norsemen saw it, most of it yet the land of voyageur, trapper and prospector, who must use its long and lonely rivers. Around Lake Superior the land

rises quickly—an area that must ever remain a wilderness from its broken nature. From Moose Factory to Lake Huron, say 370 miles, a vision of almost untenanted land.

On the south and west of James Bay the land is low with much swamp extending about 100 miles inland. The northernmost portion of Ontario, the district of Patricia, is so difficult of access on this account that it is practically unknown. Going south of the low land the very flat "clay belt" of Ontario is reached. This extends south to the gold mining area, and west to almost the main line of the Canadian Pacific Railway in places.

The writer has travelled down most of the navigable rivers of the north—south of the height of land a never ending panorama of forest, and rock. In Norse days there was nobody to put up a tent without a wrinkle, rush a cup of tea together, or lay a downy bed of spruce among whispering trees. They probably didn't hear marvellous stories of the bush that sound fanciful to the newcomer. But the country must have prepared them for what they later found to the south, because northern Ontario is a paradise in its own right. Its forests extend west to Manitoba and Minnesota. And in this whole area the Indian tribes have had a sort of unspoken alliance. Anybody who passed the Crees of James Bay would travel without harm south as far as Lake Erie and west to the prairies,—that is the record since the white man came in the 17th century at least.

There was a community of interest between all the Algonquin nations north of the St. Lawrence from the Saguenay River to the western plains including the Assiniboines of Sioux stock. The Eskimo, Sioux and Iroquois were their constant enemies. This line up should be kept in mind in reading the Vinland story.

Certainly the Norseman who left his armor at Beardmore was going far afield. He was close to Lake Nipigon, Indian centre, with its unending supply of fish and wild life. Next in importance as a food supply was the rapids of the St. Mary's river,—the Sault rapids,—where 2,000 Indians were living on the famous Soo white-fish back in 1641. As at Nipigon the nations gathered there and everybody was welcome. A Cree boy from the Canadian side of the river called on Father Marquette on the U.S. side in 1669, according to the Jesuit Relations.

THE WESTERN PRAIRIES

The prairies are all west of the Alleghany Mountains. Therefore the Norsemen must have been west of these mountains if an Atlantic coast location for Vinland is to be considered.

THE NORSE CARGOES OF WOOD

Viking ships took wood back from America, and sold it in Greenland, which had only scrub trees, and in Iceland, where "the development of forest trees is insignificant," (Ency. Brit.) The Viking ships were small, and the loads were limited by the necessity of providing about half the boat space for the men at the oars.

What kind of wood was carried? "Massur" is mentioned and Karlsefne, the trader, sold a piece of wood without knowing what kind it was. It might have been birch or tamarac which are "hard," and to Greenlanders all kinds of trees were curiosities. It is tolerably certain the cargoes were of spruce or pine. These soft woods involve much less labor in cutting and skidding, weigh less, are easier to work and last much longer in building than hard wood. Soft woods grow on river banks and hard woods favor hills. Any woodsman would guess the conifers for the above reasons, and for the fact that they can be floated down a river, where hard wood is likely to sink. Karlsefne laid his wood "on a rock to dry," to make it a lighter cargo. Thus it is hardly possible to say now whether the Atlantic coast or James Bay would prove the more convenient source of wood supply for Norse ships.

The commentators translate massur both as "birch" and "maple." No maple grows within hundreds of miles of James Bay and the chief tree there is the poplar. It is stated that the Norse like wood with a "fancy grain" for carving house objects.

SAGAS OF ICELANDIC ORIGIN

The sagas were of Icelandic origin, strictly speaking, between about 1150 and 1250 A.D. The Skalds, as the poets were called, sang for centuries of the life of the people, their wars and their heroes. These had imagination. For instance, the God, Odin, had fifty names,—the God of the Slain, The Prophet, the Adversary of the Wolf, etc. The son of Odin, Thor, was the Wielder of the Hammer, the Slayer of Giants, etc. The sea was the Land of Fishes, Road of the Sea Kings, the Gull's Wake, the Heaving Plain,

etc. Earth, sun, ship and so on, had each its string of fanciful names. Norse literature was outstanding in its day for its good style and restraint and its writers were praised for their accuracy.

DANES AND NORWEGIANS DIFFER

There is an interesting point as bearing on the story of Vinland in the differing views of Danes and Norwegians concerning the collapse of the Greenland colony. Danish opinion runs to the view that the colony died of a lack of suitable food. In Norway however the view is held that this lack was not so very important. It is pointed out by Stefansson that Eskimos have acquired rickets and other food deficiency diseases simply by forsaking the regular Eskimo meat diet for white men's food. Thus it would seem that the Greenland Norsemen either were absorbed into the Eskimo population or emigrated to Vinland. Probably both these causes depopulated the colony.

INDIANS AND CORN

The old records give the impression that the Huron Indians were the northernmost tribe which grew corn in Ontario in the 17th century. The Indians in Algoma were stated to have traded furs to the Hurons for garden produce. The universal Indian notion of agricultural economy was to use a field till its fertility was exhausted and then move the village to another site. A permanent Indian community probably didn't have fertile ground for long. Which discouraged the growing of any garden produce, with a reliance on hunting and fishing. Thus we read of a famine on Manitoulin Island about 1670 because hunting failed that year, and want at the Soo when the whitefish disappeared for a winter. But the Hurons always had maize stored for winter.

Nicholas Perrot, a French officer at Mackinaw towards the end of the 17th century, is quoted in Tailhan's edition as follows:

"The savages known as the Sauteurs (Sault Ste. Marie,) are to the south of Lake Superior and trap beaver and hunt moose. They fish also some excellent fish and gather some Indian corn, but not in such large quantities as the tribes on the shores of Lake Huron, who live on the open lands or prairies."

GREASY FUR BEST

The oldest Hudson Bay records make it clear that it was the personal fur clothing worn by the Eskimos that was valued by the Hudson's Bay Company and other traders. The reason was that these furs were greasy and had lost most of the long hairs from use, leaving the shorter hair only. When the early Norse traders reported the Indians as bringing "bundles of furs" for trading, it may be inferred that the trade in personal clothing had ceased showing perhaps an established exchange that had existed for some time.

BLACK DEATH AND BUBONIC PLAGUE

The "black death" of 1348-50 killed "half" the people of Europe, and "a quarter" of the Icelanders. Was it this plague that stopped ships going to Greenland, and did the western colony there leave because of its ravages? Thorstein and most of his men died, possibly of scurvy, at the western settlement about 1004. The frightfully insanitary crowding in Greenland houses and the proximity of cattle sheds would invite disease.

DISEASE IN THE WEST

More than 100 years ago "influenza" raged among the Indian tribes in western Canada, with large numbers dying. So it is stated in the letters of Hudson's Bay Co.'s factors of the time. Other western diseases have ravaged our Indian population since the coming of the white man. The Norsemen knew nothing of preventive medicine or sanitation.

TYPES OF NORSE AXES—(Plate 16)

Plate 16—Types of axes used in the Viking period. About 900, five of the six types of axes were in use in Britain. The sixth arrived about 1000. Type 1, small woodsman's axe lasted for centuries. Type 2, not recognized as a Viking type in Scandinavia—rather a tool. Type 3, the "bearded" axe, (6th to 11th centuries) comparatively small and light. Type 4, became most popular in 10th century. Type 5, between 850 and 950. Type 3 merged into an enlarged type 4. Type 6, about 1000 type 4 was superseded by this broad graceful type, "which is shown in many scenes on the Bayeux tapestry," the work of William the Conqueror's Queen, depicting the Norman Conquest of England in 1066.—London Museum Catalogue No. 1.

A STORY FROM SPOKANE

This dispatch appeared in the Sault Star on July 7, 1926:

Spokane, Washington, July 7, 1926.—Runic inscriptions, translated by Prof. Oluf Opsjon as telling of a terrific battle between a band of Norsemen and Indians in the year 1010 A.D., have been found almost within the city limits of Spokane. In announcing the discovery, Prof. Opsjon said the great lava rock which bears the inscription marks the burial of 12 Norsemen who were killed in battle.

Prof. Opsjon, widely known as the translator of runic characters appearing in several parts of North America, declares the discovery is the greatest Norse record ever found in the United States.

A band of Norse Vikings, consisting of 24 men and seven women, was following an old trail in travelling from east to west in 1010, Mr. Opsjon explained. They came to a spring beside the trail and camped. The spring was not a large one and the water was drained from it. A party of Indians came along and found the spring empty. They immediately attacked the Norse party in an effort to drive it away. The record left tells that the men of the party put the seven women and the baby on top of a boulder where they could not be reached by the Indians.

Twelve of the Northmen were killed and the others escaped after two men had been captured. Six of the women were taken prisoners, while the woman with the baby in her arms was thrown from the top of the boulder and killed. Later the six survivors returned to the spring, the scene of the battle. There they dug a grave near the rock and buried their dead, who had been stripped of everything they possessed. As to the burial mound, it is plainly visible.

WHERE IS THE SALMON RIVER?

If we could only get a list of the best salmon rivers in Northern Ontario it would help to identify one of the places the early Norsemen noted in this area. That is if the fish has not forsaken its old haunt. The trouble is there are so many of these salmon streams.

NORWAY HOUSE

Norway House is located at the mouth of the Jack River which flows into the Nelson River close to Lake Winnipeg. The house was built in 1812-13, by the Hudson's Bay Company.

ROUTES TO SOUTHERN VINLAND

Assuming that the Vikings used Hudson and James Bays as an entrance to Vinland, how did they travel inland? There are several probable canoe routes. The best would include:

The Hayes River to Lake Winnipeg and the prairies, and thence down the Red River.

The Albany River and its connecting waters provided the H. B. Co. with its most used waterway.

The Moose, Missinabie and Michipicoten provided the old voyageur route to and from Lake Superior.

The Albany, and Kenogami (or the Ogoki) offer a good road to Lake Nipigon, and the Nipigon River from there to Lake Superior.

The Moose, Abitibi and Spanish rivers would be taken to Lake Huron.

All the above routes have been much used in the last century or two.

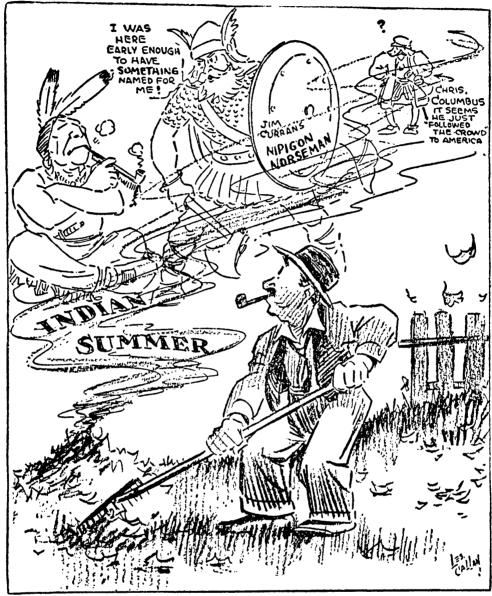
WHITES LIKED BY THE CREES

There can be hardly any doubt but that the first Indians the Norsemen met in America were the Crees. The great bulk of the tribe formerly lived in the Lake Winnipeg area and on the adjoining prairie to the west. From this place to Hudson and James Bay there were small groups. Since Hudson Bay Company days, that is since 1670, the tribe has shifted a little towards Hudson Bay.

Formerly they lived on the banks of the Red River it is recorded, and were the leaders of the Algonquin combination against the Sioux. From the multiplicity of Cree names extending from the western plains into Algoma district and farther east along the height of land in Quebec, the vigor of the race is evident. Lacombe says that the language is the easiest to learn of all Indian tongues and that in the west it is spoken in great purity.

He says that the tribe has always liked the whites and that the old traders and pioneers for this reason chose Cree wives in preference to other Indians. Today the western Metis practically all speak the Cree language, "though they understand the others."

Mackenzie (1789) says of the Cree women: "Of all the nations which I have seen on this continent, the Knisteneaux women are the most comely. Their figure is generally well proportioned, and the regularity of their features would be acknowledged by the more civilized people of Europe. Their complexion has less of that dark



MEBBE WE SHOULD CALL IT "VIKING SUMMER"

The above cartoon was printed in the Toronto Star on Oct. 14, 1938. The reference in the subline is to the mellow autumn season Canada calls "Indian Summer," during which the cartoon appeared.

tinge which is common to those savages who have less cleanly habits." Umfreville says they are more inclined to be lean of body than otherwise.

"Winnipeg" is a pure Cree word meaning dirty (or muddy) water. "Saskatchewan" means swift current or rapid water. The Cree form is Kisiskachewan. The Ojibway tongue derives the word from gawas, and jewan, (rapids or swift water), dialectical forms of the same word.

The town to the north of Lake Winnipeg, "The Pas," Faries derives from Opaskweyaw, "the wooded narrows." Lacombe, on the other hand, says it means a wood on a high ground. Other derivations suggested seem to be unjustified. It may always be accepted that an Indian name describes a local feature.

SWORDS LIKE DODD'S

In the Icelandic Museum at Reykjavik, Iceland, are swords "like Dodd's, and they are dated 1000 A.D."—note from a Norse student.

A LARGE POT FOUND

In 1916 a large "figured" earthenware bowl of good workmanship was found at the mouth of Pudder Creek on Trout Lake, 26 miles from Webbwood, Algoma District, Ontario. The bowl was 14 to 18 inches in diameter and 12 inches deep. It was found under 12 feet of earth on which was the remains of a large pine stump. The finders were men building a dam for log driving.

WHY NORWAY?

"Norumbega" was the earliest map name applied to the east shore of North America. It appears on one map as the name of what apparently was meant to be the Labrador peninsula; on another as designating Nova Scotia, and later all the coast from Cape Breton to Florida. It is said to be based on Norvegia, (the word has several forms), the old name of Norway. But this is disputed and the claim is made it is derived from two Micmac words. On Michael Lok's map, 1582, it is spelled "Norombega."

DRUID (?) MOUNDS IN AMERICA

The puzzle of the "serpent mounds" of Canada and the United States,—earth works in the form of a snake whose open mouth

encloses an "egg," has never been solved. One of these was reported years ago on Big Bay point peninsula, Lake Simcoe, Ontario, with another on the west shore of the lake. Perhaps the discovery in 1937 of an ancient Druid temple seven miles from Glasgow, Scotland, may result in a solution of the mystery. For its serpent and egg are thought to have represented "the life principle." The structure it is stated is 5,000 years old and was built to commemorate a solar eclipse,—the escape of the sun from the powers of darkness. But how would the Druids manage to start their cult in North America thousands of years ago? "Most of the structures (near Glasgow) were in the shape of huge serpents, and evidence was forthcoming that these had been constructed of wickerwork. This recalls the remarks of classical writers as to the use by the ancient Britons of monster wicker baskets of symbolic form." The implements found "include nearly every class of late stone age implement." J. Eric Ferguson, 166 Buchanan Street, Glasgow, the honorary treasurer of the Glasgow Archaeological Society, is the person in charge of the work. Verendrye noted the wickerwork defences of the Mandans.

SAULT STE. MARIE

Sault Ste. Marie, (French for Saint Mary's Rapids). is known to all Canada as simply "The Soo." Its full name is seldom used even by the 25,000 people who live in it at the outlet of Lake Superior. Its canals carry more tonnage than the Suez and Panama combined.

WHAT IS A "DAEGR"

Anton Wilhelm Brogger, Oslo, Norway, isssued his "Vindlands-ferdene," in 1937. In it he is credited with holding the opinion that a "Daegr" is "more apt to be equal to a week than a day." Also that the Kensington stone is not genuine.

SOURIQUOIS AND THEIR COUNTRY

In Eugene Achard's "Les Northmans en Amerique," he quotes Marc Lescarbot, a companion of Champlain, in his "Histoire de la Nouvelle France," (Paris, 1602), as relating a curious incident concerning some "Souriquois" Indians who were entertained by Sieur de Poutrincourt in Nova Scotia. These Indians in thanking

Poutrincourt chanted three times the phrase "afigu gatum etingu." When their host asked them what the phrase meant they replied they did not know exactly, but that their fathers had taught them to use it in expressing thanks. Curiously enough "eta" and "etinn" are old Norse for "toast"—(Zoega, "Old Icelandic dictionary.")

"Now," says Achard, "these three words are Old Norse and mean 'We have had a good dinner.' There are several other words in their language (Souriquois) which resemble Norse and their country even was formerly called Norembega, that is to say Norway."

It would seem that the story is doubtful. If the Souriquois, (the French thus dubbed the Micmacs of Nova Scotia, an unsettled Algonquin tribe), had a name in the European sense for the area they occupied they were singular in this regard among Indian tribes. None of the early writers record this of any others,—not even the Hurons who tilled the soil and lived in permanent com-The tribes were generally but not always identified by their neighbors by names which were suggested by nearby topographical features, rapids, hills, headlands, etc. Sometimes they bore the name of an animal, otter, bear, beaver, etc. And sometimes they thought so well of themselves that they called themselves by their word for "men," Wyandots, Illinois, etc., while their enemies were to them barbarians. The Ojibway name for the Sioux is "Bwan," (incapable). The Hurons knew the powerful Neutrals as people who "speak like us." and the Algonquins of the Ottawa as those who "do not speak like us." The Dakotas were simply the "allies" and the Iroquois "the people of the long house." So we have Assiniboine, (Assinibwan or Stone Sioux), a name of Ojibway or Cree origin accepted by that tribe.

Take the "Algonquins," whose name is a convenient misnomer invented by Champlain. He wrote the word several ways: Algomequis, Algoumequins, Algonmequins, etc. Biard wrote it Algomequi, and finally it was evolved as the word we now use, though the more advanced spell it "Algonkin," in an effort to Anglicise it. No Indian tribe recognizes it, so far as the writer has talked to them. But an Algoma Ojibway will not find fault with this origin:

"Agom," (agawm) to float, plus "uhkey," land, country, earth, etc.

What probably happened when Champlain on the St. Lawrence River met the Morrison Island Indians of the Ottawa River was that he naturally asked them where they came from and they told him that they came from their home by water,—having no name for the area they lived in. Champlain couldn't talk any Indian language, and his attempts to set down words are very faulty if judged from an Ojibway point of view.

"Agomukey is perfectly good Ojibway," the writer is assured, "Any Ojibway will understand it."

As a matter of fact the word as written at first by Champlain, in 1609, and by Biard in 1612, is exactly the Ojibway pronunciation today when the "l" is left out, a letter or sound not used in Ojibway.

Champlain used the word as a general term for Indians of the Ottawa River, as he makes clear. The Moose Cree form would be "Ukawuske," which is their name, says Faries, for England, the land across or on the other side of the water.

IROQUOIS AND "INDIANS"

Some tribes do not get along very well together. The Crees take more easily to white ways. At a northern Indian school, it is remarked that while the Ojibway child seldom gets past the third book, his Cree companion as a rule goes farther and sometimes passes his matric. At an Algoma Indian school, the Iroquois students are not backward about claiming a superiority. Sample remark at the end of a summer vacation by an Iroquois boy: "It's about time for these Indians to get back to school." He referred to the Ojibway boys. The old bitterness between the two people still remains.

BATCHAWANA AND KEWEENAW

"Batchawana" is om (or on)—bwa-jee-wan-ung, a spring or a place where water is in motion, that is bubbling up or "working." The first two syllables are usually written "oba," which conveys the idea of a narrows or constricted area. The reference in "Batchawana" is to the water in motion between the mainland and the island where a wind creates a "current" in the strait. The component parts of the word are "oba," (narrows); "jewan" (fast

water), and "ung," the adverb of locality, (there), which shows it is the specific Ojibway name for the place.

"Keweenaw," or "Keewenaw," is the Ojibway "ki-kee-way-din-aw," a portage over a ridge or hill from water to water. The old French spelling was Kionanconan.

"Nipigon" means "lake there." Its first map form was Aliminipigon. Apparently the first part is a Moose Cree form of the Ojibway word for dog, anim, (Baraga). Thus "Dog Lake." The dog was held in high honor and a distinguished guest knew he was honored when its flesh was served to him. The final syllable shows that the word was used by outsiders, not residents.

THE HAYES RIVER ROUTE

Hayes River is entitled to consideration as Knutson's entrance to Vinland. The route leads through a lot of lakes in a level country, and as an entrance to Lake Winnipeg from Hudson Bay has been used almost exclusively since the coming of the Hudson's Bay Company. Lord Selkirk used it for the company when he built Norway House on the Jack River mouth at the north end of Lake Winnipeg in 1812-13, and it was by this river he brought Norwegians in to build the post.

In the appendix to Simpson's Athabasca Journal, 1820-21, (The Champlain Society), is this:

"The Rock House was a depot on the bank of the Hayes River, a hundred and twenty miles above York Factory. From York to this point the river, though swift, contains no falls or impassable barriers, and fair sized boats can therefore be used without having to unload cargo. At the "Rock," cargo must be unloaded, and both boat and cargo carried over the rocky barrier in the stream. Upstream from the Rock to Norway House, near Lake Winnipeg, there are thirty such carrying places in 265 miles; for this journey it was therefore desirable to use canoes or smaller boats than could be used to advantage below the Rock. Thus the Rock was the rendezvous at which canoes and boats from Athabaska and elsewhere in the interior met the heavier boats from York, discharged their returns and loaded with supplies for the winter. The Depot at the Rock was built partly as a result of Selkirk's desire for a winter road from York Factory to the Red River colony."

GREAT LAKE LEVELS IN THE PAST

The Department of Mines and Resources, Ottawa, was asked for information about levels of the Great Lakes 1000 A.D. Mr. C. E. Cairnes, geologist, kindly wrote:

A great deal of information has, as a matter of fact, been accumulated to indicate the many, successively lower, levels at which these lakes (and the earlier, glacial lakes occupying the same, general basin) stood in the long period, 25,000 or 30,000 years, that has elapsed since the disappearance of the glaciers from this region. Much of this information is contained in Prof. Paper 154A by Frank Leverett, issued by the U.S. Geological It is interesting, in this connection, to note that the general lowering of water level during this period was not a gradual process but occurred as a series of steps or stages. At each stage the lake (or lakes) maintained a nearly fixed level for an appreciable time-some intervals being much longer than othersduring which well-defined beaches were formed. Then, due to the melting of some natural ice-dam, or to land movements, the lake level would be rapidly lowered to the next stage and so on. An interesting picture of the distribution of these raised lake beaches, in the vicinity of Fort William and Port Arthur, is shown on our own Geological Survey May 197A, by Dr. T. L. Tanton, and is referred to in his report, Memoir 167, on that district.

Although the positions of these different beach levels may be recognized, it is a much more difficult matter to date their occupation by lake waters. Some inferences are, however, perhaps permissable from the known facts.

Just prior to the organization of the present system of Great Lakes and their drainage via Niagara River, the region of these lakes was occupied by one glacial lake known as Lake Nipissing. The outflow of this great lake was past the present Lake Nipissing in Ontario and down the Ottawa Valley. The lowest and last beach level at which the glacial lake Nipissing, stood has an elevation, in the vicinity of Port Arthur, of 628 feet above sea-level (vide T. L. Tanton's report, p. 81) or about 47 feet above the present level of Lake Michigan. Warping of the land surface shifted the outlet of Lake Nipissing to Niagara and inaugurated the present drainage system. Since this shift the upper great gorge of Niagara river has been formed, an erosional process which has been estimated to have required 4,000 years. On this

basis we may deduce, with some assurance, that the level of Lake Michigan, about 4,000 years ago, was 47 feet (or thereabouts) higher than it is now. Assuming a fairly steady lowering of level in the last 4,000 years (a not too satisfactory assumption) the level 1,000 years ago would be about 12 feet above present level.

If we consider the problem in the light of observations within historical times we are handicapped by the short period these cover. No doubt you could secure from the city of Chicago or from the State Departments of Illinois or Wisconsin very precise figures on the levels of Lake Michigan in the last hundred years Unfortunately, having obtained the figures, it would still be unsafe to extrapolate from them far back into earlier time, as we could not be sure to what extent there were fluctuations in level (as no doubt there were) to interfere with our calculations. One piece of information afforded by Dr. Tanton was I thought of very considerable interest. This related to the occurrence of certain pictographs along the north shore of Lake Superior near Nipigon. They were painted there by aboriginees on the face of a sheer cliff and presumably within easy reach from a canoe. These pictographs were first described in 1790 by an Englishman, John Long, who stated that the Indians he met knew nothing about them but contended that they were drawn by a former race or tribe. From this it might be assumed that the paintings were actually made 250 or more years ago and yet they occur only a few feet (4'-8') above present lake level. This information, of itself, would imply, at most, only a moderate change in lake level (say 2 to 4 feet) in the last 250 years or about 12 feet, say in 1,000 Curiously enough this figure agrees with that arrived at on a geological basis, as previously outlined.

These figures, however, take no account of oscillations in lake level within historical as well as earlier times. I am enclosing some statistics supplied by Mr. Chas. A. Price of the Precise Water Level Division, in which you will note, for example, that the mean level of Lake Superior for the years 1860-69 (602.42 feet) is almost the same as for the years 1930-38 (602.39 feet). However the maximum range in monthly mean levels over the same total period (1860-1938) is 4.09 feet so it might easily have happened that at the time the aboriginees painted the pictographs at Nipigon the lake level was 2 to 4 feet higher than average due to some seasonal fluctuation and not because it was 250 years ago.

AFFIDAVIT RE GROS CAP SPEAR

CANADA
PROVINCE OF ONTARIO
DISTRICT OF ALGOMA
TO WIT:

IN THE MATTER of a spear found at Gros Cap, Algoma District.

We, ARNOLD PERRI, 17 years old, 718 Shaefer Avenue, and LLOYD COOK, 16 years old, 639 Shaefer Avenue, Sault Ste. Marie, Ontario, make oath and say:

On or about August 10, 1938, we went for a bicycle ride out to Gros Cap, 12 miles from the Soo. We went in for a swim at the north end of the hamlet, just where the rocky head called Gros Cap. at the end of the road, projects into Whitefish Bay. We were a couple of hours in the water swimming, throwing stones and playing. Removing a stone at the edge of the water we both noticed about half an inch of what seemed to be a small piece of iron sticking up out of the small pieces of broken sand stone, rubble, coarse gravel and sand. We noticed this after we had picked up a stone on top of it. Having nothing else to do we began to remove the material holding the iron, which lay at an angle of about 45 degrees in the debris, with the socket farthest down. It took a lot of work to get it out, it was packed in so hard. After 15 or 20 minutes we could loosen it enough to pull it out, but it was quite a hard pull. We cleaned off the heavy rust and took it home to 718 Shaefer Avenue. It appeared to be a broad pointed spear head about thirteen inches long and two and five-eighths inches at its widest point. Next day we took it to the Sault Star Office.

SWORN before me at the City of Sault Ste. Marie, in the District of Algoma, this 6th day of May, 1939.

coma, LLOYD COOK

ARNOLD PERRI

JNO. A. McPHAIL, A Commissioner, etc.

HAVE YOU A RELIC?

I am willing to trade a copy of "Here Was Vinland" for a Norse relic, or possibly for a look at one.—J. W. Curran.

BOOKS CONSULTED AND ACKNOWLEDGMENTS

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of Montreal; the Echo Bay spear, by Mr. Earl Alton, Echo Bay; the Portlock "spud," by Mr. William Grasley, Portlock, Algoma District, Ontario; Moose Factory by the Hudson's Bay Company and Associated Screen News; James Bay beach by the Royal Canadian Air Force.

The photos of Wolstenholme Cliff and the Hudson Strait birds have been loaned by Mrs. Alice MacKay, editor of the Hudson's Bay Company's magazine, *The Beaver*. Thanks are also due to Miss Lorene Squire, whose artistry in these difficult studies is so outstanding.

DAMON AND PYTHIAS

Fletcher Gill, J. E. Dodd's mining partner and pal, has been rather overlooked in the story of the finding of the Beardmore relics. He should be given equal credit. The two men prospected north of the "Norse Dike" in 1928. They found three veins and "striped" the east one. They then decided to blast a hole in the rock under the overburden. This hole filled up with every rain, and it was to avoid continual bailing that the "Dodd" trench was dug in the spring of 1930, Gill furnishing the "grubstake" and expenses, as Dodd was out of work. "I think it was the latter part of May, 1930, he (Dodd) wrote to me and told me about it," (the finding of the relics,) Mr. Gill writes. Dodd has been in the limelight because of keeping the relics at his home. The two men report values of \$6 in gold and \$7.50 in silver at the "Norse" vein.

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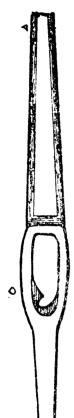
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LATEST "RELICS" REPORTED

THE HAMILTON "AXE"

A, (pick end) broken off; C, worn or broken off; C, D, bent. Length, 13½ inches; blade, 8¾ inches wide; handle flanges, 4½ inches wide. Weight 3 pounds. Malleable iron or steel. Edge dulled by hammering.



On the shore of Lake Ontario at Burlington, was found a 3 pound axe on the site of an old Indian camp some years ago. It is now in the Dundurn Museum, Hamilton, Ontario. It looks like a medieval weapon, but there are doubts about its identity. It isn't of cast iron, as has been said, because a corner of the thin blade and a flange of the socket are bent. Regarded as a "fireman's axe," or a "lodge hatchet." Of narrow width: at haft, % inch; "pick" tapers to half inch; blade, less than half inch at handle and tapers to thin edge. The blacksmithing technique seems to recall F. Gill's "pick" found on Dodd's claim.

"FIRE STEEL"

On Goulais Bay, Lake Superior, has been found this spring, what may be a fire steel, $3\frac{1}{4} \times 2$ inches. The "handle" is of flat iron and one of the badly rusted "points" for striking the flint broke when its rust was being scraped off.

Other finds, besides the above, have been reported, but so far these have not been investigated.

Hamilton "Axe"

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