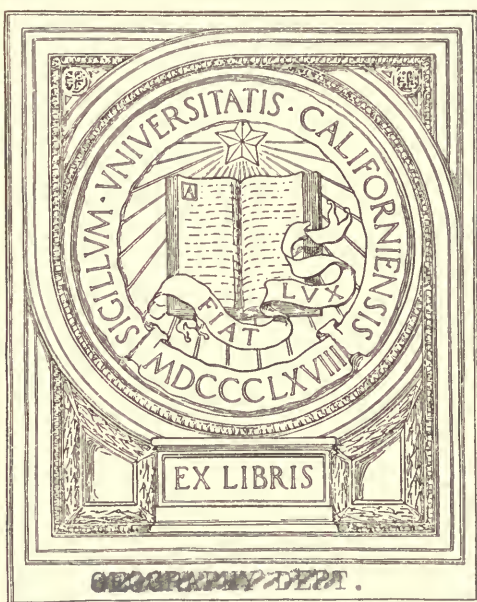


UC-NRLF



B 4 598 456



EX LIBRIS

GEOGRAPHY DEPT.

EARTH
SCIENCES
LIBRARY



SMITHSONIAN MISCELLANEOUS COLLECTIONS

VOLUME 59, NUMBER 19

EARLY NORSE VISITS TO NORTH AMERICA

WITH TEN PLATES

BY

WILLIAM H. BABCOCK

11



(PUBLICATION 2138)

CITY OF WASHINGTON
PUBLISHED BY THE SMITHSONIAN INSTITUTION
1913

E105

B2

~~GEOL.~~ EARTH
~~DEPT.~~ SCIENCES
LIBRARY

10 VINU
111109114

The Lord Baltimore Press
BALTIMORE, MD., U. S. A.

~~GEOGRAPHY DEPT.~~

CONTENTS

	PAGE
1. The New World Prelude.....	I
2. The Old World Prelude.....	7
3. The Mythical Islands of the Atlantic.....	16
4. The Problem of Great Ireland.....	26
5. The Colonization of Greenland.....	30
6. The Voyages of Madoc and the Zeno Brothers.....	35
7. Are There Norse Relics in North America?.....	43
8. Certain Collateral Items of Evidence.....	54
9. The Three Sagas and Their Relative Status.....	64
10. The Most Authentic Wineland History.....	76
11. The Story of the First American Mother.....	81
12. Leif and His Voyages.....	87
13. With Thorfinn and Gudrid to the Bay of Fundy.....	96
14. Their Wineland Voyage Interpreted.....	106
15. The Expedition to Hóp.....	124
16. Concerning the Natives.....	139
17. Review of Dr. Nansen's Conclusions.....	159
18. General Survey.....	169
Notes.....	176
Partial Bibliography.....	179
Index.....	191

ILLUSTRATIONS

PLATES		FACE PAGE
1-2.	Parts of Map of Pizigani Brothers, 1367.....	16
3.	Part of Catalan Map, 1375.....	16
4.	Part of Map of Battista Beccaria, 1435.....	16
5.	Part of Map of Matheus Prunes, 1553.....	22
6.	Map of Sigurdr Stefánsson, 1570.....	62
7-8.	The Gokstad Ship.....	100
9.	Route Map of Thorfinn Karlsefni's Expedition.....	106
10.	Map of Mount Hope Bay.....	136

EARLY NORSE VISITS TO NORTH AMERICA.

BY WILLIAM H. BABCOCK

(WITH TEN PLATES),

In the rather long continued labor of preparing this monograph, the author has had occasion to recognize gratefully the kindly willingness of scientific men and of scholars generally to extend a helping hand. He would especially mention the philological assistance of Mr. Juul Dieserud and his patient oral translation of the writings of Dr. Nansen and others before their appearance in English; the helpful criticism of my manuscript by Prof. Julius E. Olson; the explanation by the late Dr. W J McGee of the observed progressive changes of level along our seaboard by glacial recession and resultant continuing crustal wave action—a theory since corroborated by other authorities—which affords a reasonably trustworthy conception of the American Atlantic coast line and its conditions about the year 1000 A. D., and thus throws new light on the regions and special places intended by the names in the saga; the efficient aid of Mr. James Mooney in Gaelic and Indian problems; and the sympathetic interest of Mr. David Hutcheson who has furnished a copious supply of data on the subject supplemented by some personal field-work near one possible Hóp of the Norsemen.

I.—THE NEW WORLD PRELUDE

Concerning the discovery of America before Columbus, there are many theories, fancies, and claims; but only two visits can be considered historic, namely, those of Leif Ericsson and Thorfinn Karlsefni. The Wineland or Vinland of these explorers has been so greatly misunderstood and has been made the basis of so much elaborate and contradictory explanation during the past three centuries that only the hope of clearing matters a little by patient research would perhaps justify one in adding to its volume. The importance

and permanent interest of the topic really demand the careful application of every available test.

Obviously we must aim to distinguish the true narrative from less reliable accretions and competitors. We must also ascertain as nearly as possible the condition of the American shoreline at the period to which the statements of the sagas apply. These are the prime requirements, and yet whatever else may throw any light on the matter should not be neglected.

A preliminary glance is perhaps needful at what preceded the appearance of the Norsemen in the New World. In a fundamental sense the title "New World" is deserved, for science and the most venerated writings agree in ascribing priority of human life to the other hemisphere, though their reasons differ widely. Most anthropologists believe that man first walked over to America;—from Europe as Dr. Brinton¹ supposed, from Asia as many others have claimed—but in either case the route was at one, if not both, of the far northern corners of the continent. The crossing is indeed occasionally made in winter at the present day on the ice at Bering Straits, as reported to Dr. Dall,² and in summer by boat almost at will. However, no traces have yet been discovered of such passage from Iceland or any other possible stepping stone on the eastern side.³ But even the earliest coming, however remote, must have been rather late in the history of our race, an unarmored, ill-equipped offspring of the tropics, which had a long way to travel by slow degrees. The immigration may have been in a small way and often repeated. Whoever came first to America, however, or whence they came, or when, we have in the present inquiry to deal only with the Eskimo and their southern neighbors. When Europeans finally lifted the Atlantic curtain, the Eskimo were found as far south as the upper end of Newfoundland; they clung to the sea-shore almost everywhere.

Below these Inuit along the coast, and behind their southeastern wing in Labrador, as well as nearly everywhere throughout the temperate parts of the continent, there were other uncivilized men

¹ D. G. Brinton: *The American Race*, (1901), p. 32.

² W. H. Dall: *The Origin of the Inuit*; in *The Tribes of the Extreme Northwest*, p. 97.

³ C. R. Markham: *Origin and Migrations of the Greenland Eskimo*; in *Arctic Papers for Expedition of 1875*, p. 166. See also W. H. Holmes: *Some Problems of the American Race*. *Amer. Anthropol.*, vol. 12, no. 2 (1910), p. 178. Cf. A. Geike: *Fragments of Earth Lore*, p. 263.

in various stages of development, whom we habitually call Indians by misnomer, although "Amerind"¹ has won a place in scientific writing. These, or the dominant racial elements of them, appear to have come into North America from the regions near and behind these natural crossing-places above Japan, where tribes are yet found,² chiefly in mountainous insulated or nearly insulated homes of refuge, so like our wild native people that we should call them Indian without question if bodily shifted here. Whether this eastward human wave preceded, followed, or accompanied the Eskimo; what their reciprocal action and relations may have been until the first known distribution of races and territory was established; and whether the tribes of Saghalien and Kamchatka above referred to were left behind or have forced their way through the Eskimo and across the sea to their present seats,³ are matters debatable which need not concern us here. These Indians could not have been on the ground for a very great number of centuries or the population would have been denser, the linguistic stocks more plentiful. In the immense area between the Arctic Ocean, the Rocky Mountains, the Gulf of Mexico, and the Atlantic there were barely a half dozen principal linguistic families⁴—the Athapaskan, Shoshonean, Algonquian, Siouan, Iroquoian, and Muskogean. These people, however, had undergone varied experiences;⁵ therefore they differed widely here and there: yet they were enough alike to give us the accepted ideal Indian of our coinage. These few vigorous groups have made nearly all of North American history on the Indian side.

The long list of languages in North America, so often insisted on, include some that appear to be but of minor flecks and patches on the western border of our linguistic map, resembling nothing so much as the debris of waves that had struck without force to pass on, and of human fragments in the mountain nooks above the Isthmus. They all have their own abundant interest, but it does not concern our

¹Other substitutes will hardly do. Red Indian, for example, has meant Beothuk specifically. Even American Indian means Passamaquoddy, but not Micmac, on Grand Manan.

²C. H. Hawes: *In the Uttermost East*, p. 35. Cf. Geo. Kennan: *Tent Life in Siberia*, p. 171. Also his *Siberia and the Exile System* vol. 2, p. 400; and *Mythology of the Koryak* (Jochelson). *Amer. Anthrop.* (1904), vol. 6, p. 413.

³A. F. Chamberlain: *Origin of American Aborigines.—Linguistics*. *Amer. Anthrop.* (1912), vol. 14, p. 55.

⁴See map in *Bulletin* 30, pt. 1, Bureau of American Ethnology.

⁵See Notes to Chapter 16.

present inquiry; nor does the much debated problem of the semi-civilizations, extending in a long line from central Mexico to Chile down the uplands of that front of our double continent which looks ever toward the primal Asian centers of human culture.

Excepting at or near its narrowest part, the two sea-shores of North America were as two different worlds. There was never anything even semi-civilized along either of these shores in the Wineland latitudes; nothing much above stark savagery near that portion of the Atlantic shore, even with a liberal inclusion of territory to the southward. Population was indeed almost unbelievably scanty. No other part of that region was quite so bountifully supplied by Nature as Powhatan's domain near the Chesapeake, yet Strachey's¹ miniature census, river by river and town by town, has a really ridiculous, though pathetic, look. The best recent estimate² gives not more than seventeen thousand Indian inhabitants to all Virginia at that time, with 8,500 for the Powhatan Confederacy; and there may be a thousand of mixed blood there now—Chickahominys, Nansemonds, Pamunkeys, Mattaponies and other remnants—hardly noticed at all. The City of Washington, with its present population of 350,000, was prefigured by an important Indian town, which in an emergency could muster eighty fighting men for the defense of the finest shad and herring fisheries to be found anywhere.

The League of the Five Nations (central New York) could hardly put two thousand men into the field; yet this active little force imposed terror on most of the settlements between Hudson Bay and Georgia and between New England and the Mississippi. Along Narragansett Bay and slightly beyond, the density of population may have been somewhat greater; but King Philip in his most formidable estate could never assemble any imposing array. A few Englishmen sufficed to storm and ruin the fortified chief towns of the Pequots and Narragansets, the most powerful tribes about them. The upper New England coast was far more scantily peopled, as clearly appears from the slightly earlier notes of Champlain.

We have no trustworthy ground for assuming a substantially different state of affairs for the year 1000 A. D. along the Atlantic coast, although at that time there seems to have been a relatively large and

¹ W. Strachey: *The Historie of Travaile into Virginia*, pp. 40 *et seq.*

² J. Mooney: *The Powhatan Confederacy*. *Amer. Anthropol.* (1907), pp. 130, 132.

advanced Indian population¹ in the Ohio valley and beyond. These "mound-builders," of debated tribal and linguistic affiliations, appear to have worked up the great rivers from the south and remained a long time in distinct and differing nations or communities, at last withdrawing or being scattered rather mysteriously. It is well known that they left great earthworks behind them and other notable vestiges; but they may not have been known on the seaboard more definitely than they are to-day.

The Athapascan, Shoshonean, Muskhogean, and other remote stocks are clearly beyond our field of vision. Mr. Lloyd² would put the Iroquois also at the time we are considering too far away in the northwest: but according to Dr. McGee's Chesapeake tidewater theory they were much nearer.³ Still, no one places them on or near the seaboard in northern latitudes. The Sioux may have been in force along the eastern watershed of the Appalachian mountains, where we find them later, apparently losing ground; but they probably never crossed the Delaware. This narrows the field to the Eskimo, the Beothuk, the Algonquian tribes, and possible unknown predecessors, for the stretch of coast between Baffin-Land and the Chesapeake.

Below the Gulf of St. Lawrence we find this shore occupied in the early seventeenth century, and apparently in the fifteenth and sixteenth, by different tribes of the Algonquian family, the Micmac or Souriquois extending farthest to the northeast as they do now. On the island of Newfoundland⁴ were the quite distinct and puzzling Beothuk, doubtfully struggling to hold their ground against the encroachments of the Eskimo on the north and of the Micmac on the southwest.

There are some indications that these islanders had previously occupied parts of Maine and Nova Scotia. They appear with the air of people in misfortune, clinging to their last refuge and sharing some characteristics of their oppressors on both sides. A fuller understanding of their earlier history might be helpful in the solution of divers northeastern problems in ethnology. But there seems to be nothing to indicate that they ever established themselves far below the

¹ N. S. Shaler: *Nature and Man in America*, p. 81.

² Lloyd's notes in L. H. Morgan's "The League of the Iroquois," p. 188.

³ W. J. McGee: *The Siouan Indians*, 15th Ann. Rep. Bur. Amer. Ethnol. p. 189.

⁴ D. G. Brinton: *The American Race* (1901), p. 67. Cf. Capt. Cartwright and his *Journal*. Repub. 1911. First 20 pages. (Ed. by C. W. Townsend). Also Whitbourne, Cormack and others hereinafter cited.

Bay of Fundy, and there is nothing whatever that looks like an Eskimo extension southward, except a tool or so and one or two very doubtful river names, reported by Thalbitzer,¹ all on the northern border of New Brunswick, which, if really Inuit in origin, would be sufficiently accounted for by occasional southward explorations or harrings. That any Eskimo ever left the St. Lawrence basin to dwell in a more southerly region is an assumption based on no evidence whatever. Their long established habits would oppose any considerable return toward warmth and away from snow-banks, whales, and seals.

For predecessors of the Algonquian tribes we have equally no data: nor do we know when the latter first arrived on the Atlantic shore. Most investigators agree in placing their origin north of the St. Lawrence River. They seem to be an ancient people. Very likely they worked down from that valley by way of the lesser rivers—the Hudson, Connecticut, Housatonic, Kennebec, Penobscot, and St. John. There seems to be nothing to make such a migration before 1000 A. D. at all improbable, though it might be incomplete.

The year 1000, however, for America, seems very far back in antiquity. Perhaps we hardly realize how much of what we consider ancient was then yet in the future. The Mayas² no doubt were established in some cities of the Usumacinta Valley and Honduras, though hardly anywhere in Yucatan; the Inca conquests may have begun, but can hardly have been pressed very far; the Aztecs perhaps had not yet even heard of the Valley of Mexico. Since there is so much to be learned about the origin of these higher cultures, it is small wonder that we are in the dark or twilight as to ruder tribes, which have left neither records nor monuments. It is not probable that we have even a pictograph on the Atlantic coast which has endured for nine hundred years, and if one could be found it would perhaps represent no more than some passing caprice of the Indian mind.

From this point of view we can only say that Algonquian tribes were in possession as far back as we know and that the burden of proof must be on those who suggest any others—*a fortiori*, the milder burden of presenting at least some modicum of evidence tending to show either predecessors or temporary displacement and supplanting.

¹ The Eskimo Language, p. 20.

² Morley: The Correlation of Maya and Christian Chronology. Amer. Journ. Archeol. (1910), p. 193.

2.—THE OLD WORLD PRELUDE

Humboldt¹ implied, and Fiske² and others have since explicitly suggested, that there may have been many pre-Columbian voyages to America of which no record has been discovered. On the Pacific coast indications of such voyages survive in the presence of the cocoa palm, which is found in America as well as in Asia and on islands all the way across, and which antedates the period of the earliest recorded visitors to the New World, though never planted by unassisted nature, so far as we know ;³ in local legends of the landing of sea-tribes on the South American coast ;⁴ in the evident Mongolian features of certain minor northwestern littoral tribes,⁵ and some peculiarities of the language of others, apparently Polynesian ;⁶ in the architecture and sculpture of ancient Mayan cities, for example, the Chinese or Cambodian-like figures of Copan,⁷ and in the extraordinary similarity of the whole series of the signs of the Zodiac in Greece and Babylon, Mexico and Peru.⁸

The eastern gates also have their indirect evidences of approach in a variety of forms which are mutually confirmatory and of undeniable cumulative importance, though not yet amounting to full proof. Thus, in Humboldt's *Examen Critique*,⁹ we find a few instances, at widely separated periods, of strange men and boats arriving, apparently from the west, on the outlying European islands. He never visited these places, and close investigation of these tales at so late a time was impossible ; but he seems to have given them some credit. No doubt they lend a slight degree of support to the sailor story in the Zeno narrative, the Phœnician legend of Diodorus quoted in Dr.

¹ *Examen Critique*, vol. 5 ; in considering the Voyage of Madoc.

² *The Discovery of America*, vol. I, pp. 181-185.

³ O. F. Cook in *Amer. Anthropol.*, 1909, p. 486.

⁴ Justin Winsor : *Narr. and Crit. Hist. of America*, vol. I, p. 82, note.

⁵ H. H. Bancroft : *Races of the Pacific States*, vol. I, p. 225. Cf. W. H. Dall : *Tribes of the Extreme Northwest*, p. 237.

⁶ C. Hill-Tout : *Oceanic Origin of, etc.* *Trans. Royal Soc. Can.*, Sec. 2, vol. 4 (1898).

⁷ Thomas and McGee : *Pre-historic North America*, p. 256 (vol. 19 *Lee's Hist. of America*). Also Stephens : *Central America, Chiapas and Yucatan*, (see Catherwood's views), and *The American Egypt*, by Arnold and Frost, pp. 213 and 269.

⁸ S. Hagar : *Origin American Aborigines*. *Astronomy*, read Dec. 27, 1911, in symposium of *Amer. Ass'n Adv. Sci.*, *Amer. Anthropol.*

⁹ Vol. 2, p. 259. Cf. James Wallace : *A Description of the Isles of Orkney*, pp. 33, 34.

Nansen's *In Northern Mists*, the Norse-Irish accounts of the finding of Ari Marsson in his western home, and other reports of unlucky men who from time to time were storm-driven far across the Atlantic. If mariners or wanderers could thus casually make the passage from west to east, why not from east to west? The still rather common fate of being at the mercy of the elements and of an undesired landfall should not be regarded as suspicious, although of course often utilized in the fiction of all countries and periods. Horsford's¹ chart of the courses of wrecks and derelicts is a curious exhibit of their frequency in later years along a part of our coast. Would that frequency be less when both vessels and skippers were without compasses or charts, and in every way poorly equipped to elude or overcome their dangers? D'Avezac² relates, in passing, two rather early instances recorded of wrecks on the Canaries and the Azores—a French vessel of about the year 1336 and a Greek craft in 1370. For that matter, disabled ships have been known to wander over the Atlantic month after month in recent years, reaching in succession widely separated regions; and, if left to themselves, might have stranded finally almost anywhere.

The map of the Atlantic Ocean itself suggests that very early crossings were much more than possible; exhibiting as it does a strait-like narrowing between South America and Africa, and another at the far north, where the Faroe Islands, Iceland, and Greenland make convenient stepping stones. Moreover, warm, alluring islands are scattered out before Morocco and the Iberian peninsula so widely that the farthest is about halfway between Cadiz and Cape Race. Even from the tip of Brittany, the southwest of Ireland, or the Basque provinces of northwestern Spain, that corner of Newfoundland was not inordinately far. There were also favorable ocean currents at some points, the most notable of which swept then, as now, southward along the outer front of the Azores, Madeira, and the Canaries; then in a wide curve moved westward to the Caribbean, joining there another stream from the lower African coast. The various natural crossing routes above indicated were the main highways of early accidents like those above mentioned, often merely legendary, but historical in the cases of Leif and Cabral.

¹ Landfall of Leif, p. 4.

² Discoveries of the Middle Ages, p. 32. Much more recently a small vessel, leaving one Canary Island for another, was blown off and afterward found with her crew well over toward South America. Also a fishing crew of the Newfoundland banks was similarly driven to the Azores.

Who can say how early these crossings of the ocean may have begun? It is true, as Prof. Shaler¹ has suggested, that there might have been great difficulty in winning home again without a keel; but ancient Egypt, Greece, and Phenicia all used this important appliance, according to Dr. Nansen;² the Celts, Saxons, and Normans continued its use, and Scandinavian shipbuilding, in this as in other things, inherited from antiquity and the Mediterranean. Besides, the Polynesians in their great sea-boats have made recorded ocean voyages more extensive than crossing the Atlantic, and there must have been many such in far earlier times, or islands as remote as Hawaii and Easter would not have been peopled by them. Why must we suppose that there were no navigators on the Atlantic side of America who were able to emulate the dusky adventurers of the Pacific?

We must remember that the Mediterranean civilization had an outpost at Cadiz from about 1100 B. C., directly facing America; that, like all Phenician towns, it was probably even then a center of maritime curiosity and enterprise, and, at any rate, had grown into a wealthy and far-reaching commercial city when visited five hundred years later; and that in the middle of the twelfth century, after a long period of Mahometan rule just ended, it was still important enough to make Edrisi greatly exaggerate on his map the size of its peninsula, making this an island, and giving it a name when most other islands of the sea went nameless.

We know that Phenicia, Egypt, Greece, and Rome were somehow aware, or dreamed, of lands beyond the great water; and that these fascinating suggestions were useful long afterward in helping to inspire Prince Henry and Toscanelli, Columbus, and Cabot. It would be a pleasure to find their enduring charm rooted in real knowledge, as it well may have been; but modern works on Atlantis—for the most part valueless—add nothing trustworthy to Plato's memorable report of legendary echoes; and we must feel that this story, and others like it, may have arisen from some vision, as unreal as the white surviving phantom city which a Central American padre saw from a mountain top so vividly that he made Stephens³ believe in it also, with several picturesque romances by Haggard, Westall, and others for a much later result. Yet this is not the only and inevitable expla-

¹ *Nature and Man in America*, p. 189.

² In *Northern Mists*, vol. I, pp. 37, 40, 48, 242, 248.

³ *Central America, Chiapas and Yucatan*, p. 195. Also J. L. Stephens: *Travels in Yucatan*, pp. 191 and 202.

nation, and there are divers corroborative items, of various degrees of cogency, to be considered, which go to make up a fair probability that some of these early, half historic glimmerings were something more than fancy-play or mere lucky conjectures of the truth.

We should naturally expect the Phenicians of Cadiz and Carthage to reach the Madeiras and the Azores, which lay out before them, and were rather more accessible than Britain. Storms would drive them there if they lacked the hardihood to try the chances of the open sea, and one little island group would lead them on to another. In a cavern of St. Michael's,¹ of the middle Azores, an inscription is said to have been found by early explorers, which has been commonly supposed to be Phenician because identified as Hebrew, a closely allied script and tongue, by a "Moor, the son of a Jew," who was with the party, but could not, or at least did not translate it. The tale is from Thevet, cosmographer of Henry III, who says that he visited these islands long afterward. Remembering divers American "Phenician inscriptions," called so before Norsemen were put forward as our chief inscribers, one desires at least a better expert opinion, and a more generally trusted transmitter than Thevet.

The knowledge of these islands kept on through the centuries in an intermittent, glimmering way. The ancient Irish legends of exploration have much to say of islands to the southward which, in part, must be the Azores, if real, and in particular of islands notable for their fine sheep, their singing birds, or their dangerous monsters. Then the Moors, conquering Africa and the Iberian peninsula, soon came to the front as navigators, and we find again the Isle of Sheep, the Isle of Birds, and the Isle of the Dragon in Edrisi's Atlantic series, distinct from the Canaries which he had described already. Furthermore, his twelfth century map shows a string of islands stretching northward from below Gibraltar parallel to the western shore of Europe, sadly out of place for accurate geography, but in an arrangement fairly paralleled by the fifteenth century map of Zuan da Napoli, who gives us the names of Corvo and the other Azores. The chain of record seems reasonably complete, and early visits, even to that mid-Atlantic island and its companion, Conigi or Flores, must have been rather numerous. Who can believe that such visitors would all pause there with the vision in their souls of other islands equally probable, equally delightful out beyond?

¹Humboldt: *Examen Critique*, vol. 2, p. 240.

Edrisi¹ records also the celebrated Magrurin expedition from Lisbon, which is generally mentioned as occurring a little before the expulsion of the Moors in 1147, though it must have been earlier, since in 1154 he mentions a street named after them, with no hint of recent naming. They had resolved, it appears, to cross the Atlantic, but turned southward after getting twelve days out, into the weed-encumbered Sargasso Sea, and seem to have wandered rather aimlessly toward the African coast, along which, at last, they made their way home.

Humboldt² supposed that their farthest point may have been one of the Cape Verde group. Other inquirers think it more to the northward. The story gives the prince of that island an Arabic interpreter and makes him declare through this mouthpiece that his royal father had sailed forty days beyond it without finding land; after which he promptly shipped his visitors to Africa. But we do not know Edrisi's authority for what these wanderers related. Giving it full face value, however, there is nothing to indicate that they crossed the ocean.

The same is equally true of the Genoese brothers³ Vivaldi who, according to old chronicles of their city, "undertook" about 1285, in the very spirit of Columbus "a new and untried voyage, that to India by way of the West." This has been taken to import a voyage around the Cape of Good Hope, and possibly may mean nothing more, yet the words are memorable. Besides, the fourteenth century maps, long antedating the Portuguese discoveries, give Italian names almost exclusively to the Azores, which would lie well out of the way of the course supposed: Either these adventurous men or others of their country must have ranged widely eastward and northeastward, with close quartering of the sea. One is tempted to think that they can not have been so very far from the Newfoundland banks or the Bermudas in some of their outward sweeps; for they found and named all the more eastwardly islands that are known, as well as two or more dubious ones with Irish or Arabic names over which men still puzzle and wrangle. For the Irish were ever before the Arabs in their explorations—how far we cannot guess, the voyages of the Celts having begun far back beyond the twilight of history. Perhaps the

¹Edrisi: *Geography*, Jaubert's transl., vol. 2, p. 27. Their voyage is briefly related also in *Examen Critique*, vol. 2.

²*Examen Critique*, vol. 2, p. 237.

³M. D'Avezac: *Discoveries of the Middle Ages*, p. 23. Also Humboldt: *Examen Critique*, vol. 2, p. 234.

first that we hear of which can possibly have any significance in this connection is Arthur's mysterious and disastrous foray into some northern Gaelic region, in quest of "The Spoils of Amwn."

The ancient poem in the Book of Taliessin,¹ bearing that title seems to have a nucleus of reality, though surrounding the British leader, as does the perhaps equally archaic story of Killwch and Olwen,² with accessories borrowed from some fading pagan god. At any rate, these verses may have been the germ of the fictitious Arthurian conquest of Ireland and Iceland related by Geoffrey of Monmouth, that most romantic and romancing of literary bishops—who in this instance has found a believer to some extent in even the veteran investigator Rev. B. F. De Costa, for the latter says: "The expedition of Arthur to Iceland may be regarded as historic."³ One may be pardoned for regarding this deliverance itself with some astonishment. As to the origin of these medieval extravagances in that poem, it is pleasant to find one's independent conjecture anticipated and confirmed by a suggestion of Sir John Rhys⁴ published long ago.

There is a most interesting sequence of Irish sea-tales better worthy of our consideration. First, the Voyage of Bran, even as a composition, apparently dates well back into early heathen times. Dr Zimmer⁵ credits parts of it to the seventh century, but they include a quite irrelevant prophecy, made by a sea-god in person, which utterance, though itself archaic in subject matter, is evidently an addition to an original simple story. This nucleus may well be very ancient indeed.

Bran the son of Febal, we are told, having been summoned by a mysterious and lovely feminine being, sailed over the ocean to the Isle of Joy, where everyone laughed without ceasing. One of Bran's men went ashore, and forthwith took to laughing also. His comrades could get no answer from him, so sailed on and let him be. At the next island a lovely enchantress threw a ball of magic yarn to Bran; which hit the mark and held, so that she drew him and all of them ashore. She kept them with her and her fair companions for a year as it seemed, but really it was many years. At last one of the crew was taken with a great longing for home; so Bran carried him back to Ireland. But when the man stepped ashore, he fell to

¹ W. F. Skene: *The Four Ancient Books of Wales*, vol. 1, p. 264.

² J. Rhys: *Introduction to Malory's King Arthur*, p. 224.

³ B. F. DeCosta: *Arctic Exploration*. Amer. Geogr. Soc. Bull. 1880, p. 163.

⁴ J. Rhys: *The Arthurian Legend*, (1890), pp. 10, 11.

⁵ Alfred Nutt: *The Voyage of Bran*.

ashes, as though very long dead. Bran took warning and would not land. He lay off shore and told the people his story; then put out to sea and was never heard of again.

What fact, if any, is behind this delightful old pagan allegory? Of course it may possibly embody a memory of summer isles of Eden really visited; or it may be no more than the play of sea-side fancy among sunset clouds, or an echo of wonder-tales older than the *Odyssey*. The legend, as a whole and in detail, has been exhaustively considered in a valuable work by Mr. Nutt,¹ but we can get no nearer than this to the origin of its germ.

The Voyage of Maelduin² inherits from the Voyage of Bran and borrows from many quarters, even one of St. Brandan's shipmates being among its later acquisitions. Every successive editor and enlarger of the story seems to have felt bound to outdo his predecessors. Its wonders are manifold: ants as large as colts; a supernatural cat and its palace; a horse-monster with blue claws; a holy anchorite clad only in his white miraculous hair; a wicked monastery cook marooned in a little private hell on a barren rock for having played the thief and served uneatable food to his brethren. All told, this Voyage of Maelduin is hardly convincing, except as to the possibilities of Irish fancy unrestrained; which compares ill with the dramatic grip, epic power, and graphic quality of Icelandic narration. However, it passes along the tradition of lovely tropical islands in distant seas.

St. Brandan the Navigator was real, the abbot of a Kerry monastery near the end of the sixth century. His experiences are sung in twelfth century Latin verse and told in early Gaelic prose, as well as in the fine English translation printed by Wynken de Worde, successor to Caxton—not contemporary testimony, to be sure, but probably reliable as to the main fact and general course of his Atlantic journeying, with more or less of the details.

Humboldt thought St. Brandan may have gone northward, visiting the Orkneys; but he seems to be wrong, for the narrative has a southern cast. A writer in the *Celtic Review*,³ Mr. Dominick Daly, at first argued for the Bahamas—making the saint forestall Columbus—with an ingenious marshaling of winds and current, and other data not all quite so tenable. But he seems to have been converted to Teneriffe and her island sisterhood by Markham's translation of

¹ Alfred Nutt: *The Voyage of Bran*.

² Joyce: *The Voyage of Maelduin*.

³ *The Celtic Review*, vol. I, p. 139.

Espinosa.¹ He must be right in the change. Yet Mr. De Roo's² very bulky volume takes St. Brandan across in a higher latitude; and Mr. Cantwell³ plants him near Cairo, Illinois, with Ernulphus and Madoc to follow.

Saint Brandan (or Brenden or Borondon) was summoned, like Bran; but only by an abbot, poor fellow, and for a search in southwestern waters after one Mernoc, also very holy and quite vanished. Another object of his quest was the real original garden of Adam and Eve, a rather difficult order. According to some accounts the Breton St. Malo went with him, the lost Mernoc being a Breton too. Afterward St. Malo had a voyage of his own, at least in literature, along similar lines.

The ship of Brandan, like that of Maelduin, was hide-covered over a wooden framework, the hide being in three layers, one inside, two outside; and there were other coincidences as to the embarkation and the number of sailor-monks. Furthermore, two of the crew were foredoomed in each case. But propriety was now strictly observed. No magic yarn-balls caught the saint; he was not fished for by any kind of Circe or Calypso. The reasons are not given. Only once a faint semblance of peril may seem to threaten, in his visit to an island monastery of some easy order, where angels lighted the tapers and served meals for the brethren, exciting only a reverent astonishment in the pious guest. Very humanely and winningly, though, he warns off the tormenting swarms of devils from hapless Judas, bidding them let the poor creature have that one night in peace. And about the loveliest fantasy in literature is that of the divinely singing birds, who were really unlucky angels, doomed only to serve God in this delightful way, "because our sins had been but little. Then all the birds began to sing evensong, so that it was an heavenly noise to hear."

The legend was a liberal dealer in matters of myth, borrowing and lending. Under one of these heads and as proof of Irish-Arab interchanges already alluded to, either direct or through others, we must rank the island-monster, which punished the building of a fire on it in mistake, and the roc-like bird that began life again after the manner of the phoenix. Only, this was by immersion in a Pool of Youth, which passed on to later times, prompting, it may be (with

¹The Celtic Review, 1909. p. 273.

²P. De Roo: History of America before Columbus.

³E. Cantwell: Pre-Columbian Discoveries of America. Mag. West. History, vol. 13, p. 141.

native aid), Ponce de Leon's pathetic effort to turn a dream into reality.

Among vagrant fancies, the Voyage of St. Brandan preserves a few significant facts. The island where were "the whitest and greatest sheep they ever saw," pasturing on luxuriant herbage never touched by frost, recalls the northern side of Teneriffe and its fleece-robed inhabitants, who lived mainly by their flocks, as depicted on the spot by Espinosa, whose work was first printed in Spain in 1597. A visit to a neighboring region, seemingly continental, is also related, whence the explorers carried away "fruit and gems." Now Africa, having both, is not very far away. Even more apt and explicit are the accounts of volcanic phenomenon; for example: "They saw a hill all one fire and the fire stood on each side of the hill like a wall, all burning." Such a picture might have been photographed within four or five years among the Canary Islands, and has many times been repeated during the march of centuries.

No doubt there are many islands having volcanoes, but not among the Bahamas. One might find some difficulty in discovering sheep, cliffs, active volcanoes, fruit, tropical weather, good pasturage, and an earthly paradise, all nearly together; but at any rate it must be conceded that no part of the world within reach of the saint, except the "Fortunate Isles" or their neighbors could probably supply the combination.

Espinosa relates traditions of the few surviving Guanches, concerning an early evangelist supposed to be an apostle (as in so many other instances); thirty people who landed long ago at Icod, "the gathering place of the sons of the great one," and the finding, before the Spaniards came, of a miraculous image, inscribed with uninterpreted assemblages of Latin letters; also a curious quotation from an unidentified calendar, which relates the sojourn in those islands of St. Brandan and St. Malo for seven years. The latter, it tells us, performed an ecclesiastical experiment in resuscitating the dead and damned, thereby learning uncomfortable things about "Hell"—and permitted his patient to die again (and finally) "in the time of the Emperor Justinian." The statuette (of the Madonna and child) above referred to, or a later substitute as some say, is still borne in religious processions about the island of Teneriffe; and withholds obstinately the message of its cryptic characters. Until these cipher writings shall have been read to some purpose, they obviously can not help to establish any connection with St. Brandan. Mr. Daly thinks the saint

and his companions may have brought the holy image from Ireland; but in view of the great gap of time to be accounted for, I incline rather to the entertaining Father Espinosa's artless declaration that angels brought it straight from Heaven.

In all this there is not much to be fairly called corroboration of the internal evidence of the medieval voyage-narrative; but it is certainly interesting to find the sixteenth century Spaniards of the Canaries well up in the legends of St. Brandan and St. Malo, and confident of their visit to those islands a thousand years earlier.

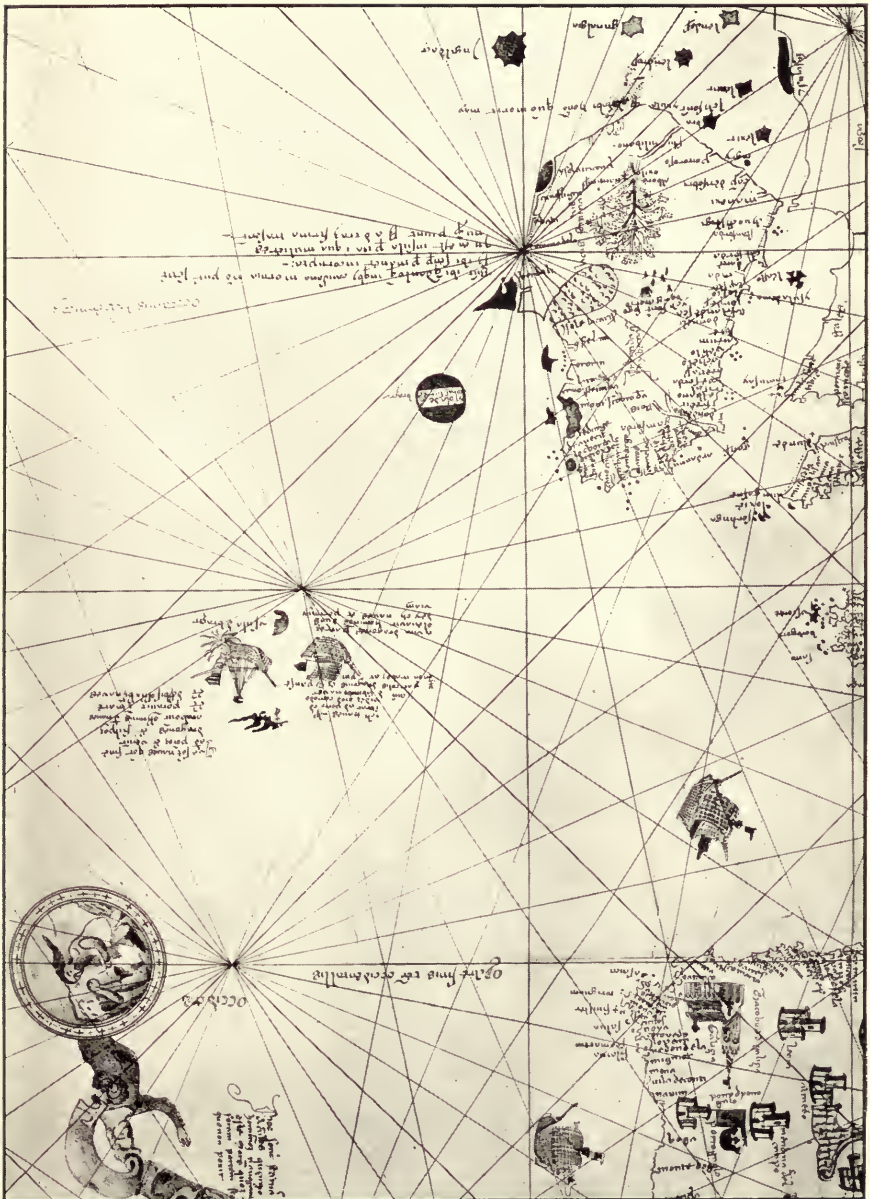
3.—THE MYTHICAL ISLANDS OF THE ATLANTIC

The only place where one can still see St. Brandan is on Pizigani's map¹ of 1367, bestowing his benediction, in medieval portraiture, on his "Fortunate Islands," thus named collectively in the map-legend, but individually as Ysola Caporizzia, Ysola Canaria, and Ysole douer Sommart. Possibly they were borrowed from Dulcert 1339 of Genoa, who calls the first-named island Capraria and the last Primaria.² The site of the latter is identical in both maps and approximately occupied by a cluster of rocks in a more modern one. Sommart (somma) is, however, more likely to indicate the peak of Pico; and the plural form Ysole may convey a sense of its less lofty Azorian companions. Whatever the explanation of this item, the cartographer of the Atlante Mediceo or Gaddiano map (1351) thought best to omit it; as does also the Catalan map of 1375. They substituted, however, for Caporizzia, Legname or d'Legname (Markland, forest-land) because of the great woods "de haute futaie" (D'Avezac)³ with which the early visitors found it covered, also the companion island becomes Porto Santo, as now, and Las Desertas have already taken their name as Insulæ Desertæ. Zuan da Napoli, whose map—that is, the Venetian one uncertainly attributed to him—is given by Kohl approximately the date 14—(perhaps of 1440 or later) translates Legname into Madera, its Portuguese equivalent, which, with a little change in spelling, still remains. It seems pretty clear that Madeira is the original Markland of Atlantic voyagers; also that it and its neighbor, Porto Santo, with or without some lesser com-

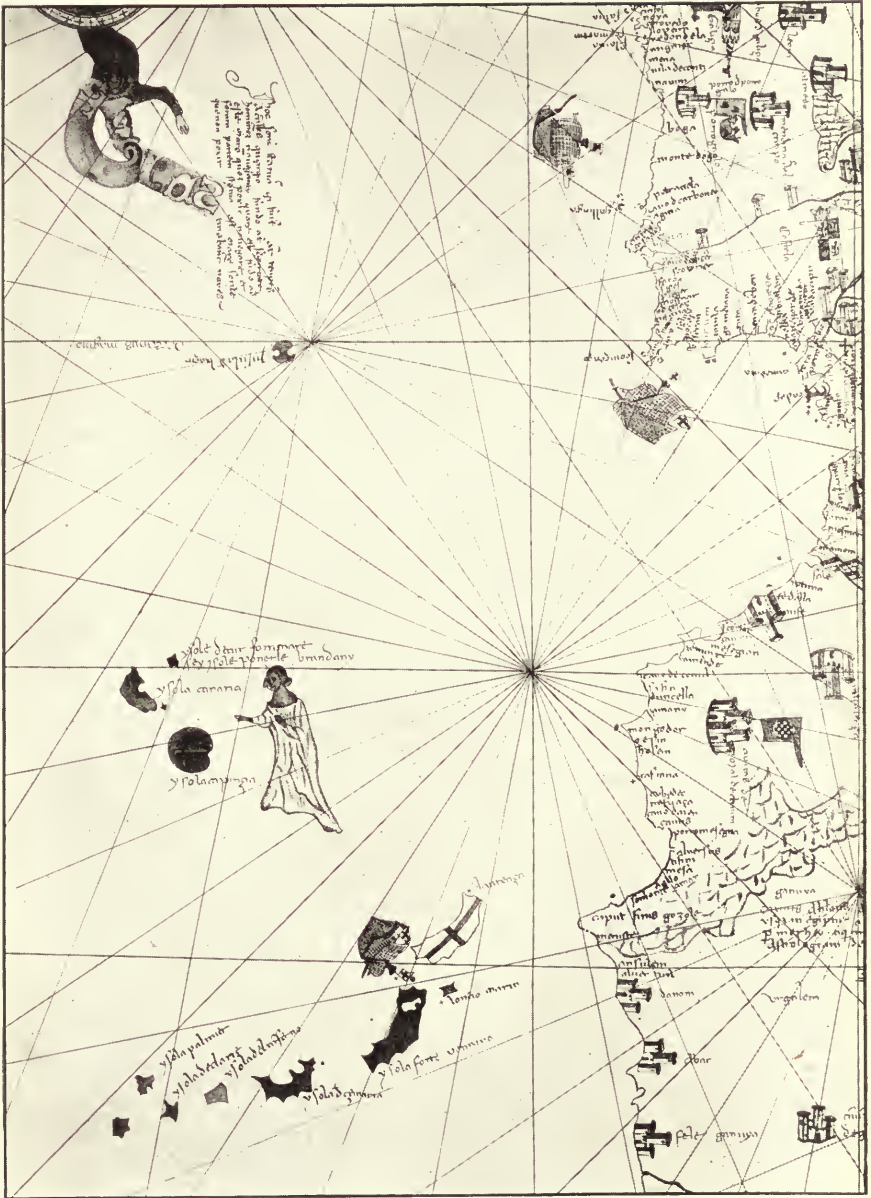
¹ Kohl's collection of maps in Library of Congress. Also Jomard's Atlas.

² Nordenskjöld's Periplus, pl. 8. also K. Kretschmer: The Discovery of America (Die Entdeckung Amerikas). Atlas, Tafel 1, pl. 2. Benincasa 1482 and others also show the Madeira group as three islands; but consider Las Desertas one of them, omitting Primaria or Sommart.

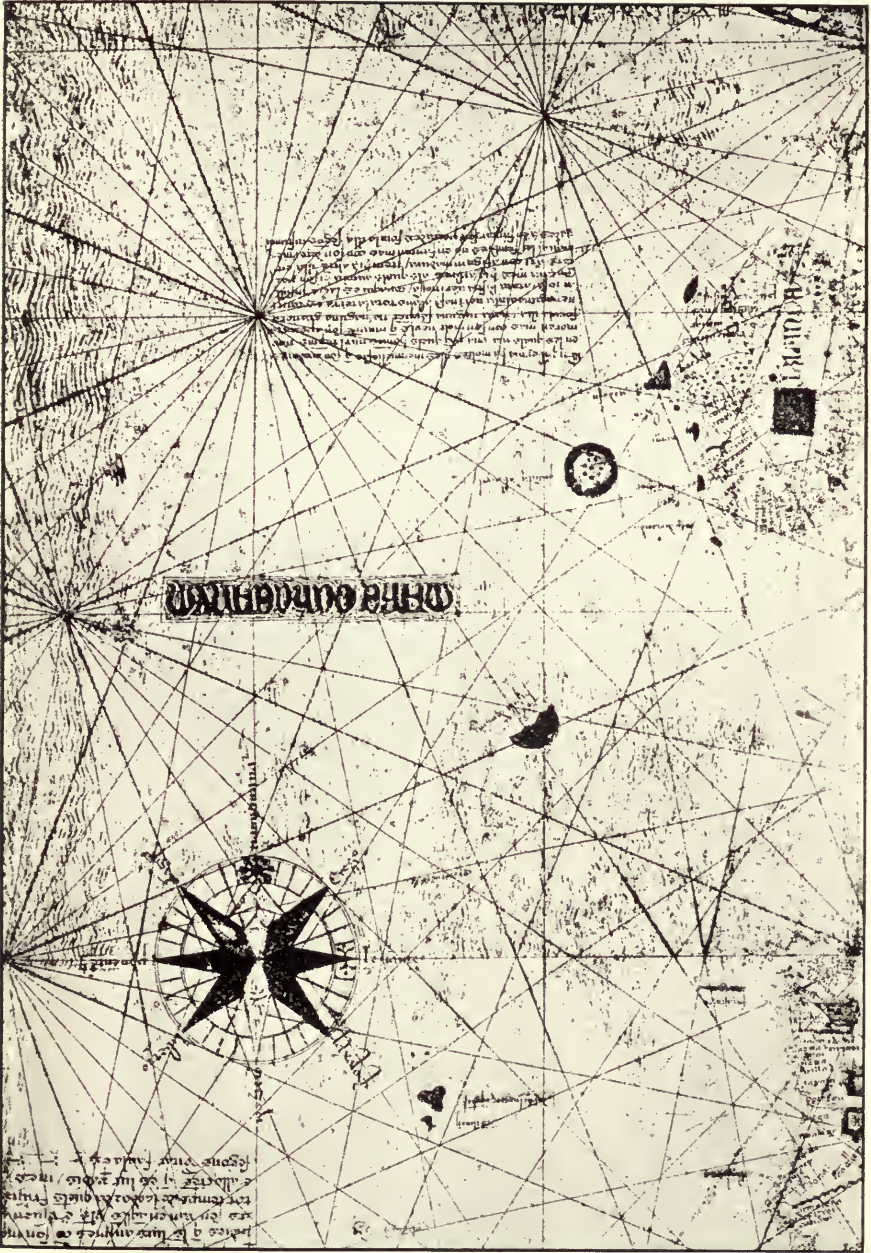
³ Marie D'Avezac: Discoveries of the Middle Ages, pp. 7. 8. The best reproduction is in Fischer's Sammlung. There is also a good one in Benzley's The Dawn of Modern Geography and an incomplete *facsimile* in Nordenskjöld's Periplus.



PART OF MAP OF THE PIZIGANI BROTHERS, 1367 (FROM JOMARD), ATLANTIC ISLANDS, UPPER PART Showing Brazil west of south of Ireland; also Brazir (Man) with ship, dragon, and kraken

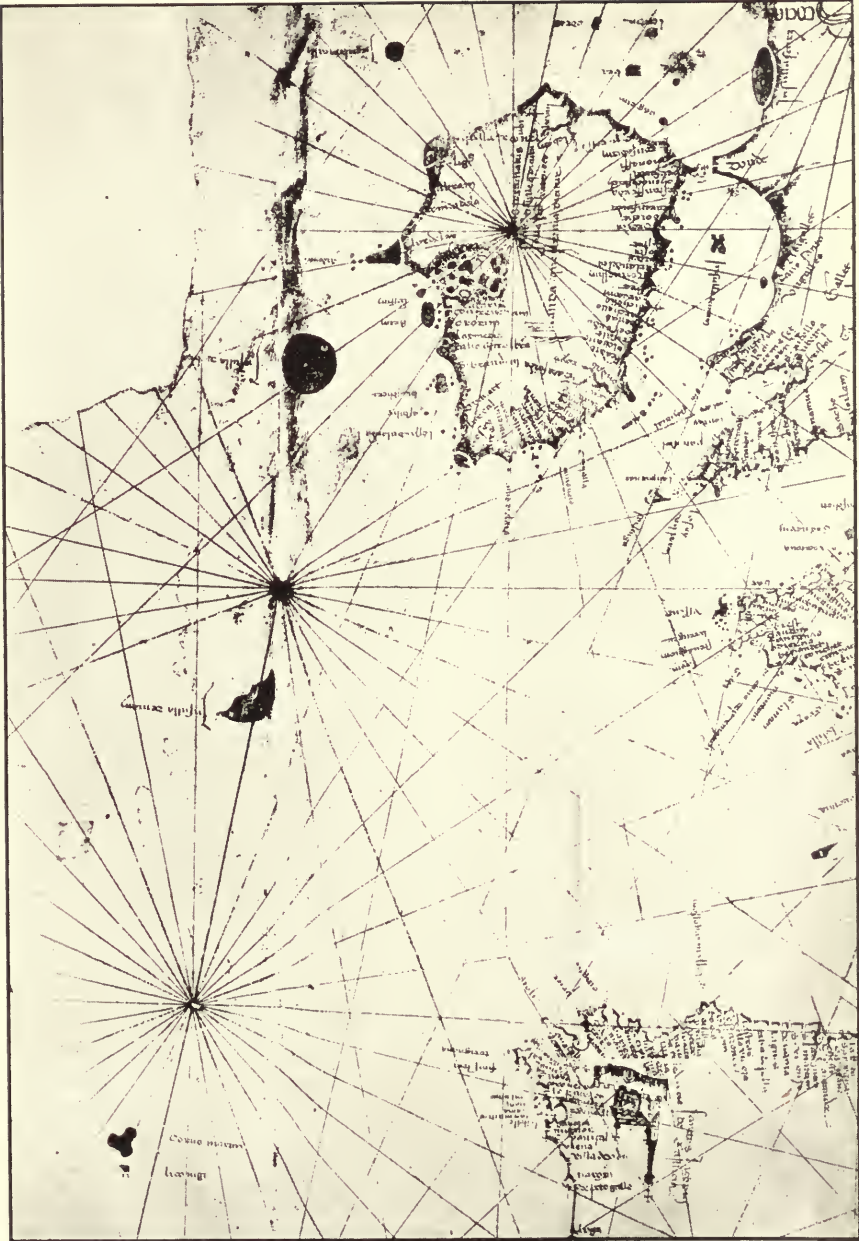


PART OF MAP OF THE PIZIGANI BROTHERS 1367 (FROM JOMARD), ATLANTIC ISLANDS, LOWER PART
 Showing angel warning against westward travel; also St. Brandan kneeling by his islands
 (This plate partly overlaps plate 1)



PART OF CATALAN MAP OF 1375

Showing the Island of Brazil west of the south of Ireland. Man and Corvo (with Flores as li Congli) successively below. Brazil is annular, enclosing water and islets



PART OF MAP OF BATTISTA BECCARIA (BECHARIUS) 1435, UPPER PART OF THE ATLANTIC ISLANDS Showing Brazil, Man, Corvo, and Flores

panions, were generally accepted by the conjecture or tradition of the fourteenth century as The Fortunate Islands and especially The Fortunate Isles of St. Brandan. This identification was afterwards forgotten, but the memory lingered that at least one island had borne his name, and we find it reappearing, in random fashion, here and there about the ocean at points where no island should be—a very elusive “*Ile fantastique*,” though not the only one nor the most significant; for “the mythical islands” are sown most liberally over the maps of five centuries. Thus Brazil, on a French map of 1754 holds nearly the same direction from Limerick as Dalorto gave it about 430 years before. Mayda (*Asmayda*) is even more persistent, for I find it in the old and proper latitude, opposite northern France, on a relief map, copyrighted in the United States in 1906.

As map-makers have generally followed explorers, with only a little toning down and conjectural improvement, we may safely take every additional island of the map as representing at least one voyage or the report of one. We know how the very dubious disclosures of the Zeni and the indubitable discoveries of the fifteenth century got into geography, though the former have since melted away. Also we can see how the medieval cartographers built up, item by item, a true island-showing for the eastern side of the Atlantic, so that even the 1351 map already cited,¹ has not only all the Canaries, but all their names, as now in use, with the single exception of Teneriffe. The islands which have not held their place in maps of the best authority are almost all islands out of place and duplicated, like the Island of St. Brandan, or bits of some more extended and more distant coast line similarly misunderstood. Thus the Sunken Land of Bus, named after one of Frobisher's ships² and long a disquiet to the mariner, since it could never be found again, is now generally recognized as a part of Greenland, which appeared unexpectedly before him when he was somehow off his reckoning. Several other and better known “mythical islands” are inadequately accounted for by any theory which does not cross the Atlantic.

In form and direction Antillia and Brazil are quite as constant as the Canaries, and more so than the Azores, of the early maps; which may show conviction arising from some previous precise narrative. Antillia, at its first appearance, is a large, elongated, rectangular, quadrilateral island with four indentations in its eastern side, three in its western side, each in two or three lobes, also a greater one at its southern end, all carefully delineated as if by survey; and it so remains, on nearly all the pre-Columbian maps. Sometimes this form

¹M. D'Avezac: Discoveries of the Middle Ages, p. 42.

²Or possibly after one of his officers.

and the name also have been explained by the Atlantis legend, since Plato's description corresponds with it more or less. But there is no obvious reason why this influence should have been less potent in the fourteenth century, the quite numerous maps of which have no drawings of Antillia.¹ Humboldt argued against both suppositions and thought the name derivable from the Arabic "Al Tin," the serpent or dragon, a reminiscence of the terrors of the Sea of Darkness. In support of his contention he refers to the Island of the Dragon and like items. It is certainly true that Edrisi has a passage concerning that destroyer, killed, as he says, on one of the Azores by Alexander the Great; that the Pizigani's kidnapping monster is distinctly labeled "a dragon" and that even the much later Olaus Magnus² decorates one issue of his history with a pictured saurian having a serpent's tail, in the act of dragging a sailor from a ship's deck to its lair on some rocky Atlantic shore. Evidently huge reptiles of the lizard kind were associated in human minds for five or six centuries with the perils of westward navigation. This of course may mean no more than a play of fancy about memories of crocodile-haunted African rivers; though it may also conceivably record impressions left by far western islands where similar forms were at least equally common. D'Avezac,³ reviewing the matter of etymology in 1845, dissented from Humboldt's hypothesis; which does not seem to have been taken up zealously by any advocate, notwithstanding the very great eminence of its author. Perhaps it has been regarded as ingenious, rather than perfectly reliable, for the transformation of Altin into Antillia is not adequately explained.

A more plausible conjecture, probably the most nearly convincing one thus far offered, makes up the name in Portuguese from Ante or Anti (before or opposite) and ilha Island. On some maps the latter word regularly becomes illa—for example that attributed to Zuan da Napoli,⁴ already mentioned. By either spelling, the pronunciation in full would presumably be Anteillia or Antiilia, readily compressed to Antillia, after the manner of all languages when two similar vowels come together. Obviously this derivation has the advantage of simplicity and the case as to meaning is equally good. Divers early maps—as Battista Beccaria (Becharius) 1435, Bianco 1436, Pareto⁵ 1455, Roselli 1468, Bertran 1489, and Benincasa, 1482—show Antillia,

¹ Jomard: Atlas, Plate 11', Pizigani Map of 1367. An obscure Latin inscription on it contains, however, the word Atullae or Atillie, identified with Antillia by Kretschmer and others.

² J. Winsor: Narr. and Crit. Hist. of America. vol. 1, p. 74; Tillinghast's Monograph.

³ Les Iles Fantastiques, p. 27.

⁴ Kohl's collection of maps in Library of Congress.

⁵ K. Kretschmer: Die Entdeckung Amerikas, Atlas, Tafel 4.

thus named, out before the Azores and opposite Portugal across a great expanse of sea and curiously duplicating that kingdom in length, breadth, minor details, and rectangular outline. Benincasa adds to the appearance of accuracy by inscribing at intervals names, perhaps of provinces, on all parts of this large island, but seemingly with special reference to the bays and their neighborhoods, as well as on another of similar general form, though shorter and narrower, which lies to the northward somewhat farther than Florida from Cuba. Bianco had called this rather fearsomely *La Man de Satanaxio*, commonly rendered *The Island of the Hand of Satan*, a name abbreviated to *Satanta* by one much later geographer and even changed to *St. Anna* by another, both necessarily of but secondary authority in such a matter. Benincasa, however, reverts to the earlier name *Salvagio* or *Saluagio* of Beccaria, changing it slightly to *Saluaga*. Presumably in both cases the "u" should have the value of "v," as was common usage then and long afterward.

This Beccaria¹ (Becharius), was the first delineator, so far as we know, of this highly significant Antillian group of large far southwestern islands. He makes them four in number, including a relatively small, but considerable island, north of *Salvagio* marked I in *Mar-Sea Island* (or *Islands*), literally "in sea"—and *Reylla* (*King Island* or *Royal Island*), bearing, in area, form, and position, approximately the same relation to *Antillia* that *Jamaica* bears to *Cuba*.² He also applies to the whole group the conspicuous legend *Newly Reported Islands—Insulle a Novo Repte.*, which recalls the note accompanying *Antillia* on Behaim's globe of 1492, prepared while Columbus was yet at sea on his first voyage, to the effect that a Spanish vessel visited this island in 1414. Nordenskjöld quotes also an anonymous map of 1424 at Weimar, which Santorem has copied in his atlas, but without *Antillia* by reason of incomplete westward extension; but the present Weimar librarian considers this to be certainly the work (perhaps about 1481), of *Freducci*, a map-maker of the latter half of that century.³ Another map by *Freducci* made after the earlier

¹ *Studi Bibliografici e Biografici*, containing papers of 1st and 2d Italian Geographical Congresses, with maps appended, plate 8.

² *Roselli* 1468 shows all four islands, though the outline of his *Roills* is faint. The original map is in the collection of the *Hispania Society of America*, New York. *Bertran*, as reported by *Kretschmer*, gives it a different name.

³ My photographic copy of the original, made in Weimar, shows the upper half of *Antillia* with the name in full, the lower half of the island being cut off by the parchment border. *Salvagio* above it is in full outline of usual form, but with only S legible.

voyages of Columbus is considered by him to show Antillia as of the real Antilles. The slightly later (1500) map of Juan de La Cosa may preserve another echo of the tradition recorded by Behaim in his entry "this is the island that the Portuguese found" applied to an unnamed outline of the orthodox rectangular form of the eastern South American coast, for he could hardly yet have heard of the landfall of Cabral. Finally, we know that Las Casas, the friend of Columbus, promptly applied to Cuba and its companions the term *The Antilles*, which they bear to this day and that other contemporaries believed he had reached the Antillia which Toscanelli recommended to him in advance as a convenient stopping-place on the way to Asia. All things considered, it appears that Nordenskjöld had some solid ground of justification for classifying all the maps of Periplus which contain Antillia, under the heading "Maps relating to the New World" (see note 1, p. 176).

Antillia and its consorts cannot be the Azores, which in each instance are shown half way out to them or not much less, the remotest pair of the latter, Flores and Corvo being similarly situated in reality with regard to some points of the American shore. Furthermore these Portuguese islands are in each instance represented of about the proper size, being indeed evidently well understood except as to the western inclination of the extended Azorean series. This is not strange in view of the amount of coming and going among them at that time, Beccaria's earliest date being about sixty years after¹ the establishment of the Norman trading post Petit Dieppe on the African coast far below, followed by frequent voyages thereto while the Basque and Breton fisheries were carried on in a lively way in those seas. The Italians also had been up among them, leaving names for all the islands, and now the Portuguese were taking exploration and colonization earnestly in hand. But far beyond these Azores there was obviously, in their settled belief, something very much greater, aptly defined as in front of Portugal, and the Azores, since it extended from the parallel of Lisbon or higher, to about that of Gibraltar or a little below. The Antillia of Beccaria and his successors may well be rather too far north. Discoverers, knowing nothing of the dip of the isothermal lines southward on the western side, would be likely to judge by climate and productions, thus erring in the latitude; and it is easy to see how an opposite mass of land reported to resemble Portugal in bulk, and conditions, might be conventionalized by the map-makers into greater resemblance. A royal grant of 1486 even

¹ Nordenskjöld: *Periplus*, p. 115. Cf. M. D'Avezac: *Discoveries of the Middle Ages*.

refers to Antillia as possibly part of another continent.¹ The facts above presented seem to me to point to the region of the Greater Antilles, as we very appropriately call them now, perhaps with a part of the neighboring mainland and lesser islands outlying at sea, but there is no need to work out this suggestion more particularly. The names of the chief upper island have puzzled geographers, but if savages were there and acted after their kind we need find no great difficulty in accounting for Salvagio or The Hand of Satan; and all later forms apparently grew out of these.

Nansen's *In Northern Mists* condenses from Diodorus a tale already mentioned, of a Phœnician ship driven by tempests to a region opposite Africa, which had both mountains and lowland tracts, and abounded in the lavish gifts of nature. This description would fit the West Indian region above mentioned, though hardly anything above it on the American side. However, it may equally well have been developed out of the reported facts of a traditional accidental visit to Madeira. Nordenskjöld will not say as much for Brazil (the original one) as for Antillia, yet it has a case that cannot be ignored. The former island of the map rarely, if ever, wanders into southern waters, and is nearly always west or south of west of Limerick in the early maps, at an apparent distance which is absurdly small. But the fourteenth and fifteenth century cartographers had a cautious habit of minimizing distances, the perfectly well known Corvo, for example, being generally shown (with that name as *Corvi Marini*, *Corvis Marinis*, or *Corvo Marinis*), very much nearer Spain than it should be. The *Piziganis* (1367) show both, also Brazil in the usual form and place besides the more southerly "Ysole Brazir" apparently Man, to judge by its crescent form and location, though farther out than usual and doubly puzzling by the approximate repetition of the upper name and the use of the Italian plural where but one island is shown. This part of the map shows a dentapod kraken dragging a seaman from a ship, a dragon heart and an angel warning navigators back; with a frantic though obscure inscription denouncing the dangers of sailing westward.

The original circular Brazil, west of southern Ireland, is said sometimes to have been called "great," by the medieval Irish,² reminding us of "Great Ireland," which was in the same quarter or near it; and it was believed to be of such promise and importance that numerous expeditions were sent forth in search of it by the merchants of Bristol during the period between Botoner's failure in 1480 and Cabot's

¹ E. J. Payne: *The Age of Discovery*. Cambridge Modern History, vol. 1 p. 20.

² See note 2, p. 176.

success in 1497. His small ship *Matthew* won through the storm-belt to the region about the Gulf of St. Lawrence; and he evidently felt that this was Brazil, for he uttered hopeful forecasts of finding silk and brazil-wood. Since it was midsummer, the extravagance of this would be hidden; besides, his ideas were no doubt colored by acquaintance with lovely, dye-yielding, forest-clad, fortunate islands of the eastern Atlantic, and his words were perhaps meant chiefly for more southward points than his first landfall, since he may have voyaged a considerable distance that way.

There are certain features of this Brazil most naturally explained as imperfect delineations of that outjutting elbow of North America which includes the Gulf of St. Lawrence, although no one seems to have noticed what they indicate. Thus the Catalan atlas of 1375 shows Brazil not as a solid land, but as enclosing a sheet of water in which several isles appear. Nordenskjöld¹ says they are seven in number, and reads them as derived from the legend of the Island of the Seven Cities, giving no authority except his own fancy. But this Brazil is too far north for the Spanish story, which most likely had to do with one of the Azores or Madeira, being perhaps an exaggeration of some real migration of escape, such as would be nearly certain to occur at the height of the Moorish conquest. Besides, seven towns do not require an equal number of islands in a great lake or an inland sea. The Spaniards themselves felt no incongruity in hunting for those cities, in 1539-40, among the deserts and mesas of New Mexico.

Again, several maps, for instance Prunes's² 1553 and Mercator's 1595, show Brazil as divided into two islands by a passage or channel. For this also we have a mythological explanation (by Dr. Nansen³)—namely the "river of death." But again the conjecture is quite unsupported. Yet again, in several maps, Brazil has a space marked on it after a quaint early fashion of indicating mountainous regions and other natural features, and this bears the inscription *Montorius* or *Mont orious*, apparently meaning at least, that a portion of Brazil was mountainous. But the map of Dalorto 1325 or 1330 gives its name in full as *Insula de montonis siue de brazile*.⁴ (See note 3, p. 176.)

If, now, we apply these several distinctive features to the region reached by Cabot, we find this outjutting corner of America surrounding the Gulf of St. Lawrence, which contains Prince Edward's Island and the Magdalen Islands, Brion Island and others. Its east-

¹ *Periplus*, p. 164.

² K. Kretschmer: *The Discovery of America*, Atlas, Tafel 4, map 5.

³ *In Northern Mists*, vol. 2, p. 228.

⁴ *Ibid.*

ward wall is divided by the Strait of Cabot; and the great estuary of the St. Lawrence, dividing the opposite side, might well be thought a continuation of that channel and to lead out again to the sea. Just this was in fact supposed down to Cartier's voyages or later. We are now aware that only the front of this elbow of the continent is insular (Newfoundland and Cape Breton), but it was inevitable that in all the centuries before the seventeenth the whole tract, if known at all, should be regarded as an island. The circular external outline may have been some mariner's guess from the curvature of Newfoundland and Nova Scotia considered together, and the scollops, serrations, or indentations of this outline presented by many maps may indicate a memory of real bays and inlets, though fancy would be ample for supplying them. As to the mountains, there are considerable elevations along these ocean-fronting regions, and they grow distinctly impressive beyond the Bay of Fundy, still within the land-wall of the St. Lawrence Gulf.

We have, then, in a real region, and in only one, the several peculiar features above stated, each offered also by a group of old maps—as though every observer had individually contributed what most particularly impressed each of them, and was most vividly remembered: and there is nothing in geography or in the circumstances of those times to make predecessors of Cabot, crossing as he crossed, impossible or very improbable. Indeed, that particular part of America always held itself out conspicuously, tempting discovery. The coincidences may be nothing more; but the speculation has probably a sounder basis than any other advanced thus far concerning this very suggestive "island."

• Some investigators, considering Brazil a reality of the past, have explained it in another way, making it a lesser Atlantis of more gradual submergence, a veritable "sunken land," which went slowly down, leaving no more to show for it now than the lonely, bare, granite peak of Rockall, best described by Mr. Miller Christie in *The Scottish Geographical Magazine* for 1898. He does not, however, suggest its identity with Brazil. According to a globe which he has found, there seems to have been a sand-bank visible (at least sometimes) on the spot three or four centuries ago; but nothing could have been there in the historical period to warrant belief in the great Brazil; its crags must have been frequently in sight of those who sought the latter; and the situation must always have been too inclement. Porcupine Bank has also been presented in this connection, but with even less plausibility, being too near the Irish coast, too ancient in its visibility, too much out of the right direction from

Limerick, and also apparently indicated on at least one map which distinctly shows Brazil also, farther afield.

The name, Brazil, has been the subject of much discussion and has led many on a quite misleading trail. For a generation or so after the first appearance in cartography of the original Brazil off Ireland, so far as known, the maps begin to show a second or emulative Brazil off Portugal, and with much the same relation to Lisbon as the other had to Limerick. Its name varies, as might be expected, from Brazi and Bracir to Buxelle, for the word was a foreign importation. Probably this island¹ was Terceira of the Azores, where dye-woods abounded and which seems to be the Bracir opposite Spain of the 1367 Pizigani map, a mountain there still bearing the name Brazil. A second island in that group was named the same perhaps for like reason, any kind of red dye-wood being known as Brazil-wood; and there were other instances of such naming, the latest holding its ground sturdily even yet in eastern South America. It is evident that from the middle of the fourteenth to the beginning of the sixteenth century, any region named Brazil would be expected to yield Brazil-wood or other vegetable dye, such as orchilla, in justification of its name. So it is not surprising that we should be bidden to seek the derivation of the first Brazil in just such material for dyeing.

But here the clue fails; for the origin of the word itself is still to seek. The only tenable explanation thus far given makes Brazil a coalescence of two long obsolete Irish Gaelic words, breas (Prince) and ail (noble—besides other meanings). Breas also having been in ancient use as the proper name of many chiefs and eminent men. The Irish local name usually prefixes I, or Ily, meaning "country," and more particularly "island," from Inis, the Gaelic equivalent of Insula, Isola, Ysola, or Ilha. It might not be safe to translate I. de Brazil as the Island of the Noble Prince or the Noble and Princely Island; but the general intention of extolling its merits is undeniable, and, on the fifteenth century map of Fra Mauro we even find a Latin legend declaring it to be Berzil the fortunate island of the Irish. In all this there is certainly something more than admiration of a salable commodity which might be gathered by the shipload and used for dyeing. Furthermore, nobody would have thought, in the beginning, of expecting such dye-woods or equivalent material approximately in the latitude of Ireland. After centuries of association between the name and the article, the case was very different (see note 4, p. 176).

¹ M. D'Avezac: Discoveries of the Middle Ages, p. 35.

The true history of the matter seems to have been as follows: The original Brazil, west of Ireland, was found some time (probably very long) before 1325 and named admiringly. Afterward, in emulation, the same name of high praise and celebration was applied to the beautiful island of Terceira, where a mountain bears it still. The abundant dye-material¹ of the latter came to be known by this geographical name (as india rubber is, wherever obtained); other islands which had the like were called Brazil, and at last it was hardly possible to think of that name without thinking of the dye. This came about early and effectually among the South-European geographers, who had borrowed an Irish word without knowing the Irish language. We find Brazir and Brazile as their pretty fair guesses at the true name of the original island, besides the more aberrant forms already mentioned, which were generally applied to the later and derivative Brazils nearer their own shores. Thus Brazil-wood has nothing to do with the original naming; but the island name has everything to do, through another and namesake island, with the naming of the widely sought and greatly coveted dye.

From the middle of the fourteenth century, Brazil had usually a crescent-shaped consort on the maps called Man, Mon, or Mam, located farther to the southwest and about in the latitude of Brittany. This has been sometimes identified with that similarly located and most persistent Asmaida, Mayda or Mayde which Humboldt thought to be of Arabic naming and diabolical significance; and certainly having names in two languages need be no more surprising in this instance than in that of Madeira, or Teneriffe, or Flores. Indeed, Man with its distinctive form, appears in one old map as Joncele; and Mayda in a later one as Vlandoren, showing that navigators of still other tongues had taken their turns in reporting. It must further be said for Mayda that even in a mid-eighteenth century map it retains the old station of Man southwest of Brazil; but, on the other hand, it is not usually of a distinctly crescent form.

Sometimes, too, Man has been identified with the island north of Antillia, the full name of which is understood to be La Man de Satanaxio; but this is most likely a case of mere verbal coincidence, helped out by their share in a common evil repute, to which the Devil Rock, still appearing on some maps in this quarter, may bear witness. But the existence of this rock is apparently disproven, as the United States Hydrographic Office informs me. At any rate, on the fifteenth century maps of Beccaria, Benincasa, and Bianco,

¹ See Note 5, p. 176.

both islands are shown, although of very unlike aspect and in widely separated regions of the sea. It is altogether more likely that the name Man is Gaelic in this instance, as in that of the well known island in the Irish Sea, especially as its nearest and most constant neighbor Brazil is Gaelic too; but the "Man" of Bianco's long name is doubtless correctly rendered as Latin in origin. This would not, however, prove a different original meaning, for "Man" is said to mean "Hand" in obsolete Gaelic also.

If all this curious shoal of names and islands having to do with Man in name or in form and location must indeed be considered as one then assuredly is that one the most protean, elusive, and bewildering of the whole "mythical island" display. It seems more readily conceivable to suppose they have grown out of two or more glimpses of land, at widely separated points and by men of different nations and languages who sometimes used a syllable in common, though with different meanings; and there is nothing in this to preclude those shores from belonging to a single far extended line, continuous or broken. A guess at Satanaxio has already been given. Similarly we may say that if Brazil be the region about the Gulf of St. Lawrence, we might possibly find Man in the Bermudas, though the indications are too faint to warrant more than a diffident suggestion (see note 6, p. 177).

Reviewing the general field of these islands that for so long have played their little jests with geography, it seems altogether likely that, before the acknowledged historical discoveries of the Antilles and North America, there had been crossings and recrossings of the Atlantic at various times approximately along the routes of Columbus and Cabot; possibly also on one or more intervening lines. The vague intimations which they gave in the figures and traditions of Antillia and Brazil undoubtedly spurred on both of these men; and probably one or more of them had, far earlier, through the related Great Ireland and its legends, made certain the discovery of Markland and Wineland by the Icelanders. But we have no surviving narratives of these previous voyages which may be tested by their data of natural history, ethnology, and coastline features as we test the voyage-narrative of Thorfinn Karlsefni.

4.—THE PROBLEM OF GREAT IRELAND

We acquit St. Brandan of finding America, but the fact remains that for probably more than five centuries men believed in a Great Ireland far west of Ireland over sea.

Two native boys, captured in Markland, an American region, according to the Saga of Eric the Red and the Saga of Thorfinn Karlsefni, told, about the year 1006 of a country beyond their own, where people wore white garments, carried rags on poles and shouted; from which it was inferred that this must be the already known or rumored White Men's Land,¹ sometimes called Great Ireland. We may suppose that these little prisoners were merely echoing what they heard from the Norsemen around them, to find favor with their masters. But this would equally prove what was then the prevailing tradition.

We know that the early Irish Church was the lamp of faith for all the west; that St. Patrick's conquest of the island for Christ aroused in it a wave of militant Christian emotion, becoming in some souls an eagerness to spread the gospel, in others a wild hunger for solitude, where life might be as nearly as possible an unbroken trance of religious ecstasy; and that these combined motives drove little shiploads of religious mariners out in all directions with most abandoned recklessness. The Norse rovers were counted the hardest and boldest men of all the world, but they could find no place where these Irish had not been before them. It was so in the Orkneys, in the Faroes, and in Iceland—and their holy-isle off shore from this latter home is still named for them. A well-known passage of the *Landnamabók* records their withdrawal, apparently between the years 885 and 1000, leaving Irish books, bells, and croziers behind them. But that is not their earliest. Dicuil, the monastic Irish geographer, mentions meeting, a hundred years before, one of the brethren who had been to Iceland; also there are items, of uncertain value, in various quarters concerning an alleged Irish settlement on that island a century earlier still.

In view of what they really achieved, their known fearlessness and very special impulsion, why should it be incredible that in one thing more they should outstrip all others, reaching at some point the mainland of America, though they might not be able to return, and their settlement must die out if reinforcements failed? If their supplanters in Iceland, the Norsemen, had not recorded the presence there of these ecclesiastical Irishmen it is likely that we should be debating it to-day, though it continued so long.

In the beginning of the *Heimskringla*²—"one of the great history books of the world," as Dr. Fiske has called it, in a portion recognized

¹ See Dr. Brinton's early article in *Historic Mag.*, vol. 9, p. 364 (1865), identifying with Carolina by reason of Albinos.

² Laing's translation of *Heimskringla*, vol. 1, p. 216.

as presenting very ancient material, we find a parallel use of the name "Great Sweden" for an immense region, the nearest to Sweden southeastward across the Baltic sea; just as Great Ireland was conceived to be nearest to Ireland across the ocean, southwestward. This Great Sweden was peopled with myths and monsters no less uncanny and disturbing than the deadly Uniped which drove an arrow into Thorvald Ericsson, or the big-eyed apparition of menace or warning which inflicted herself on Gudrid beside the cradle and the baby, as the Flateybook story will have it; a region obviously little known and open to doubt, yet occasionally reached by Swedes. There is no question now concerning the reality of this Great Sweden, nor that the references to it are historic in a way, for it is simply Russia. Dr. Storm¹ also observed this coincidence and added Magna Graecia as another example; but somehow he remained of the opinion that Great Ireland was a myth or a mistaken remembrance of Iceland.

An old manuscript (codex 770 of the Arne Magnean collection), quoted by Rafn's *Antiquitates Americanæ*, is fairly explicit as to locality:

Now there are, as is said, south from Greenland, which is inhabited, deserts, uninhabited places and icebergs, then the Skrellings, then Markland, then Vineland the Good. Next, and farther behind, lies Albania, which is White-men's Land. Thither was sailing formerly from Ireland; there Irishmen and Icelanders recognized Ari, the son of Mar and Katla of Reykjaness, of whom nothing had been heard for a long time and who had been made a chief there by the inhabitants.

This appears to have been prompted by the following brief narrative in the *Landnamabók* of Ari the Wise (a descendant of the vanished man) who died in 1148. His *Islendingabók* says the same, only omitting the sources of information:

Their son was Ari. He was driven out of his course at sea to White-Men's Land, which is called by some persons Ireland the Great. It lies Westward in the sea near Wineland the Good. It is said to be six doegrs sail west of Ireland. Ari could not depart thence and was baptized there. The first account of this was given by Rafn, who sailed to Limerick and remained for a long time at Limerick in Ireland.

Ari the Wise adds that Thorkell Gellison, his own uncle, had heard the same story from Earl Thorfinn of the Orkneys.

There is a parallel episode in the *Eyrbyggja Saga* (perhaps a fragment of the lost saga of Biorn the Broadwickers' champion) which has sometimes been thought a mere elaborated echo of the

¹G. Storm: *Studies on the Vineland Voyages*. *Mémoires Société Royale des Antiquaires du Nord* (1888), pp. 307-370; also separately 1889.

above, though Vigfusson in *Origines Islandicæ* treats the events as different, while reckoning both disappearances to be a little earlier than Leif's voyage to Wineland. The ship of one Gudleif, it seems, having sailed out of Dublin, was driven by storms to a western land where, after some risk from the inhabitants, they were greeted by Biorn, who was now a chief in his new country, but who warned them away as from a place of danger. Without giving his name, he inquired particularly about a certain woman, who was the cause of his exile, and about their son, sending messages to both. In conclusion, the saga tells us that there was no proof of their story, but that most people believe they went to Great Ireland. Vigfusson¹ appears to accept this guarded statement as presenting a fact; but Reeves² does not feel the identification at all certain; and doubtless it is not. As to internal evidence, Biorn was on horseback, banners were carried before him and his people spoke a language like Irish: so wherever Gudleif went, if there be any truth in the details, it was not to America. We may most safely treat this story as adding no data to the material in hand, but merely borrowing from the better authenticated legend of Ari Marsson, in developing an edifying sequel to a well known Icelandic romance of reckless and lawless love.

Taking the passages above quoted with the Sigurdr Stefánsson map, hereafter more fully treated—which shows Helluland, Markland and the upper part of Wineland, and bears traditional notes of the latter's extension southward to the "wild sea" and to a "fiord," separating it from the "America of the Spaniards"—we might conjecture Great Ireland to be New Jersey, or the eastern shore of Maryland, or Virginia south of the Chesapeake, according to our choice among the "fiords." All are in the deep concavity of the coast line between Cape Cod and Cape Hatteras; all consequently lie below and behind the southern sea front of New England and Long Island. But precision can not really be insisted on; for Stefánsson must have had very vague ideas of everything below Cape Breton, or else his drawing would have been extended in that direction. The notes are perhaps by another hand, but if so represent equally well the national tradition. However, Beauvois's conjecture locates Great Ireland on the St. Lawrence. Others have located it in the Mississippi Valley, or some part of Ireland itself. Storm thought it a sort of reflection or adumbration of Iceland. But all non-American identifications of this region seem rather far-fetched.

¹Vigfusson and Powell: *Origines Islandicæ*, p. 23.

²A. M. Reeves: *The Finding of Wineland the Good*. Final Notes.

The Ari Marsson story is one of the questionable things which nevertheless may be true. Earl Thorfinn would undoubtedly give his best information to a descendant of the lost man; but we do not know whether he merely repeated Rafn or had learned independently. The latter's account was earlier than Thorkel's we are told, but there is no pretence that this Rafn knew anything personally or made any close inquiry. Vigfusson decided that he was not an Icelander; and nothing seems to be known of him, except that he heard the story in Limerick, presumably from seafaring people, and carried it to Iceland. Now this is the city obviously linked with the Island of Brazil by the implication of the earliest fourteenth century maps.

But it is not in Limerick sailors' yarns, however possible, nor in parallel nomenclature, however significant, nor in obvious inference, popular belief and geographical statements or representations having no assured basis, to establish an important fact of history. One must feel that Irish monks, blinded to everything beyond their absorbing purpose, may very well have been here before any Norseman; but it seems at present beyond proving.

Yet there is no warrant for treating Great Ireland as assuredly unreal, and reasoning therefrom by analogy against Wineland. The inability to prove is a different thing from conclusive disproof; and we are so far from the latter that the preponderance of probability leans the other way. Great Ireland, White Men's Land, or Albania is simply an asserted region like the Island of Brazil, believed in for a long time by many people likely to have some inkling of the truth, but which, unlike Brazil, did not find its way into maps drawn by men of southern Europe. Great Ireland and Brazil Island may well be near neighbors, or overlapping names for parts of the same coast. But at present we should hold the matter in abeyance for further light.

5.—THE COLONIZATION OF GREENLAND

Toward the end of the tenth century various things combined to bring the Icelanders to America. The insular stepping stones out from Europe had grown more familiar than remote districts of their own island; the habit of voyaging in every direction but one made that exception an anomaly which could not last. Furthermore, the aggressive missionary spirit of Christianity was rising and reaching forth, especially from Norway. Iceland thus far had held out nominally, in a spirit of conservatism, for Odin and his wife and the tremendous warlike Thunder; but King Olaf¹ was urging his new doctrines, with appeals to commercial advantage and menaces of

¹ Heimskringla. Laing's transl., vol. 1, pp. 427, 445.

personal disfavor, which could not be without effect even in dealing with an independent community, since its independence was a little uncertain and it was linked to the parent country by many ties. His personal prestige counted also; why need any one hesitate about serving a Heavenly King whom even the redoubtable Olaf of Norway delighted to follow? Already he had many island adherents and the end was plainly near. It is curious, but hardly a matter of surprise, that the same year witnessed the formal adhesion of both Iceland and Greenland to the Christian faith, as well as the incidental discovery of America by a newly converted missionary sea-captain, a son of Eric, sailing out to the latter country with the message of Christ and King Olaf.

Turning back a very little from this, the Iceland of the year 980 and thereabout was in the very flood-tide of population and hopefulness, even afflicted with an excess of strenuous enterprise and uncompromising self-assertion, which made every neighborhood faction eager to fight for its sentiments at a word, every man painfully concerned in distinguishing himself and his steel sword on others, every member of a family bound to avenge any wrong or slight to its least appendage or take vengeance indefinitely for some retaliation perfectly warranted by their own code.

The last word is significant, for the thing itself was rarely lost sight of. The distorted and bloody law-abiding spirit of the Icelander has been often commented on as almost unique in history. He had inherited a common law, and so venerated it that he sent an envoy early in the island history to Norway for more perfect enlightenment. This man brought back a slightly modified code. It caught the popular fancy wonderfully and became a great factor in their daily lives, though its precepts and the decisions under them for the most part were carried in memory only. A singularly artificial system of pleading and practice grew up, every one being a stickler for exactness of procedure and treating legal formulas as of quite magical efficacy—witness the effective but unintended declaration of truce which the adroit Snorri the Priest, in the Saga of the Heathslayings, entraps a conceited memorizer into declaiming, before the latter knew that his most deadly enemy was beside him.

Most of the sagas are indeed almost as much the histories of litigation as of private war. The two things went together. Duelling was fully recognized and relied on as one means of settling disputes—even at first, of acquiring and holding other men's wives and property; while the blood feud seems to have had a semi-legal status, gradually losing ground*in theory but remaining popular, so that

everybody indulged in it, although a dominant party or leader would sometimes use a tribunal to ruin an opponent for having done so.

Eric Raudi (the Red or Ruddy) had his full share of troubles, and was never long without belligerent experiences proper to a spirited Iceland gentleman—which is about all that can be charged against him. Relatively blameless and most useful men appear sometimes to have been unjustly driven to the lava fields and ice mountains, as in the case of Grettir, who robbed those who expelled him, that he might live.

Eric does not come into view as an aggressor. He had left Norway with his father, as the best way to escape a feud. In his first Iceland home the beginning of tragedy was a landslide or avalanche that did some damage to a neighbor's land, whereupon this neighbor laid the blame on two slaves of Eric—probably Britons or Gaels—and killed them incontinently. Eric flared up in fury and killed the slayer. This brought about the usual turbulent "lawsuit," and Eric was exiled from the district; making his new home on Oxney (Ox-island) in the great southwestern Broadfirth.

But he did not keep out of trouble. A friend borrowed from him a pair of heraldic door-posts, used occasionally, too, as ship's figure-heads—or possibly picture-carven sections of those partitions, often strikingly ornamented, that made up the box-bed enclosures in which our modern separate sleeping rooms find perhaps their origin. They were valuable at any rate, and the borrower prized them no less than he; so refrained from returning them as desired. In the end red-headed Eric went to the false friend's house with a party and took them away. There was a rally of the affronted household; pursuit, sword in hand; a small battle in the highway, in which Eric cut down a man or two—thereby winning distinction as a brisk champion, not to be imposed upon, but also unlimited persecution and disaster.

He had made good and eminent friends in that neighborhood, one being Thorbiorn, chief of Vifilsdale, son of Vifil, one of Queen Aud's Dublin men, of whom she had said that he would be distinguished anywhere, with land or without it. Also, Thorbiorn, through his beautiful daughter Gudrid, was to be grandfather to the first-born white American: so there were notable issues hanging on the door-posts of contention and on Eric's honest impulsiveness for good or ill. However, they overrode him and he was driven to hide in outlying islands and inconvenient places, while his enemies hunted diligently to find and slay him.

Then our fugitive called to mind a ninety-year-old story of an unknown land over the western sea and determined to seek refuge

there. For one Gunnbiorn soon after the beginning of settlements in Iceland had found the rocky islets in the Greenland sea which long bore his name;¹ and had passed beyond them to full sight of a forbidding shore, on which he remained for a season. His account had not tempted any one thither in later years. That nameless region called for a man like Eric to open it, hardly for any other—a man homeless and endangered but inherently hopeful, at once astute and daring, and far from unbefriended.

Those who still stood by him helped Eric to a ship, which lay hidden in quiet places till he could slip away with a volunteer crew, quite suddenly, into the unknown.

For three years he was lost to the world,² three years devoted to an exploration so careful and thorough that, according to Rink's Danish Greenland (a "fascinating book" as Fiske has rightly called it) hardly anything has remained for later search unless in the absolutely ice-clad interior, the remote north or the nearly inaccessible east. Nansen also—and there can be no better authority—ranks his achievements as an explorer among the very greatest. Passing through the narrow water gates—hidden altogether from the eyes of Davis late in the sixteenth century—which break at intervals the Coast of Desolation, he followed deep and branching fiords into an interrupted belt of verdure and flowers, of low trees and shrubs and plentiful berries, of tumbling cascades and far off glacier-glimpses; and this he called Greenland, choosing it for the heart of his main settlement. Another area, somewhat like it, about two hundred and fifty miles up the shore, was penetrated and chosen, too, becoming the site of the lesser western settlement. The subsequent centuries have disclosed no improvement upon these, and he seems to have acquainted himself equally with the less valuable or utterly savage regions which he passed by. There is no doubt that he reached Davis Strait, very likely passing up beyond Disco, soon afterward well known as Bear Island (Biarney). He may well have stood out far enough from shore to see the other side. When the work was

¹For their disappearance see note on Ruysch's (1507) map of the world, Lelewel's Atlas. Also Voyages of the Cabots and Cortereals by H. P. Biggar, p. 60; also Major's Works; but Nansen dissents, believing they were on the Greenland coast.

²"This happened five hundred years before the rediscovery of America by Columbus and Cabot. I think this Norse exploration of Greenland a thousand years ago equals any modern polar exploration both as regards importance and as regards the way in which it was carried out." Nansen in Scribner's Mag., Mar. 1912. Article dated Nov. 26, 1911.

all done he brought back his astonishing report to the elder colony, calling for settlers to people this new Greenland. What he had found justified the name as to the region chiefly intended, but the native shrewdness and humor of the man come out in his announcement—presumably among friends—that by giving it a good name they would get settlers more easily.

All at once he had become a popular hero. The tidings went over Iceland, awakening an eager spirit of enterprise. Here was a new realm won for them by a man whom they had expelled. Outlawry was disregarded and died out, hardly needing a formal rescinding. One perfunctory duel for honor's sake ended the feud. We are told that Eric had the worst of it, and can see that he might feel able to afford such a settlement, having graver matters in hand. Perhaps he was beginning to feel the claims of a continent. Then a large fleet, for the time and country, set out under his leadership, losing eleven vessels by the way, although the major part won through and safely established themselves in their new home about the year 985. The center of this colony was at Eric's home, Brattahlid, near one of the branches of what is now known as Igalico inlet. Apparently he was the first judge as well as chief personage. Not far away, toward the other branch, the Cathedral of Gardar was built a hundred and forty years later. It still stands, though perhaps an early fifteenth century restoration, as the ruined "Kakortok church." In all that region Eskimo names have supplanted Norse, except a few added by Danes in the last two centuries. Yet from Greenland came the Lay of Atli and possibly Edda poems¹ and Dr. Nansen supposes that a special school of versification had its origin there.

No one who follows the career of Eric, as outlined by the often unsympathetic saga-men, will grudge him this hardly won triumph. Few characters, if any, are more clearly presented in history; few are stronger and more interesting. A sea-king who never marauded; a just man, careful of what was confided to him, yet insisting promptly on his rights at every cost; a conservative, who could turn explorer off hand with better results than the work of the very best; a deadly fighter who fought defensively only; a man of hospitality, cordiality, cheerfulness, who never complained except when his Christian wife turned against him for remaining a pagan.

He made the Norse Greenland, which stood as his monument for nearly five hundred years. He gave the name by which we know it

¹ G. Vigfusson: Prolegomena to the Sturlunga Saga, p. 191.

still. If Greenland be America, he was the first explorer of any part of America, so far as we know. He may have been the first white man to view the more immediate American shores. At any rate he gave to the world, and sent forth upon his ventures, the historic Leif who is first of record as making that discovery. He also aided in sending forth the expedition which bore Thorfinn Karlsefni and Gudrid to these shores, giving Gudrid in marriage from his house and seeing his son Thorvald sail off to death in their company.

6.—THE VOYAGES OF MADOC AND THE ZENO BROTHERS

A few early westward voyages on the Atlantic offer at first glance the hope of throwing light upon Wineland problems, but they really supply very little information. Nicholas of Lynn, whose work has been traced as far as possible by De Costa¹ and others, has left on various maps indications of theories derived from his northern explorations about the year 1360. He seems to have reached Iceland, making a quick passage and presumably going farther; but until his lost narrative "Inventio Fortunata" shall be found, who can tell where he went?

Madoc of Wales has been put forward intermittently for centuries with zeal as the first colonizer of America. Welsh Indians, by blood or language, were formerly (as was supposed) discovered by his advocates in Florida, Mexico, the Carolina mountains, the Hopi pueblos, and the Mandan villages on the Missouri. One man declared that he was greeted in Welsh in the lobby of a Washington hotel by an "Asquaw" chieftain of Virginia "wearing ostrich feathers."² Stephens's newly republished "Madoc" is a veritable museum of these futile oddities. There is no room for Welsh, recent or archaic, on our Indian linguistic map, and the world has grown incredulous about it. Welsh people might, however, have come and lost their language; and they might blend with the red men so as to be indistinguishable in their descendants. We suppose such a result, or extermination, to have occurred in the case of Sir Walter Raleigh's colony,³ the Norse Greenlanders and the Spanish expedition, going eastward, which vanished in the Llano Estacado. We know it was so in the case of the Spanish Chilians, overwhelmed

¹ B. F. De Costa: Arctic Exploration. Amer. Geogr. Soc. Bull., 1880, p. 163.

² Th. Stephens: Madoc (ed. 1893).

³ W. Strachey: The Historic of Travaile into Virginia. (See Powhatan's statement.)

and absorbed by the Araucanians. And one of the wildest tribes of the Peruvian mountains is said to be quite certainly in part of European descent (which does not show at all) as a result of a lost white city planted unluckily by a viceroy to overawe them. However, we have no proof of such experience in the case of Madoc's followers.

Across the ocean there is some little evidence for him; but either late or uncertain. That part of the History of Cambria attributed to Caradog of Llancarvan (died 1152) mentions Madoc in its last paragraph among "Prince Owen Gwynedd's many children by divers women." Certain abbeys brought the work down to the year 1270. A well known English translation of about 1559 by Humphrey Lloyd was afterward edited and extended by D. Powell with great pains, and published in 1584. Both of these modern writers made interpolations, which there was an honest attempt to distinguish by notes and markings; but they leave the reader uncertain as to the actual facts.

Thus the statement that "Madoc left the land and prepared certain ships and men and munition and sought adventures by seas, sailing west, leaving the coast of Ireland so far north that he came to lands unknown," may be due to some forgotten brother of a monastery; or to Lloyd the translator nearly five centuries afterward, as the next sentences undoubtedly are.

Furthermore, when we find Powell quoting from Gutyn Owens, an early writer, to the effect that Madoc left some of his people in the new country when he returned to Wales and that he afterward sailed to rejoin them with ten ships, it is baffling to learn from Stephens that close inquiry fails to supply any original and that the passage is not in the manuscript work to which it most often has been credited. Yet assuming that Powell read it in some lost book of Owens, and even that it be true, we still are not informed where Madoc went.

Stephens also winnowed and sifted a number of pre-Columbian allusions or supposed allusions to Madoc in Welsh poems; giving more accurate translations, which offer such unnautical substitutes as "walls" and "fierceness" for the sea-words relied upon. There remains only a small residuum, vaguely celebrating his taste for navigation. We may add Lloyd's reference to certain popular "fables" of Madoc current in the sixteenth century, but a specimen would be more valuable than the translator's easy disparagement.

Davies, quoted and followed by Stephens,¹ believed that Madoc died in Wales by the hand of an assassin before the year 1170, the

¹ Th. Stephens: Madoc (ed. 1893), p. 212; see also p. 210.

date usually alleged for his voyage. This is fortified by an ancient quotation or so and by a reminder that Giraldus Cambrensis, who missed very little which seemed noteworthy, was in that neighborhood within 18 years afterward and tells us nothing about Madoc's voyage—a consideration which one may appreciate without any Welsh scholarship. Moreover, this same observant Gerald explicitly blames the Welsh for their lack of interest in shipping. They seem to have had little to do with the ocean since Arthur's time, as compared with the Irish and Bretons. However, the growth of a legend of American colonization from the assassination of a Welsh prince is not conclusively made out nor easily thinkable.

It seems more likely that he sailed, at first on a westward course as stated, which, if continued far enough, might land him in Nova Scotia or on the shore of the Gulf of St. Lawrence. But Madoc of Wales would have no compass, though the Arabs had it, and the Spaniards through them;¹ and though the troubadour Guiot de Provins was to mention it only four years later; and Madoc had no particular aim that we know of, so that, either by accident or design, his helm may have shifted widely. Armorica, Madeira, and other possible landfalls have been suggested; but there is no evidence for any of them.

If the story of Madoc is baffling through its meagerness approaching a vacuum, the Zeno Brothers'² narrative is likewise baffling by its exuberance and confusion. Nicoló Zeno published the story at Venice in 1588, as his best restoration of a map and letters, which he had found when a boy among family documents and torn or otherwise damaged unthinkingly. His work seems mainly done in good faith and to celebrate the prowess of the earlier Zeni, with no thought of pitting them against Columbus; but he used divers maps and books to help him out and conjectured at random, and even wilfully decorated a little, as though to make amends for very despicable usage.³ Thus "Icaria" in the original—possibly Kerry or St. Kilda—suggests the myth of Daedalus, which forthwith comes headlong into the story. Again he must needs help out a fisherman's yarn of travel among Indians in America by a little recently acquired knowledge of Aztec temples and human sacrifices. There was also a great shifting of harbors and towns. His most conspicuous invention

¹ Th. Stephens: *Madoc*, p. 195.

² R. H. Major: *The Voyages of the Venetian Brothers Zeno*.

³ F. W. Lucas: *The Annals of the Voyages of the Brothers Zeno* (1895), pp. 8, 83, 99.

is Frisland, a huge island south of Iceland, identified by Mr. Lucas¹ with the Resland of Edrisi—apparently Estland or Shetland (some say Iceland); though Mr. Major thought Frisland the Faroe-islands, blended by misunderstanding into one and shifted to unfrequented seas, where it might be credible (see note 7, p. 177). In fact it took root there, to the confusion of explorers and cartographers for several centuries. Sigurdr Stefánsson makes it a very little one on his map; which bears the apologetic note:

“I do not know what island this may be unless the one that the Venetian found.”

In getting back to the original communication, we are further baffled by its unintended ingenuity of misunderstanding, a habit of prodigious exaggeration and a genius for transforming words. When we read that Zichmi, ruling in Frisland, made war against the King of Norway, it means, according to Major, that Earl Sinclair of the Orkneys had a skirmish with a forgotten claimant to a part of his territory. Later, a warm spring on an island of a Greenland fiord, beside which a monastery once stood, evolves a monastery and monk-ruled village on an active volcanic mountain with commercially profitable gardening, carried on by the aid of hot water pipes—an item borrowed, according to Lucas, from sixteenth century Norway or Iceland. You soon can measure the value of such narrative and make due allowance for its exaggerations. There is usually some germ of truth to be found and the Greenland part of their map has an accuracy in detail which appears to mark it as based on personal observation or information (see Major) that Europe could not supply, although even this argument in favor of the story has been undermined by Lucas and the discovery of some ancient maps.

It seems that an earlier Nicoló Zeno, being cast by chance on the coast of Frisland about 1390, was saved from the rude inhabitants by Zichmi, lord of the region, who took the Italian into his service. Nicoló participated in the wars then and afterward carried on by the Earl, and sent for his brother Antonio, who joined him in Frisland, took part in the Shetland Campaign, and wrote letters to their brother Carlo at home. A certain Faroese fisherman having brought back after a long absence a tale of strange adventures in unknown countries southwest of Greenland, Zichmi fitted out an expedition to seek them. This expedition, however, found only “Icaria,” Iceland, and Greenland, with some minor islands known and unknown. The brothers Nicoló and Antonio accompanied Zichmi, perhaps about

¹ *Op. cit.*, p. 105.

1400, and wrote a narrative of this voyage, which was recast by the younger Nicoló. It gives our last glimpse of civilized life in Greenland, if accepted as veritable. The monastery by the hot spring and a curious description of kayaks as in use among the people, may be taken hesitatingly as credentials. Lucas hardly makes out a case against them. The warm Greenland¹ spring thus utilized also occurs twice in Hans Egede's citations.

It would seem that the white and Eskimo races were then interchanging arts, and perhaps the racial blending had begun. Similarly, there is mention elsewhere² of a Norse visitor for two winters, beginning in 1385, who had two Eskimo servants. It was many years since Ivar Bardsen, then or afterward steward of the Bishop, accompanied, probably about 1337, an expedition of relief to the western settlement, threatened by the Eskimo—and found that colony devoid of human life. A few deserted cattle and nothing more remained as relics of the earliest of the Greenland mysteries. The preceding decade affords the curious evidence of an extant official receipt for the Greenland contribution of 1327 (in walrus tusks) to the expenses of a crusade.³ These facts and the 1347 voyage to Markland show that the Eastern settlement at least was alive and in touch with both continents. Through the second half of the fourteenth century we must suppose that the Eskimo were drawing nearer and gaining ground, especially after the return to Norway in or before 1364 of the relief expedition of 1355 under Paul Knutson.⁴ About 1379 there seems to have been another Eskimo attack, costing the colony 18 men. But probably peace reigned in 1400 and as late as 1409, when a young Icelander visiting Greenland was married at Gardar by the Bishop and even after 1410, when the last authentic voyage⁵ from Iceland to Greenland occurred.

About 1418 the storm broke on them, according to a papal letter of 1448, in the form of a fleet of heathen, devastation, captivity, and death. But the destruction was not complete and in 1448 the colony was getting together again. A dubious entry⁶ of 1484 mentions annual voyages until then from Bergen to Greenland. Another papal letter,⁷ about ten years afterward, announces the

¹ H. Egede: *A Description of Greenland*, pp. 20, 21.

² W. Thalbitzer: *The Eskimo Language*, p. 29.

³ H. J. Rink: *Danish Greenland*, ed. by R. Brown, p. 28.

⁴ G. Storm: *Studies on the Vineland Voyages*, 1899.

⁵ H. J. Rink: *Danish Greenland*, ed. by R. Brown, p. 29.

⁶ W. Thalbitzer: *The Eskimo Language*, p. 29.

⁷ J. E. Olson: *The Voyages of the Norsemen*. *Orig. Narr. Early Amer Hist.*, Vol. 1.

sailing of a new bishop, who never seems to have reached the colony or even Iceland. An effort was, however, made to reopen communications about 1492, but nothing came of it.¹ After that, there is nothing except the hints and rumors gathered by the loving care of Hans Egede,² while he was hoping against hope that some remnants might survive behind the ice-barrier of the eastern Greenland coast in deep fiords, which have since been explored by Lieutenant (later Commodore) Holm³ of the Danish navy and others, yielding nothing. Admittedly the most nearly authentic of these reports, as well as the most thrilling experience, was that of the sixteenth century Iceland Bishop, Amund of Skalholt, who was driven by rough weather so close to Heriulfsness that he heard, or thought he heard, the lost people driving home their cattle and sheep in the twilight.

Probably we shall never know just when the last flicker of civilized life died out of Norse Greenland; but it may well have been somewhere between the middle and the end of the fifteenth century. Darkness falls, and there is an end; but the uncertainty and the marked pathos of this chapter of old history makes any item very welcome, even if distorted (see note 8, p. 177).

Major's skill in clearing away the fogs from the adventures of the Zeni among the island clusters and in Greenland has naturally been less available for America. The fisherman who caused the memorable western expedition died before it started; but the regions called by them Estotiland and Drogeo appear on their map as roughly corresponding to Newfoundland and Nova Scotia. Kohl⁴ has suggested East-outland as a derivation of the name, with reference to the eastward protrusion of that great insular mass of land; but there seems a difficulty in accounting for the adoption of this English form. Lucas⁵ rather improbably derives Estotiland, by not very confident conjecture, from the beginning of an old motto. Beauvois⁶ has an interesting suggestion that Estotiland is a misreading of Escociland (Scotland), perhaps not clearly written in the original letter; the name having been transferred to America as Great Ireland had been long before, and as Nova Scotia and Cape Breton were also in later times. This seems probable.

¹ J. Fischer: *The Discoveries of the Northmen in America*, p. 51.

² H. Egede: *A Description of Greenland*, pp. 14-22.

³ G. Holm: *Explorations of the East Coast of Greenland*. *Meddelelser om Grönland*, vol. 9.

⁴ *The Discovery of Maine*, p. 105.

⁵ *Voyages of the Zeno Brothers*, before cited.

⁶ *La Découverte du Nouveau Monde par les Irlandais*, p. 90.

The informant averred that he had been driven thither by storms with the crew of a small fishing vessel; and was afterward sent with them southward by the chief of the country to a region called Drogeo or Drogio, on one map Droceo. Being captured by savages, he was transferred from tribe to tribe far southwestward, reaching a country of temples and sacrifices, until by good fortune he escaped and succeeded in making his way back to Estotiland (Escociland); thence crossing to Greenland and reaching home at last.

Drogio has also caused much speculation, the preferred theory being that it is native American more or less changed. But perhaps this name also had a European origin, Italian in source or transmission. On Mercator's map of 1595, we find the words *Drogio dit Cornu Gallia* (compare Cornouailles of Brittany) applied to Cape Breton island; which is too far removed from the mainland, but unmistakable in its distinctive form. There is no mistaking, either, his reference to the Breton horn protruding from northwestern France into the Atlantic, which gave its name, early in the sixteenth century, through its seafaring sons, to this other long, elevated northern cape or ness discovered in the new world. This was always the next land below Newfoundland; it was also lower in elevation, perhaps in part very much so, as fully half the island certainly is now. Possibly *deroga*, *derogare*, or *dirogare*, if carelessly treated, might evolve a Drogio fitting both meanings, if the Italian word may dispense with the moral implication of "derogatory." Mercator's identification, being but seven years later than the publication of the Zeno story, and, therefore, that of a geographer who could have consulted the publisher and author on any doubtful and important point, must be taken as more nearly authoritative than anything else which we have. Ortelius, about the same time, showed Drogio even farther from the mainland and with less fidelity to outline, but the intent is the same.

This seems a revulsion from the more frequent mapping of Cape Breton Island as integral with Nova Scotia, which was less literally true, yet nearer the actual fact; for the Gut of Canso has never been more than a water-thread, and there was nothing to prevent the continuous southwestern travel indicated by the story, with hardly appreciable addition of canoe-ferriage.

Dr. Fiske is at pains to present parallels to the tale of this castaway in the narratives of the romancing Ingram, and the more historic as well as more widely ranging Cabeza de Vaca. We might add Selim of Barbary, who appeared in colonial times on the wilderness border of Virginia, having been carried from New Orleans to the Shawnees

on the Ohio, and worked through the Indian country and the mountains, as related by Bishop Meade.¹ Nothing in the story of the Zeno-informant is more incredible than Ingram's² extravagances about the city of Norumbega, followed by other writers and perhaps developed from some real though temporary Penobscot Indian town. Yet the first part of the former offers us a civilized or nearly civilized Newfoundland nation, the middle is too general and easily invented to be quite convincing; and the southern part, nearer the end, is a meager and faint reflection of Spanish observations in Mexico.

Lucas, however, must be wrong in ascribing the whole story to the latter source, for the Estotiland and Drogiio portions have no Spanish earmarks and are placed too far north. On the other hand, Kohl in the Discovery of Maine is equally inadequate, finding only, as he thinks, the reflection of the general American knowledge of Greenland Norsemen; for these could have had no such illusions about their neighbor, Markland, then known for several centuries; and, on the other hand, they may be supposed quite ignorant of semi-civilized teocallis, temples, and human sacrifices. About all that could be obtained in Greenland for this little Zeno exposition of fourteenth century America was the existence of a timbered Newfoundland, its protrusion into the ocean, the fact that it was inhabited, the great cape below it, the sea between and behind, some notion of a lower coast peopled by savages, and some lingering tradition of a warmer and more fertile region lower still, and effectively guarded in like manner.

A faint shadow of corroboration may be found in Cormack's³ account of the surprising works of industry of the Beothuk in 1828 and what Cartwright⁴ has to tell us more than half a century earlier. There was surely something of the Norse indomitableness about a people who, after centuries of encompassment and continual hostility, could still refuse submission or even amicable relations, choosing destruction instead, and who inspired a terror that outlived them in their Micmac enemies and successors. When we read of their thirty miles and more of deer-fences in use when they were confined to a small area in the northwest of the island; of their stone causeways,

¹ Wm. Meade: *The Old Churches, Ministers and Families of Virginia*, vol. 1, p. 34.

² M. Lescarbot: *Nova Francia*. Erondelle's transl., p. 47. Also Champlain's *Voyages*, p. 46. Orig. Narr. Early Amer. Hist.

³ W. E. Cormack: *Journey in Search of the Red Indians in Newfoundland*; Edinb. Philos. Journ., vol. 6, 1829, p. 327.

⁴ Capt. Cartwright and his Journal; republished 1911; before cited.

notable food-preserving inventions, and ingenuity in boat-building and husbanding their few resources, it seems possible enough that about the year 1380 there may have been some Newfoundland palisaded town, rather more advanced than the Hochelaga which Cartier found and which was soon obliterated.

But this Italian literary curiosity of the Zeni is not such a thread of evidence as will bear any serious strain.

7.—ARE THERE NORSE RELICS IN AMERICA?

If Icelanders or Greenlanders reached our Atlantic shore, there will always be a possibility that some trace of their former presence may be found. Whether it amounts to probability must depend on the extent and character of that presence. There is a vast difference between permanent occupancy¹ by thousands of people, erecting stone houses and bridges, churches, and monasteries, in a region like southern Greenland, where for centuries there were no other inhabitants and the forces of nature tended toward preservation, and the hasty visits of exploring parties and wood-cutters, or even brief attempts at colonizing a bit of forest country, subject to invasion by savages, fire, and decay.

Inscriptions deeply graven might last even until now in dry and protected places. But why should there be inscriptions? Laing reports in his preface to *Heimskringla* that "few if any runic inscriptions of a date prior to the introduction of Christianity are found in Iceland," while Greenland, though then already occupied for 15 years, and for centuries afterward, has not yielded one. There is not even a letter, runic or Latin, or a character of any kind, on the standing cathedral walls of Gardar or anywhere within its compass, though repeated excavations have exhausted all the ground. Graah² noticed a tablet-like wall-stone with parallel lines on its inner face, which may have been prepared for such use, but the purpose was never carried out. There are perhaps half a dozen Greenland gravestone inscriptions of the conventional sort, in one alphabet or the other, beginning with the twelfth century; and far up Baffin Bay a miniature monument was found about 1824, bearing the names of men who had "cleared land" or performed some other operation there at a date near Whitsuntide in the year 1135, as some read it, though others put the year a century or two later, apparently either as a preemption entry or a record of exploring achievement. Nothing more than this in the way

¹ H. J. Rink: Danish Greenland.

² W. A. Graah: Narr. of an Expedition to the East Coast of Greenland, p. 40.

of inscriptions from Greenland's estimated population of ten thousand (Dr. Rink) with an organized life exceeding in duration that of English-speaking America from the beginning until now! Brathtahlid's doorway-lintel, perhaps of the year 995, still held its old position in the middle of the nineteenth century, but this mansion of Eric and the homes of his long dominant descendants have not favored us with one carven line or letter. Surely we must think that these people were not given to expressing themselves in that way.

But human opposition and eagerness were certain to discover supposed runes and confirmatory vestiges in America when attention was once directed to the subject. Rafn's voluminous *Antiquitates Americanæ* led the way with the Newport "tower" (since clearly shown to have been only Governor Arnold's windmill patterned on an older one in his former English home) and other equally random fancies. Longfellow embodied one of these speculations in a spirited ballad, immortalizing that squalid Fall River "skeleton in armor," whose copper breast-tablet and belt only antedated the ornaments found by Gosnold¹ in use on Cape Cod, with no hope at all of such honor.

The Dighton rock-pictures, with the central row of tallymarks, have been many times published since the first copying by Dr. Danforth in 1680. The present rate of obliteration would have wiped them quite away before now, if existing conditions had been established then or a little earlier.² Schoolcraft obtained an erudite Algonquian reading from his Ojibway experts, although the tally marks baffled them, and these he called runes, but afterward withdrew the exception. As quoted by Colonel Mallery,³ his final verdict was: "It is of purely Indian origin, and is executed in the peculiar symbolic character of the Keekeewin." These tally-like marks were still visible when I visited the rock in 1910, but might apparently have been made by any one who could carve the numeral 1 or an X.

On the west shore of Mt. Hope Bay, near that noted elevation, is a boulder marked on its top, as it now lies, with the outline of a boat, having the bow enlarged or uplifted, much as a white man's boat will appear when the stern sets low in the water. We saw several like instances on Taunton River soon after inspecting and tracing the one above mentioned. An Indian canoe hardly could be

¹J. Brereton: *A Briefe Relation of the Discoverie by Gosnold*. Bibliographer, 1902, p. 33. Also in *Old South Leaflets*.

²See Prof. Greenwood's letter of 1730. *Amer. Anthropol.*, 1908, p. 251.

³Fourth Ann. Rep. Bur. Amer. Ethnol. (1882-1883).

made to look like that. It is fairly drawn in Bacon's Narragansett Bay, Miller's Wampanoags of Rhode Island, and Higginson's Larger History of America; and a duplicate of a copy made by Mr. Bacon in 1900 shows the other characters as published; but some of them are gone from the stone and all the others have been damaged. Only the boat remains unhurt, though shallow. Early settlers are said to have been acquainted with this rock when it was in the field above the low cliff or bank, near the base of which it now lies. It was lost sight of about the middle of the nineteenth century, but afterward found again, having most likely slipped down into the reach of the tide. Prof. Diman, when an undergraduate, is said to have mentioned it in the "Bristol Phoenix" about 1846, between the time of its loss and its rediscovery. Its characters have a more alphabetic look than those of the Dighton rock and may mean either something or nothing. It must not be forgotten that Indians often depict objects on rocks in idleness, just as any of us may carve a bit of wood or scrawl careless figures and characters on a newspaper margin. Such work is sometimes done as an exhibition of skill before others; and characters not obviously pictorial may be conventionalized outlines or random grooves and scratches, not necessarily even records of any fact, still less symbolic. Of course it is not intended to deny that pictorial records, such as the "winter counts," have been made and preserved by Indians, nor that symbolic figures are used in the ritual of their priests; but there can be no doubt that the tendency to find something esoteric or at least very meaningful in every chance bit of native rock-scratching has been a delusion and a snare.

The proximity of the boulder to Mount Hope seems to mark this queer relic as almost certainly Wampanoag work; and the same may be said with less confidence of a chain of deeply incised recesses and channels in the landward face of another boulder found by Mr. David Hutcheson¹ just off shore at high tide (bare at low tide) in a small cove of Portsmouth Bay, Aquidneck, across the fields from the railway station. Several other inscriptions, plainly Indian work, are figured at the end of the *Antiquitates Americanæ* as formerly existent at this point and at Tiverton on the other side of the strait known as Sakonnet River. They seem to have since disappeared and call for no especial description.

No doubt the Wampanoags, Narragansets, or their more eastern neighbors of like stock, are responsible for the Dighton Rock cur-

¹ Charles Rau's monograph on cup stones illustrates Algonquian specimens of similarly connected pattern, the nearest being at Niantic in western Connecticut.

iosity-shop of figures, not necessarily the result of one hand or one period, but these are now fast lapsing into invisibility. There is something trivial and childish in most Indian pictorial work and this Taunton River contribution seems a rather aggravated case. It could emanate only from an infantile rudimentary people. To charge it or anything like it on those splendid Icelanders whose saga-literature remains a wonder of the world seems sufficiently absurd.

One objection, sometimes urged overhastily, requires, however, a little qualification. It has been said that no rock inscription or pictograph could last so long on our Atlantic coast. The present rate of wearing away by tide-water would ensure obliteration no doubt in much less than the nine hundred years between Thorfinn's time and our own, but that rate depends on present conditions, which did not obtain when the pictographs were out of reach of the tide, as they must have been at first and long afterward. This, of course, does not establish nine hundred years of life for them, but only that nine hundred years of life may not be impossible. In 1700, though then partly tide-washed, they were still "deeply engraved" according to Cotton Mather.¹

On Cape Cod, not far away, some forgotten hearthstones have been dug up as Norse witnesses; likewise a copper plate averred by E. N. Horsford² to bear "the legend of Kialarness." They have been almost restored to oblivion. The same must be said of like unconvincing evidences occasionally reported from various points around that bay.

The Charles River Valley near Boston is a region more zealously championed; especially in the Norumbega pamphlets of E. N. Horsford,³ whose tablet on his pretty "Tower of Norumbega" near Roberts station may be styled a new birth of history as the facts ought to have been. But such matters can hardly be settled in that way. We are given positively the dimensions and industries of Wineland as a nation, the name and site of its capital city, the exact part taken by the several leading explorers and founders, and a variety of miscellaneous information, eminently desirable if true, and at all events entertaining. In tracing the sources of the various items it is regretted that this learned and estimable investigator was not more thorough in securing basic knowledge for his conclusions.

¹ Quoted in E. M. Bacon's "Narragansett Bay".

² E. N. Horsford: *The Landfall of Leif*, p. 31.

³ *The Defences of Norumbega, The Landfall of Leif, The Discovery of the Ancient City, The Problem of the Northmen*, etc.

The "defences of Norumbega" about the base of this "tower" resolve themselves into a few roughly aligned rocks and a lower dyke of rifle-pit pattern following the curve of the hill, wherein a few dozen Indians or as many English colonists might have held off an enemy behind palisades. That they could have anything to do with the "city" and "quays" six miles below them is by no means clear. They seem a curiously futile protection, the place being accessible on so many other sides. Why must an enemy be supposed to follow the river? And why should the little fort be situated so far from base?

At Watertown (the Norumbega of Horsford) there are indeed the disordered stones of what may have been an effective rough dam before the present wooden one was constructed. The shores also exhibit embankments of sand, in which Horsford thought he discerned wharves, quays, and divers other appurtenances of a commercial waterside. One may safely say that they are man-made and not recent, but beyond this there is no safe road. The dam, according to the investigator, was to facilitate the floating of mausur wood for collection and export. Searching farther, he thought he found like vestiges in the Merrimack and other rivers of eastern Massachusetts; whence he inferred a thriving industry and a large Norse population, widely spread. It cannot be pretended that he has adequately accounted for its disappearance, with the whole inevitable retinue of domestic animals. This and like facts might surely have been given a better explanation, easy to find; for the Indians themselves were accustomed to dam and dyke streams, often of considerable size, as a part of their wier-construction, which was an important matter with them, since fisheries, especially in spring, were their most reliable source of abundant food supply along the Atlantic. It is of record that the Indians taught somewhat of that art to the early Virginian colonists, and their skill and industry in this line excited surprise. The few surviving Nanticoke of Delaware, in fact, have told me that an old dam and a ruined fish-trap of their ancestors yet remain visible on Indian River, and I have been shown a mound (as of the same origin) which would compare favorably for size with those I have inspected in Minnesota. The New England dams discovered by Prof. Horsford were probably also Algonquian and for fishing purposes, with no implication of white visitors or early lumbering. It is not very remarkable that their remains should be found above Boston on the Charles River as well as below Lewes, near Rehoboth Bay.

¹ Horsford: *The Defences of Norumbega*, pp. 10, 31.

Other structure-relics of the Charles River neighborhood, confidently identified by Horsford as marking the house-sites of Leif and Thorfinn, "a Norse path,"¹ duly photographed and published, and some stone walls and foundations credited with unfamiliar character are at least white man's work. An attempt has been made by the Horsfords and some of their adherents to fasten these works on Norse white men, through a series of excavations on abandoned Icelandic homesites made by a Scandinavian scholar (which are in themselves very interesting), but nothing has been established in that way affecting the question. Many simple homes have been erected, abandoned, and forgotten in all the older parts of our country, for Anglo-Saxon America is no longer new; and such remains do not usually differ decisively among related peoples.

The very land where this is written (in the hill country above the city of Washington) bears such traces of the past in different places and of different periods. It would be almost as easy to work out a more southern Leif's-booth and Norumbega above the Potomac wild rice and amid plentiful wild grape-vines, in accord with a "rune-stone"² found at the Great Falls ten or twelve miles up stream, if we may believe a sensational announcement in a newspaper of Washington city (1867). It was no doubt a wild fiction, but honored by a serious Danish refutation and a note by Dr. De Costa, correcting some errors and substituting others.

Finally, the Superintendent of the U. S. Coast and Geodetic Survey writes that the oldest chart of Boston Harbor accessible to him, made for the British government in the latter part of the eighteenth century, shows in the channel leading to the Back Bay a ruling depth of two fathoms. The flats of that bay have no depth-figures, but were not necessarily quite bare at low tide, for those of Dorchester similarly shown have a four-foot depth marked on them. He infers that there could have been only a "few feet" of depth on the Back Bay flats except when the tide came in. By "few" we must understand no doubt something like the four feet of Dorchester flats. It would have required a light draft "fleet" to make itself comfortable there in General Washington's time. At the date of Champlain's voyage (1660)³ there was naturally no bay worth considering. He explored the neighborhood and almost certainly anchored in Boston

¹ Horsford: *The Landfall of Leif* (frontispiece). Also Cornelia Horsford: *Vinland and Its Ruins*. (Appendix by Gudmundson and Erlendson.)

² F. Boggild: *Runic Inscription at the Great Falls of the Potomac*. *Historical Magazine*, March 1869.

³ *Voyages of Champlain*. *Original Narratives of Early American History*, p. 67.

Harbor before passing on to Plymouth. Charles River impressed him, for he called it "very broad," named it ineffectually the River du Guast and speculated as to whether it rose toward the "Iroquois," but with all his eagerness as an observer and pains as a recorder he has left us no sort of indication of the existence of any Back Bay. What then could there have been for Verrazano in 1523, much less for Thorfinn five hundred years earlier, in view of the fact that this part of the coast has been sinking for many centuries?

The unknown graves of Thorbrand and Thorvald, abandoned in a wild land, must always be themes of poetic interest—"the graves that the thicket covers, the graves that the rain bedews." Miss Horsford¹ hoped she had found the former, and if this indeed were only so!

A seaboard point near Ipswich has some stonework locally attributed to Norseman as Dr. Fewkes informs me.

A more positive claim has been put forward by a New Hampshire judge in the latter case, in the Boston Journal, quoted by the Philadelphia Times of July 27, 1902, as follows:

A certain field on the narrow marsh and beach on the main road up town [Hampton] contains the rock on which are cut the three crosses designating the grave where was buried Thorvald Ericsson 1004. The rock is a large granite stone lying in the earth, its face near the top of the ground with the crosses cut thereon and other marks cut by the hand of man with a stone chisel and not by any owner. That field came into possession of the author's ancestors 250 years ago.

Even so, there are 650 earlier years to be accounted for, years of absolute Indian dominance; and who so likely as an Indian to use a stone tool in such graving? The cross, too, has been a favorite symbol of all primitive religions from time immemorial. But, if we must give it a Christian significance, how many different kinds of Latin Catholics ranged this shore before and after the very numerous early sixteenth century Basque, and Breton fishermen! There were the expeditions of Gomez, Fagundes, and Verrazano, the Spanish searchers after the lost De Soto, the colonizing De Monts and Champlain, Jesuit priests with their dusky flocks raiding or exploring, adventurous noblemen lapsing out of French civilization after the fashion of the Baron of Castine! The list might be increased and the marking of a cross would be almost automatic on the part of any of these gentry. So the judge's assurance, giving it full face value, does not seem to take us very far toward certainty about the interment of Thorvald son of Eric so many centuries before.

¹ Cornelia Horsford: *The Graves of the Norsemen*, pp. 20, 40. (Bound with Leif's House in Vinland.)

On the Maine sea-coast even the kitchen-midden-like oyster-shell-heaps are turned to account as Norse vestiges. "There are three distinct strata," the lowest representing cannibalistic savagery, the second, ordinary Indian occupancy. A railway folder says of the highest: "Prof. Putnam claims this to be of Norse origin"; but it also says that the Norse colonies in Greenland "about the 8th century supported 20 bishops" and that "the Phenicians are the legendary ancestors of these Irish Druids." Rock inscriptions on Monhegan Island and elsewhere are attributed to Phenicians or Norsemen, according to taste and individual sense of probability. The Monhegan inscription,¹ discovered in the fifties of the nineteenth century, has been "interpreted" as giving the age of a certain chieftain, and one Canadian theorist even identified it as the work of Turanians not long over from Japan, who left similar messages in Michigan on the way. A "rune-stone" has also been found at Ellsworth and a double-edged dagger, "the exact likeness of one in Du Chaillu's Viking Age," in a cellar near Castine. Pemaquid² discloses pavements and house foundations, and similar vestiges as well as Algonquian inscriptions are scattered up and down the coast and along the rivers. They may be mysterious enough to be Icelandic, but no positive proof takes any of these relics back of the early Breton visitors or the first French and English attempts at colonization.

In the Algonquian myths of Maine and the British provinces, Leland³ believes that he distinguishes echoes of the Eddas, proving Norse intercourse, but these do not impress every ear. Moreover Leif came as a missionary royally commissioned to spread the Christian faith; and Thorfinn and Gudrid, with most of their followers, were in the first flush of conversion. After her return to Iceland Gudrid was considered nearly as a saint. Besides, these stories have a distinctly aboriginal air. One really cannot discern the contrast which Leland insists on between their quality and construction and those of the Iroquois and Ojibway wonder tales. Of course there are some plots and mythical explanations which grow the world over out of certain human complications or insistent natural phenomena. It is not surprising that a Passamaquoddy Indian and an early Norseman should hit on similar impersonations of cold and

¹ Said to be copied in *Mémoires de la Société Royale des Antiquaires du Nord*, May 14 1859.

² J. H. Cartland: *Ten Years at Pemaquid*, pp. 94-103.

³ C. G. Leland: *The Algonquin Legends of New England*; also his *The Edda Among the Algonquin Indians*. *Atlan* tonthly, Aug. 1889, p. 223.

hunger, of storm and electrical discharges, or weave simple dramas of war and home life in more or less likeness to each other. The chain of such evidence is not strong enough to hold.

Lacrosse, the national game of Canada, has also been claimed by Hertzberg and Nansen¹ as a Scandinavian contribution, but Mooney, who is better authority as to aboriginal idiosyncracies and probabilities, tells me that it is distinctively Indian. Nor can one easily believe in such an acquisition reaching the southern tribes so quickly in the conditions then probably prevailing. The Eskimo game reported by Egede seems a strained parallel and a poor partial coincidence. Giving the Norwegian game the benefit of all doubt as to substantial identity with lacrosse, we must not forget how cat's-cradle, that very artificial sport of ingenuity, occurs from of old in Britain and Polynesia (see Porter's Journal) and how even the most surprising expedients and preposterous customs have apparently been reinvented repeatedly in remote parts of the world.

One would be inclined to consider more seriously the double-headed axe and the gouge, both peculiar to Scandinavia and north-eastern America, which were exhibited by Holmes, December 27, 1911, before the American Association for the Advancement of Science, but it may be best to imitate his caution in drawing no inferences. Such topics tempt the fancy and their accumulation cannot quite fail to leave some impress. But they prove nothing.

Next beyond the State of Maine, and at the entrance to the broad-spread, lovely Passamaquoddy or St. Croix Bay, lies Grand Manan, theoretically one of the most hopeful, or least hopeless, fields for research, spreading obliquely north-northeast and south-southwest in the mouth of the great Bay of Fundy. Thus far, no trace of anything earlier than the American Revolution (and not unmistakably Indian) seems to have been found on that island, unless it be an anchor greatly reduced by long rust and ocean wear, and attributed by some to Champlain, though without any obvious reason. Doubtless many other Frenchmen anchored there in olden times, and Mr. McIntosh of the Natural History Museum at St. John, New Brunswick, assures me that French anchors are often found in various parts of the province. Since nothing that can be identified remains of Champlain on or near Grand Manan, it is the less remarkable that we should find no trace of Thorfinn's party, who landed, if at all, 600 years earlier. Such traces may, however, be hidden there, for the northwestern side of the island presents at least 20 miles of wilder-

¹The Norsemen in America. *Geogr. Journ.*, vol. 38, p. 574; also *In Northern Mists*, vol. 2, pp. 38-41.

ness, behind precipices, towering several hundred feet above the sea, and its thorough archeological exploration is an affair of the future.

On the mainland of New Brunswick a curious medallion-like stone has been found near the road between St. Andrews and St. John, below a cliff of similar material and beside Lake Utopia, a near neighbor of the Passamaquoddy region. Its dimensions are considerable, nearly two feet by more than a foot and a half, and it bears a profile face, head, and neck in outline, shown in a drawing accompanying a paper by J. Allen Jack.¹ He believed it to be Indian; but Mr. McIntosh thinks not. It seems to be something of a mystery, although no one has ascribed it to the Norsemen.

Over the Bay of Fundy, at Yarmouth, Nova Scotia, are two rocks with strange markings; one of these "inscriptions" being sometimes translated "Harko's son addressed the men," though this is also credited to Nature's handiwork. I must agree with the Harko party to the extent of counter-scepticism concerning the probability of long mistaking rock-veins and the like for human letters. In that region they do sometimes simulate character outlines and graven symbols in a curious way, nevertheless almost anyone would distinguish the truth at a second glance, if not straining for an argument. But why should sensible Norsemen take so much pains to record such a trivial incident? More likely it is the work of Micmac Indians, or someone else equally removed from the Icelanders. Certainly it has not been accepted by most investigators. There are Micmac rock-pictures not far away at Fairy Lake. Also there are living Micmac above Digby, nearer still.

Rumors of the Norsemen linger about the Nova Scotia seaboard. Of one isle we are quaintly told by a guide-book that Red Eric loved to make it his special haunt—notwithstanding the plain testimony of the saga that he was crippled by an accident in attempting to embark with Thorstein, and took this for a warning to explore no farther, so remained quietly in Greenland during the Wineland voyages. There seems to be nothing tangible connecting any Norsemen with the spot, which may not have been above water in their time.

Newfoundland and the Gulf of St. Lawrence coast, though really promising on general principles, have yielded, I believe, only some early Basque and English foundations and relics, no longer claimed as Norse by anyone. Just below, southwestward at Miramichi on the

¹ J. Allen Jack: A Sculptured Stone Found in St. George, New Brunswick. Smithsonian Rep., 1881, p. 665.

shore of the mild Acadian Bay, a few slippery coincidences in names, customs, etc., evidence to which ethnologists now attach little value, have been gathered by Bishop Howley¹ and put forward with a certain confidence in his *Vinland Vindicated*.

Labrador needs thorough searching. So far, it offers only certain small stone structures,² perhaps of native origin, and an Eskimo legend, quoted by Packard³ from an earlier writer, concerning a race of invulnerable giants, roundly identified with mail-clad Norseman by these white recorders. But Chambers, finding the same myth among the Iroquois, fastens it in *The Maid at Arms* on wandering Spaniards of De Soto's time. Yet further, we learn that other tribes know these tall, hard-shelled warriors in quarters beyond the reach of mailed Europeans. Perhaps the Norse Giants should be set aside for the present as fancy-figures; it is so natural for primitive ill-defended people to thrill over such nightmares, which may issue out of the dark at any moment and do what they will with you, themselves unharmed. Something of it, indeed, is in or behind every well created ghost-story.

The deep indentation of Hudson Bay offers perhaps the only remaining field—hardly a hopeful one. The Kensington rune stone⁴ fills it, having a legend all its own, and is now urged with determination by certain Minnesota advocates, geographical and linguistic, who certainly claim consideration. This relic was found in the interior of Minnesota by a Swedish farmer in a Swedish settlement, and it seems to be admitted that the inscription itself has a Swedish cast. These facts, added to the remoteness of the location and the obstacles in the way, surely raise a presumption against it. There is an attempt to overcome this objection by the statement that the stone was under and among the roots of a tree, estimated by observers to be forty years old, which would carry it well beyond the period of the modern Swedes in that locality. But any rapidly-growing tree, such as our tulip tree, or most other indigenous "poplars," will make a greater growth than Mr. Holand's several statements call for in much less time than that. A tulip tree near my home which had not yet sprung up from the seed, in August, 1897, showed in September, 1910, thirty-eight inches of measured circum-

¹ M. F. Howley: *Vinland Vindicated*. Trans. Royal Soc. Can., 1898; see also E. Beauvois: *Les Dernières Vestiges du Christianisme*.

² W. G. Gosling: *Labrador*, chap. 1, 1910.

³ Alpheus S. Packard: *The Labrador Coast*, p. 220.

⁴ H. R. Holand: *The Kensington Rune Stone*. *Records of the Past*, Jan.-Feb. 1910.

ference three feet above the ground. The story told by the inscription is improbable nearly to the point of impossibility. The runes are discredited by the verdicts of Messrs Dieserud and Flom and other competent philologists. The well-known but quite unauthentic map of J. Toulmin Smith, which took Thorfinn by sheer guesswork to Baffin Land before his departure southward, is offered us again as a background for the later travels of the alleged Minnesota explorers by the Hudson Bay route. Biornslund parades there below Hvitramannaland, Gudleif's course to and from it being traced as conscientiously as though something could be known, or reasonably conjectured, about it or him. And little but darkening of counsel can come from such a suggestion as that the forestland may be northward of the region of stony desolation. We find no sound reason for supposing that any Norsemen ever were in the neighborhood where the stone was found before the nineteenth century.

It seems, then, that so far as investigation has gone, there is not a single known record or relic of Wineland, Markland, Helluland, or any Norse or Icelandic voyage of discovery, extant at this time on American soil, which may be relied on with any confidence. There are inscriptions, but apparently Indians made them all except the freakish work of white men in our own time; there are games, traditional stories, musical compositions, weapons, utensils, remnants of rude architecture, and residua of past engineering work, but no link necessarily connects them with the period of Icelandic exploration or with the Norse race. One and all they may perfectly well be of some other origin—Indian, Basque, Breton, Norman, Dutch, Portuguese, French, Spanish, or English. Too many natives were on the ground, and too many different European peoples, who were not Scandinavians, came here between 1497 and 1620 for us to accept anything as belonging to or left by a Norse Wineland, without unimpeachable proof.

8.—CERTAIN COLLATERAL ITEMS OF EVIDENCE

Greenland and Wineland were coupled together from the beginning in popular mention. Thus we have seen Ari the Wise, between the years 1100 and 1114, referring to the hypothetical natives of the former and the well known natives of the latter in one sentence. About 1400 Ordericus Vitalis referred to "Finland" with Greenland, apparently meaning Vinland or Wineland, since he does not seem to have had the Baltic Finland in mind. Between these, in 1121, according to Icelandic annals, Eric Gnupson, then Bishop of Green-

land, sailed from that country to seek Wineland, and vanished utterly. At least there is no later mention of him, and two years afterward his flock, who should know best, are found demanding a new shepherd. The latter was accordingly consecrated (in 1124) in the person of Bishop Arnold. Bishop Eric remains a lost heroic figure of history. It is true that the Danish poet Lyschander of 1608, and Professor Horsford in 1889, agree concerning his later prosperity in the isolated Wineland diocese; but we do not know of anything behind their assertions more substantial than a cheery hopefulness. Most writers have supposed with Dr. Storm that he was on a missionary errand (though Dr. Nansen doubts this also), and that he died in trying to make the latter part of his title represent something real. However, nothing is positively known, except his passage from Iceland to Greenland in 1112, followed by his attempt, nine years later, to reach Wineland also.

Whosoever will is of course at liberty to believe that "Eric Gnupson" was really the "first bishop" of Wineland, or with the poet that:

Eric of Greenland did the deed;
He carried to Wineland both folk and creed;
Which are there e'en now surviving.

We see, full fledged, in these verses of the early seventeenth century the conception of a settled, organized, self-supporting Wineland, a thriving offshoot, which was to Greenland what we know Greenland to have been to Iceland or Iceland to Norway. The picture has its fascinations and seems to dominate many minds even yet. Nothing but proof is lacking, or at least some little glimmer of evidence in its favor. The real Wineland was a wild land, visited once by accident for a few weeks only; and once more intentionally, not long afterward, with three years' exploration and temporary abode at two points, by a party of colonists who abandoned the attempt and returned to Greenland and Iceland. That is all that we find positively recorded until 1347. This distinction, if clearly grasped, would have saved some misunderstanding and wasted work.

We have shown already that circumstances about the year 1000 favored and almost ensured the discovery of America from Greenland; also that the house of Eric Raudi would naturally take a leading part in the work. There is evidence that this happened; but as in most matters of remote history, the evidence is not absolutely first-hand. We must be content with copies of copies. The world, with due caution and corrections, rightly accepts and believes many things

without that special kind of proof required by the technical restrictions and arbitrary rules of convenience of English-speaking courts.

Apart from the chief narratives—the Hauksbook Saga of Thorfinn Karlsefni, the closely parallel Saga of Eric the Red, and the two chapters relating to Greenland and Wineland in the Flateybook Saga of Olaf Tryggvason—there are divers brief statements of very old writers, which corroborate and check them.

Our first witness is the prebendary, Adam of Bremen, not a Scandinavian but a well known German geographical author and official clergyman, who visited the court of Denmark about 1069, when he might still converse there with men who had met Leif or Thorfinn or some of their following and heard the story from their own lips. His "Description of the Northern Islands" was probably completed in Latin in 1076, undoubtedly not much later. In the sixteenth century there were at least six manuscript copies extant,¹ one or more being probably in southern Germany. Two such copies, written out in the thirteenth century, are now in Copenhagen and Vienna. The book was first published in print in 1585. Its authenticity is undoubted.

Reporting a conversation with the Danish King, it says:

Moreover he spoke of an island in that ocean, which is called Wineland, for the reason that vines grow wild there, which yield the best of wine. Moreover, that grain unsown grows there abundantly is not a fabulous fancy, but from the accounts of the Danes we know it to be a fact.²

Then he proceeds to tell of the "insupportable ice," and gloom of uninhabitable regions beyond, ending the passage with a moving discourse on the perils of the northern seas. Here we seem to have some tradition of Helluland with its savage surroundings.

The name Wineland is superfluous to identify the more southern and more favored region, in view of the wild grain which is mentioned, and the wild grapes capable of making good wine. The valuable monograph of Dr. Jenks³ on The Wild Rice Gatherers of the Northwest plainly discloses what a staff of life the *Zizania* still is to thousands of Indians. Many of the slow rivers of our Atlantic slope abound in it no less than the smaller glacial lakes. As to the wild vintage grapes, Lescarbot⁴ who was of those next making their acquaintance along this shore, vaunts wine as God's best gift to men,

¹G. Storm: Studies on the Vineland Voyages. Mémoires Société Royale des Antiquaires du Nord, 1888; also separate 1889.

²Translation in Reeves's "The Finding of Wineland the Good," chap. 6, p. 92.

³Ninth Ann. Rep. Bureau Amer. Ethnol., p. 1018.

⁴Nova Francia. Erondelle's transl., p. 97.

excepting only bread. Those large grapes are here yet and still wild, ranging above the middle of New England along the coast; their abundance then is plentifully attested and beyond all doubting.

Quite recently we have been invited to find a sufficient explanation of Adam's words in his credulity which resembled that of many other old writers, in the possibility that he might have read or heard of a statement by Isidore¹ of Seville attributing wild grapes, *messis* (perhaps grain) and vegetables to the ridges of the Canaries; in the fact that some ancient Irish sea-stories mention grape islands—as well as apple islands and other delectable places—and that he might have heard of them; and in the etymological, mythical, and every way mysterious relation of the unusual verbal form which we translate Wineland the Good (perhaps more adequately the Blessed) to the Isles of the Blest, the Fortunate Isles, the Irish Isles of the Undying and the fairy isles and hills of Scandinavia. But as Adam of Bremen adds no word, magical or otherwise, to plain Wineland—nor, for that matter, is any word added by the saga—we need not linger over the final point.

But is it not curious that Adam himself gives us no hint of these classical, Irish, and north European sources; that the next European visitors, Verrazano and Cartier, Strachey and Brereton, Champlain and Lescarbot, are equally reticent in this regard, and equally positive about the grapes; that the European writers who followed Adam of Bremen used his material freely but abstained from this particular statement as though to save their credit. Fearing this, he had taken pains to protest in advance that it was "not a fabulous fancy"; but the asseveration evidently was distrusted.

It may be objected that the sixteenth and seventeenth century Europeans had nothing to say about the wild grain, but Cartier's² "wild grain like rye" on the southern shore of the Gulf of St. Lawrence can be nothing but wild rice plainly distinguished as it is by him from the cultivated maize which he met soon afterward as an article of diet and called "millet as large as peas," even after he had seen it growing at Hochelaga. Neither he nor any other European would consider the wild rice after making the acquaintance of this greater cultivated Indian corn, which had nearly eclipsed its rival even among the natives. But in its absence the former was highly important to all. In our present corn belt, even wheat holds its ground beside maize almost wholly by alternation; but there

¹ Nansen: In *Northern Mists*, vol. 1, p. 345, and other passages.

² *The Voyages of Cartier*. Orig. Narr. Early Amer. Hist.

could be no alternation between maize and wild rice, for they require different conditions of moisture. So the latter had become only an occasional variation of diet in Virginia, as Strachey seems to say, perhaps not being used at all farther northward; and the maize fields flourished. The French and English explorers gave prompt heed to them, and the first settlers who followed were kept alive by their yield. At an earlier time, the wild rice-patches would have been their only reliance—an effectual one if the crop were rightly watched and harvested.

But this would be a more impressive gift of nature to Icelanders; who brought no grain with them, raised none at home, and rarely before had enjoyed the prospect of bread for their tables; yet who knew both wheat and grapes well enough from their trading voyages to Ireland, England, and France, and from other experiences abroad. It is incredible that Leif or Thorfinn should need any explanation of the ordinary kinds of grain or of wine.

Adam names no Vineland explorers; perhaps he did not hear of them nor care for them. To him they would be only obscure citizens of a rude northern republic; and his chief informant, King Sweyn, may not have felt any greater concern in the matter, though it would appear that some of his own subjects were thought to have visited the new region.

With Ari Frode (the Wise), next in order, the case was radically different. Names and historic items, exactly given, were of prime importance to this every way remarkable man. He had set himself to tell in detail the story of the beginnings of Iceland, omitting nothing important which concerned any notable family of any neighborhood; a great national service never before undertaken anywhere; and he carried it through admirably. It is hardly exaggeration to call him the father of conscientious modern history. At least he began about 1100 the glorious prose literature of Iceland by a succession of investigations and records which the world has found invaluable. Born in 1067 and dying in 1148, he filled a long life with this excellent work.

It was his habit to learn, when he could, from the very men who had taken part in the events related, or, this being impossible, from those who had heard the story in that way, or to use the next best authority that was attainable. Thorkel Gellisson, his uncle, is thus quoted by him as having contributed certain Greenland items, derived at first hand from one of the companions of Eric the Red. Other informants were the foster son of Hall of the Side¹ and the

¹G. Vigfusson: *Prolegomena of Sturlunga Saga*, p. 28.

daughter of Snorri the Priest, two leading early Icelandic chieftains. Vigfusson mentions six others in his masterly preface to the *Sturlunga Saga*. With this tendency and his opportunities it is nearly certain that Ari the Wise often heard the Wineland narrative in all its forms from the descendants of Gudrid, for example Bishop Thorlac Runolfsson, whom he undoubtedly knew.

There is no question that Ari wrote the *Islendingabók*, which survives in a later abridged version or *Libellus* also by his hand. The *Landnamabók* is probably in great part his too, excepting the entries of the eastern settlements and certain later additions, carrying the story down beyond his time, though his share in it has been double. He perhaps also began the long series of historic sagas¹ as one of the authors of the *Kristni-Saga* and the *Konungabók*, narrating respectively the conversion of the island and the deeds of Norwegian kings.

In each of these four books Wineland is mentioned; always as though readers would naturally be familiar with this item of history and geography. Once, being better known, it defines the supposed location of Great Ireland; and again, by a rather loose analogy, contributes its *Skraelings* to identify the as yet unseen inhabitants of Greenland, who had left some savage debris behind them—broken boats, discarded tools, and empty hovels. The *Landnamabók* has also a brief reference to “*Karlsefni* who found Wineland the Good, Snorri’s father”—every one plainly being supposed to know all about these personages.

The *Kristni-Saga* says of King Olaf Tryggvason:

He sent Leif to Greenland to proclaim the faith there. On his voyage Leif found Wineland the Good; he also found men on a wreck at sea, therefore he was called Leif the Lucky.

The *Konungabók* passage is similar:

Leif, a son of Eric the Red, passed the same winter in good repute with King Olaf and accepted Christianity. And that summer, when Gizur went to Iceland, King Olaf sent Leif to Greenland, to proclaim Christianity there. He sailed that summer to Greenland. He found men on a wreck at sea and succoured them. Then also he found Wineland the Good and arrived at Greenland in the autumn. He took with him thither a priest and other spiritual teachers and went to Brattahlid to make his home with his father Eric. People afterward called him Leif the Lucky. But his father Eric said that one account should balance the other, that Leif had rescued the ship’s crew and this that he had brought the trickster to Greenland. This was the priest.

The vellum copy of this book, known as *Frisbók*, may be, according to Mr. Reeves, the oldest extant manuscript mentioning Wineland.

¹Vigfusson and Powell: *Origines Islandicæ*.

There are references to the region and events which happened there in other ancient narratives which have never been even partly ascribed to Ari. Thus, to much the same effect, proceeds "The Longer Saga of Olaf Tryggvason," which, by the way, is not the one in the Flateybook:

King Olaf then sent Leif to Greenland to proclaim Christianity there. The King sent a priest and other holy men with him to baptize the people and to instruct them in the true faith. Leif sailed to Greenland that summer and rescued at sea the men of a ship's crew who were in great peril and lay upon the shattered wreckage of a ship; and on the same voyage he found Wineland the Good and at the end of the summer arrived in Greenland.

This passage ends like that of the *Konungabók*.

Also the very old *Eyrbyggja Saga*, two vellum pages of which date from 1300 and one entire copy from about 1350, relates that:

Snorri and Thorleif Kimbi went to Greenland. . . . Thorleif Kimbi lived in Greenland to old age. But Snorri went to Wineland the Good with Karls-efni; and when they were fighting with the Skrellings there in Wineland, Thorbrand Snorrason, a most valiant man, was slain.¹

This Snorri, the father of Thorbrand, is of course not to be confused with Snorri the little Winelander, son of Thorfinn Karlsefni and Gudrid, Thorbiorn's daughter.

Dr. Nansen calls attention to a narrative in the Longer Saga of King Olaf the Saint in which the latter is made to speak of Leif Ericsson without calling him Lucky or mentioning his discovery.

Besides narratives, there are divers geographical notices, following an old formula with modifications. Reeves and Rafn have quoted them in their works above mentioned. All agree as to the relative positions of Helluland, Markland, and Wineland along the American coast. One already quoted from the *Antiquitates Americanæ* (A. M. Codex 770), omits the name Helluland, but makes the meaning sufficiently clear by the substitution "deserts, uninhabited places and icebergs," indicated as "south from Greenland which is inhabited."

Always this series of regions is located "south from Greenland." Usually they are identified as belonging to Europe. In two or three instances an extension of the formula occurs, suggesting the connection of Wineland to Africa, with inevitable implication of heat and luxuriance. In "The Finding of Wineland the Good" Mr. Reeves takes some pains to array these instances. Probably they represent the usual teaching of the northern schools during several centuries.

His most significant quotation is from the Arne Magnean MS. 194 (8 vo.), a miscellany partly in Latin, partly in Icelandic:

¹ A. M. Reeves: *The Finding of Wineland the Good*, p. 18.

Southward from Greenland is Helluland, then comes Markland; thence it is not far to Wineland the Good, which some men believe extends from Africa, and, if this be so, then there is an open sea flowing in between Wineland and Markland. It is said, that Thorfinn Karlsefni hewed a "house-neat-timber" and then went to seek Wineland the Good, and came to where they believed this land to be, but they did not succeed in exploring it, or in obtaining any of its products. Leif the Lucky first found Wineland, and he then found merchants in evil plight at sea, and restored them to life by God's mercy; and he introduced Christianity into Greenland, which waxed there so, that an episcopal seat was established there at a place called Gardar. England and Scotland are one island, * * *

Dr. Storm attributed, not too positively, the unique and perfectly warranted hypothesis of an "open sea (the strait of Cabot) flowing in between Wineland and Markland" to a certain geographically minded Abbot Nicholas¹ of Thingeyri, who died in 1159. This would imply still greater antiquity for the accepted statement about Africa, which it accompanies as an after-thought and corollary. Note also that the passage preserves a tradition of disappointment hardly so clearly stated elsewhere. Apparently the carved door-post, or whatever else the doubtful name house-neat-timber may convey, was cut in Markland; and their next move, according to the saga of Thorfinn Karlsefni, took them that spring into temporarily pleasing quarters, where they afterward underwent a trying winter and nearly lost heart. This timber must be that which the Flateybook saga represents him as carrying to Europe and selling at a good price, then learning that it was mosur or mauser wood and worth far more—on all accounts a very doubtful anecdote. We shall have more to say of this material.

From 1285 to 1295 there are a series of entries in the Icelandic Annals concerning a certain new land west of Iceland, apparently including "the feather islands." This land and islands were found in the first year above given, and Land-Rolf, the zealous advocate of an expedition to thoroughly explore them, died in the later year named. During the interval he had been authorized and sent out by King Eric and had traveled through Iceland, gathering volunteers. If he had lived a little longer, something more might have come of it. We must not insist over-precisely on direction, which these and later people used very loosely. That it should be Markland, found again from another point and believed to be a new discovery, may seem strange, but to suppose with Reeves that the entries mean a part of Greenland—so much nearer and so long and well known—

¹ More emphatically credited with the same in J. Fischer: *The Discoveries of the Northmen in America.*

is surely even more so. Perhaps the conspicuous out-jutting elbow of America, barely insular, which includes Newfoundland, was alternately visible and not visible to the knowledge of northern Europeans during several centuries, getting a new name—as Brazil, Forest-land, New-land, Escociland—every time it was brought again especially to attention, although the older name might also be used, as for another region.

This was a common phenomenon in old geography. Some early maps give Greenland a minor duplicate in "Grocland," off its west coast yet not so far as America; and the Faroe islands called Frisland, while retaining their place, gave birth in cartography to a fictitious great Frisland far away over the ocean. The name "feather islands" was applied later in substance to divers bird-crowded islets (for example Funk Island, Cartier's Bird Island) along our northeastern shore. On the whole it is likely that the latter was touched at some point, probably Newfoundland or near it, by these thirteenth century discoverers who effected so little. At any rate some such episode was currently related.

Arngrim Jonsson,¹ one of the few Icelandic authors who mentioned Wineland in the gray dawn of modern life, had for disciple and coadjutor young Sigurdr Stefánsson, a grandson of Bishop Gisli Jonsson of Skallholt, Iceland. Sigurdr afterward took charge of the diocesan school at that place, unhappily being soon drowned in a neighboring river at 25 years of age. His chief memorial is a map of the northern regions, which has been copied by Torfaeus, Higginson, Wiess, Vining, and others, but not always quite accurately. Although it is a late document (probably 1590, though marked 1570) both its cartography and notes bear valuable witness to the tradition of his country, where national memory has always been most tenacious and at its best. This map shows a mountainous or hilly peninsula, marked Promontorium Winelandium, with its tip nearly opposite southern England, a tapering gulf behind it, and irresistibly suggesting by position and appearance a more slender Cape Breton Island—say the long, thin part beyond Bras D' Or. The narrow Gut of Canso, which now barely separates this area from the mainland, was of course unknown or disregarded, as by some of the European voyagers and map-makers of the sixteenth century. But this promontory was not considered the whole region or country of Wineland, for a note near the inner end of the Gulf behind it—hence also near the region about the head of the Bay of Fundy—states that Wineland is not far

¹G. Storm: *Studies on the Vineland Voyages*, before cited.



SIGURDR STEFÁNSSON MAP OF 1570 (1590 ?)
 (From Studies on the Vineland Voyages, by Gustav Storm)

from that point; it also tells us that Wineland is called "the Good" from "its fertility or the abundance of its products," and the writer seems unconscious of any occult meaning. Another note adds that it is believed to border at the south on the "wild sea" and to be separated by a fiord or inlet from the America of the Spaniards. The former statement would fit either Nova Scotia or southern New England; the latter tempts one to recognize the Chesapeake, near the southwestern shore of which de Ayllon had planted his ill-fated little colony anticipating Jamestown. But we must not press inferences too far or too confidently.

Scandinavia¹ supplies the Hönen inscription of 1010 to 1050 A. D., existing in copy only, but held authentic by Prof. Bugge. It includes fragmentary letters which seem to make up "Vinland," with allusions to its remoteness in the seas and to neighboring cold regions. Dr. Nansen, however, thinks its "Vinlandia" may be a myth, located anywhere.

Taking all these minor evidences together, we find them affirming that there were three distinct regions south of Greenland, namely, Helluland, Markland, and Wineland, in that succession southward; that Wineland was perhaps cut off from Markland by water, but was not very distant, at least in its northern part; that its northern end was a promontory, and its southern face abutted on the sea, though it was perhaps connected to Africa; that it was prolific and especially notable for its spontaneous yield of grain and grapes; that Leif discovered it by accident and Thorfinn Karlsefni visited it, fought there with natives, losing Thorbrand, the son of his friend Snorri, and withdrew in disappointment; that Thorfinn's own son Snorri, was born in Wineland, and that he and Leif found valuable wood fit for carving. From the names we know that Markland was forest-clad and Helluland a region of flat stones and desolation. Perhaps we may fairly add that Wineland was understood to be of great extent, almost marching with Markland at its upper limit and with the later Spanish possessions at its lower. In other words it included perhaps all between the Chesapeake and the Gulf of St. Lawrence; but there is no need to insist emphatically on these boundaries.

This is the sum of our information; but even without any Wineland saga we should not be quite in darkness. Now, if there be two or more versions of the Wineland discovery and exploration, the presumption, other things being equal, strongly favors that one which

¹H. Hermannsson: *The Northmen in America*. *Islandica* No. 2 (Bibliography). See also Nansen: *In Northern Mists*, vol. 2.

accords with these miscellaneous ancient data and the traditions embalmed by them. It so happens that there are three versions, two being so nearly identical that each of them fits the above items and differing only in minor details and special modes of statement: whereas the third, that of the Flateybook, though preserving many of these features, differs radically in others and adds a great number which are inconsistent therewith or inherently improbable and have no corroboration whatever.

9.—THE THREE SAGAS AND THEIR RELATIVE STATUS

The three extant sagas of Greenland colonization and Wineland discovery and exploration are very old manuscript copies on vellum, all the original documents being lost—as in other and even more important cases, where we must rely on secondary evidence for all that we believe of the past. Two of these sagas occur in compilations—Hauksbook and the Flateybook already mentioned—such as were often made for monasteries or prominent men, desiring to preserve in convenient form the literature or records which they valued. Miscellaneous matter therefore accompanies the sagas: Hauksbook, for example, having contained the Landnamabook and the Kristni-Saga, which Bishop Bryniolf separated for convenience in recopying, though they at last reached the same (Arne Magnean) collection. A few pages were lost in this disintegrating process, but these do not affect the Wineland narrative, which has always remained in the body of the book.

A. M. Reeves in *The Finding of Wineland the Good* has carefully worked out and authenticated all that is known of the history of the three sagas. Hauksbook, it appears, was copied for and partly by Hauk Erlandsson, a descendant of Snorri, the Winelander, son of Gudrid and Thorfinn; Hauk being also a well known personage of his time, a lawman in Iceland, as well as a knight and lawman of Norway, where he died in 1334. The work on this compilation is supposed to have begun much earlier and was probably completed at latest in 1332 during his last visit to Iceland. Hauk wrote in person the final passage of the saga, bringing the list of Snorri's descendants down to his own time and including himself by name and title (herra, acquired in 1305); also he copied about half of page 99 and two lines of page 100, his handwriting being well known and exemplified by a still extant letter. The remainder of the saga was copied by two assistants, known as his first and second Icelandic secretaries, the ink, penmanship, and orthography changing as they replace each other

in the task. There is no evidence that he or they composed any part of the saga except his genealogical pendant; but the contrary appears from the occurrence of every passage, excepting it only, in the parallel but verbally independent saga of Eric the Red. This fact causes also a very general belief that the latter was the title of the saga which he transcribed, but for some reason the copy in the Hauksbook began in the middle of one of the parchment pages with a blank space above it, as though the title had not been determined upon. Possibly he grudged the supremacy, even in title, of the founder of Greenland, believing his own ancestor's achievements more important still; yet, finding the usage well settled, he may have hesitated to disturb it. In the eighteenth century "The Saga of Thorfinn Karlsefni and Thorbrand Snorrason" was written in for title by Arne Magnusson, the greatest of Icelandic collectors and an authority whose every action or utterance is held significant; but whether there were any better warrant for this than convenience and completeness remains unknown. It is usually styled The Saga of Thorfinn Karlsefni; and must obviously have been copied between 1305 and 1334; but not from the same copy as the above mentioned saga of Eric the Red, for the differences between them, although slight, run through every part of the story, making everywhere for rather less archaic and graphic diction in the former saga and, when there is any difference in matter of substance, for less exact statement—a policy hardly to be carried out by three men in the same way through a whole saga. Hauk's close supervision might account for such changes, if we could suppose any sufficient motive for making the story everywhere a little less good as literature and in some places a little less serviceable as history. His career and his choice of material for the compilation do not favor the hypothesis of carelessness or lack of discrimination. Since these variations, then, can hardly be due to accident or to editing, we must suppose two slightly different antecedent copies—one being a little nearer the original than the other—from which the two surviving sagas were independently made. For convenience of distinction we adhere to the two names, but believe that the remote original bore Eric's name only.

The Flateybook's title-page recites that it was copied by two priests, whose names are given, for John Haconsson, known in other instances as a patron of such labors, the relevant parts of it being finished, as supposed, about 1387 or certainly before 1400; though there have been later additions, which do not concern us. This makes the transcription about three-quarters of a century later than that of the Saga of Thorfinn Karlsefni, roughly stated.

The parts in question form two chapters, separately imbedded in the Saga of Olaf Tryggvason, which is an important feature of that miscellaneous and bulky compilation, these having for titles respectively, A Brief Narrative of Eric the Red and A Brief Narrative of the Greenlanders, but being adapted to form a connected minor saga when put together. Probably this was their normal condition and the scribes dislocated them to build them into the longer saga, a common practice of that period. At any rate they have often been restored to this hypothetical continuity and so published, usually as The Saga of Eric the Red. This is manifestly confusing, an earlier claimant of that title being already in possession. It will be better to designate it The Flateybook Wineland Saga. The Flateybook is considered the handsomest as well as the most copious of all the Icelandic manuscripts. Formerly its Wineland narrative was sometimes assumed to have been composed in Greenland, perhaps from the nature of the two headings of its sections; but we do not know that any sagas were written there and discover nothing like affirmative testimony in this instance—which, indeed, seems close to a decisive negation. For the Flateybook version robs Eric's house of the claim to first discovery and charges his daughter Freydis with atrocious unbelievable crime. No one in any way connected with Eric or accepting his or his son's leadership could be expected to tolerate it. Even remote descendants would not enjoy the hearing or reading.

Some Scandinavian writers (see Reeves's notes) have credited this version conjecturally to the north of Iceland, others lay stress on the undoubted first finding of it as an heirloom in the west on Flat-land of Broadfirth, but cannot follow the trail much farther. Back of its rather late emergence there is a long period unaccounted for, and its place of origin is unknown.

The Arne-Magnean vellum MS. 557 quarto, containing the third of these old sagas, must have been copied about 1400, according to Vigfusson and other Icelandic authorities. Its transcriber did not have Hauksbook before him, because he copied more archaic terms and even some slight verbal errors, not in the saga of Thorfinn Karlsefni, but evidently from the lost original or an intermediate copy—most likely the latter. Also, as pointed out by Prof. Olson, it does not have the ending of the pedigree, which Hauk personally added.

A. M. Reeves mentions two verbal items, which, on the face of them, appear to favor the Flateybook. It gives the name *Midiokul* for the first point in Greenland sighted by Eric, adding that it is "now called *Blacksark*." The Thorfinn saga calls it *Blacksark* only; that of Eric the Red, perhaps by the transcriber's error, calls it only

Whitesark—the Hutisark of Olaus Magnus. But the composer of the remote common original of the last two sagas may not have remembered the earliest name or may have passed it by as unimportant, and the passage does not occur in the Wineland-voyage narrative, but in the preliminary account of the achievements of Eric Raudi, which may rest on a different time basis. In any case it would be a slight reed to lean on, supporting the burden of so much contrary evidence.

Likewise of the two Brands. The two parallel sagas say “Bishop Brand the elder,” which of course could not have been written before the second Bishop Brand was consecrated—in 1263. The Flateybook says “Bishop Brand” only, which might have been written at any date after the consecration of the first Bishop of that name and before that of the second one, but also may have been written after the latter event, if the Flateybook saga-man happened to lose sight of one bishop. Moreover this is in the genealogical tail of the story, presumably added from time to time, as we see in Hauk’s case, and does not throw any more light on the date of the body of the saga than a birth-entry or death-entry in a family Bible throws on the date of the neighboring book of Genesis.

Hauk Erlendssen might not notice the omission of the elder Brand or of a mountain’s obsolete name—if he knew it—but he was too prominent and cordially interested a descendant of Thorfinn and Gudrid not to be an authority—probably the best one then living—on the family traditions of descent and achievement; so his copying and evident endorsement of the saga of Thorfinn Karlsefni is a strong argument for its claims, as to all the main points at least, though he should probably have given it the original name The Saga of Eric the Red.

In particular, how can we suppose him ignorant whether his ancestress was the granddaughter of Vifil of Vifilsdale and went to Greenland as an unmarried girl with her father Thorbiorn; or whether she was picked up, a kinless woman, by Leif from a wreck at sea, together with an otherwise unknown and quite apochryphal first husband, Thori the Eastman? Either Hauk was thus incredibly ignorant, or he wilfully falsified the record to glorify his ancestors, or the version preferred by him is the right one. The former two alternatives contravene his known standing and character, as well as all the early writings (except the Flateybook) touching this subject; the third has simply nothing but the Flateybook against it.

This instance is characteristic of the latter’s elaborated saga, which must have been produced at so late a day that liberties with family

history were felt to be tolerably safe. Yet it seems to have been almost suppressed for two centuries, Mr. Reeves's¹ diligent search having discovered but one copy made from it, as against about thirty made from the other two sagas, which, in general outline, chief events and most minor details, are really one. It seems, then, that the Flateybook saga never can have had much influence in its own home until put forward in print by scholars of Continental Europe; whereas the earlier and simpler form of the narrative was accepted as authentic not only by the descendants of the explorers but by their Icelandic neighbors and fellow countrymen.

Their styles afford another criterion; it being well known that hardly any literature is so directly, impressively, and nobly epic, so Homeric in quality, as the early Icelandic sagas, but that, as always, the first flush of power was succeeded after a time by greater (or more obvious) self-consciousness and love of adornment, producing good work, yet not so good as before and easily distinguishable. Even in the English translation we must feel that the saga of Thorfinn Karlsefni belongs to an earlier and nobler period than the Flateybook story.

Scandinavian scholars, more intimately enlightened, bear this out with emphasis. Storm insists that the composition of the latter saga cannot long have preceded its copying, thus making the date perhaps 1350 to 1380; whereas he suggests 1270 for the other narrative; and the later consideration of Finnur Jonsson, an excellent authority, quoted by Olson² with approval, carries this back to 1200 confidently.

Embedded in that early prose are two epigrammatic fragments of verse, which no doubt antedate all sagas, following a general law the world over. Storm has shown that their metre indicates the eleventh century and Reeves has pointed out a very archaic choice and form of language. There has been difficulty in exactly determining the meaning, and some variants in certain later copies apparently have none in part, the sounds and forms persisting without it, through reverence for tradition, as often happens everywhere. They claim on the face of them to have been composed in Wineland during Karlsefni's expedition, and though no great reliance be placed on this, we may be sure that they are the most nearly contemporary compositions on the subject (except his sailing directions embedded in the saga) which we are ever likely to see.

The framework of the two versions may be compared instructively. According to "Eric the Red" and "Thorfinn Karlsefni," Leif the son

¹ A. M. Reeves: *The Finding of Wineland the Good*. Appended Notes.

² Julius E. Olson: *Original Narratives of Early Amer. History*, vol. 1, notes.

of Eric accidentally discovered Wineland as already stated. Thorstein, his brother, failed in an attempt to reach it the next year and returned, marrying Gudrid soon afterward. That winter he died. After a time she married Thorfinn Karlsefni and set out with him for Wineland. They reached in succession Helluland, Markland, the peninsula of Keelness, the Wonderstrands and Straumey and Straumfiord of the sea currents. They made their home for the winter, first in a bay behind Straumey, then on the island itself; finally on both, getting the benefit of both regions. In the spring they went south, finding another bay or loch called Hóp by them, into which a river flowed, passing thence by a strait to the sea. Here they spent a year, but at last had to leave on account of the hostility of the natives. They returned to Straumey and spent another year there unmolested, incidentally exploring the other side of Keelness, apparently the southeast shore of the Gulf of St. Lawrence, including a part of what is sometimes called the Acadian Bay. Here Thorvald their helmsman, another son of Eric, was killed by an archer of great activity, whom they thought abnormal. Quarrels among themselves about the married women caused their return to Greenland, thence to Iceland. Biarni, one of Thorfinn's noblest companions, went down at sea on the way, having given his life in a sinking ship for that of an unworthy follower.

The Flateybook saga, it would seem, rewards this Biarni by making him, not Leif, the accidental discoverer of Wineland, he being on the way from Iceland to Heriulfsness in Greenland, following his father Heriulf—a relationship unknown to Landnamabook. He touched three lands, evidently meant for those of Karlsefni taken in reverse order, the upper part of Wineland being first found. Biarni did not die, but safely reached the shore in front of his father's house, on his first approach to Greenland, an improbable achievement often substantially repeated in this saga. Leif blamed Biarni for not landing on any shore that he discovered, so he borrowed Biarni's ship and sailed forth to remedy the error. He found the three "lands," this time in north-to-south order, and built, "Leif's-booths" on the shore of a bay, which seems a composite of the southern Hóp and the northern bay behind Straumey. He returned to Greenland for no reason given, picking up Thori the Eastman and his wife Gudrid from a wreck on the way.

Next, Leif's brother Thorvald borrowed the ship and the Wineland house and reached the latter without any recorded difficulty. From this abiding place he explored the coast westward a long way and afterward explored eastward also to Keelness, turned that cape.

found and killed eight natives and sustained in the ship the resulting attack of many canoes. An arrow from one of them killed him and there is a pretty bit about his burial at Crossness. His party returned to Greenland.

Next, Thorfinn, having married Gudrid, sailed with her to find Thorvald's grave, not Wineland in its own right. They were beaten about and returned unsuccessful, squarely hitting in the first landfall his home at Lysufirth far up the coast. He died, and she returned to Ericsfirth and married Thorfinn Karlsefni in due course.

They sailed, and found Leif's-booths and dwelt there. Gudrid gave birth to Snorri. Indians came and they trafficked and fought with them, but at last withdrew to Greenland from that hostility. Thorfinn carried Wineland products to Europe and bought property near his former home in northern Iceland, where he lived and died.

Last of all, Freydis led an expedition to Leif's-booths, quarreled with companions about occupancy and other things, and in the end very wantonly and treacherously compassed the murder of a whole ship's crew, chopping to death all the women, after capture, with her own hand. She returned with a false tale, but Leif suspected and tortured her followers into confession, though he spared her as his sister, while predicting evil.

It will be seen that the Flateybook saga substitutes five voyages that reached Wineland for only two, using as additional leaders nearly all the names made prominent in the earlier narrative. Necessarily it has divided up Karlsefni's experiences and geography and filled them out with other matter to make them go around, thus causing confusion. For the same reason and to be more exciting, minor items and hints have been elaborated, sometimes with misunderstanding, and in other instances with shifting of place. For example Thorvald's death in battle, Christian sentiments and picturesque burial—the result of a wanton massacre properly punished—seem to have been worked up from two simple unconnected items in the saga of Thorfinn Karlsefni, put together for dramatic effect; and the momentary frenzy of Freydis before the yelling Indians is interpreted as furious malignity and developed into a nightmarish and quite unbelievable episode. Perhaps, as Dr. Storm suggests, the reference to quarrels over married women may have been another germ in this case, though affording little material.

In substituting a voyage from Iceland for a voyage from Norway, the probability of an accidental view of America, as he points out, has been destroyed. Greenland is so near Iceland that any one missing its lower tip would discover and put about long before

crossing the very much greater interval to America, whereas the full width of the ocean would leave many chances of strange happenings and miscalculations in times before the mariners' compass and accurate means of observation. It is not known that any ship out of Iceland for Greenland ever made America first, but long after Thorfinn's time, Cabot with far better equipment, and a century later Hudson, sailing from northwestern Europe for Greenland or the extreme northeast of Labrador, were directed to a more southern shore; the former by a discouraging southward drift of ice, the latter by the bodily force of storms. Prof. Horsford¹ has compiled and printed an instructive chart, showing the recorded drift of many derelicts and storm-driven vessels to New England under the dominance of the currents from the north and the prevailing winds. But to fall within their power one must sail low enough.

Leif's alleged Wineland house, too, is a monument of improbability—being found by each one of the later parties, with years between them, and always incredibly ready for occupancy, even after the neighboring savages had gone to war with the temporary white intruders and would have liked nothing better than to loot and burn. It is hardly necessary to cite the angry Indians who "pulled out the cross"² from the grave of "Champlain's" follower and "dugged up the body" to make their savage sport with it. Why should they spare an enemy's home? We need not pick out and dwell upon all such untenable items. Mr. Reeves has afforded every facility in *The Finding of Wineland* for a word by word comparison, either in the original handwritten Icelandic, or the same in print, or the printed English translation. It is disappointing to find Dr. Fiske declaring of the additional voyages, "it seems to me likely that the Flateybook here preserves the details of an older tradition too summarily epitomized in the Hauksbook," for surely the law of literary development is from the simple to the complex. There are some exceptions, perhaps; but the internal evidence is strongly adverse to the supposition that we have one before us. Dr. Fiske's notes clearly show that he had not seen the above work of Reeves and the English translation of Storm's paper until after his own text was prepared; and he can hardly have given them adequate consideration. The Flateybook Wineland saga bears the familiar marks of derivation and development. This does not necessarily mean that the composer of it had "Eric the Red" or "Thorfinn Karlsefni"

¹ Horsford: *The Landfall of Leif*, p. 42.

² M. Lescarbot: *Nova Francia*. Erondelle's transl., p. 105.

before him, or either of the parchments from which they were copied. More likely there was another copy or more than one, almost identical in some parts—for whole sentences are practically repeated, though not always in the same place—but with omissions, additions, and changes; and further traditional material, oral or written, may have been worked in for the first time during transcription. Thus Gudrid's antecedents and first appearance differ widely in the accounts, as we have seen, but there is a close parallelism in the episode of the western settlement, though some passages are not common to both. Undoubtedly we find greater dignity and deeper tragedy in the Hauksbook version, particularly as concerns the behavior of Gudrid herself in the grief and horror of that uncanny death-night. It seems the elder form, but the other must have developed early. Both put words of prophecy in Thorstein's mouth, most reasonably explained as, at least in part, of later interpolation. They display a knowledge of Gudrid's religious eminence toward the close of her life and the subsequent prosperity of her family.

The Flateybook Wineland saga is chiefly important as at least partly independent testimony to much that is recorded in the others; and for some items which it adds that seem authentic. If all else were lost, we might still learn from it of Helluland, Markland, Wineland and Keelness, their relative position and their chief characteristics; the island north of the lower end of the land, which is almost the direction of Grand Manan after rounding the southwestern tip of Nova Scotia; the behavior of the tide and the great shallows left on the ebb, suiting equally Thorfinn's great currents and what may be seen now along the lateral bays and rivers of the Great Bay of Fundy the fiord-indented mountainous shore of New Brunswick and Maine just beyond; the voyages of Leif and Thorfinn; the birth of Snorri and the death of Thorvald, both in Wineland; the savages who had furs to trade and were improvident in dealing, who took flight at the bellowing of a bull and afterward attacked the settlers with fury; the two days' sail between Helluland and Markland and between Markland and Wineland—with divers other matters alike in all versions. As added items we have Thorfinn's stockade, a precaution which he would be likely to borrow from his enemies after danger threatened; the piling of timber above a cliff, perhaps as now, where a shute or runway shows at the north point of Grand Manan; the tall and striking figure of the hostile chief; the wooden structure on an island, possibly a shed or bin for wild rice gathered by Indian women, who are still the chief garnerers of the northwest, and a much-expounded statement that

the sun had *eyktarstað* and *dagmalastad* on the shortest day of winter.

The history of the controversy over this latter item will be found in Reeves's notes appended to *The Finding of Wineland the Good*, with the verdict of two astronomical experts, working independently on both sides of the Atlantic, that it proves only a northern limit about the upper end of Newfoundland. In other words, Leif or rather Thorfinn can not have been farther northward than this at the time of taking the observation, but may have been somewhat farther south—how far is not stated.

Bishop Howley¹ presents what may be called the gastronomic view, as opposed to the celestial. *Dagmalastad* is admittedly breakfast-time, and the *eykt* measured the interval to the afternoon meal. Thus regarded, the Icelanders were merely expressing their satisfaction at being able to eat both meals by sunlight every day through the winter. Of course they were sailors and practical would-be settlers and this view is somewhat tempting at first glance.

But they really could take observations at need after a fashion, and were willing to report the same for the people at home; as in the celebrated case of that Arctic expedition in 1266, which went farther than any one could follow it until the nineteenth century. The sun, they reported, shone about July 25th over the gunwale of a seven-oared boat on the face of a man lying across the bottom with his head against the opposite rail. Also at a given time the sun was as high at midnight as when it was in the northwest in settled Greenland. The first latitude depends in part on the height of the gunwale and the exact position of the man's face; the second on the chosen point of the settlement. Probably there was approximately a standard size and pattern of boat and Gardar would be understood as the home observatory; so these two made after all a pair of rough and ready indications; from which Rafn deduced a parallel between the 75th and 76th degrees. Thalbitzer thinks they probably did not pass the 73d, but bases his estimate on matters of the coast-outline rather than calculation. This primitive nautical observation makes a good precedent for the *Flateybook* statement, which also has an authentic look, although there is no record of it before 1387 or thereabout.

Apparently it relates to the northern dwelling-place beside *Straumfiord*, which may well come within the limits allowed by the modern astronomers' calculation, especially if we allow for some

¹ *Vinland Vindicated*, before cited.

looseness of language as in the other case. It is true that the characteristics of Hóp are blended with those of Straumfiord in the confusion of this corrupted saga; but the latter preponderate on the whole and we cannot suppose the more southerly point to be intended. Grand Manan would have made a good observatory. But no doubt Dr. Fiske is right in holding that the context implies a length of winter day which surprised them; so it must have exceeded that at Dublin, or even Rouen, which they currently visited in their trading voyages. Perhaps we might add Bordeaux, taken by their Norse kinfolk a century or two before and which they may have known very well, but this after all is hardly certain enough for reliance.

They were no doubt the first observers of the difference between isothermal lines and lines of latitude crossing the Atlantic ocean, a dislocation which the human mind even yet finds it hard to realize or regard as quite natural. Some point in southern New England seems called for; though possibly Yarmouth or Eastport might do.

It would be interesting to know whence these bits of really illuminating tradition drifted into the Flateybook version, but they cannot offset the grave charges against it. The preference long and generally given this later derivative and corrupted saga has been one of the chief causes of investigation going astray. Two others are a persistent conception of Wineland as an organized continuing colony and the innocent acceptance of the present seaboard as that of the year 1000. Of course there are still others.

Dr. Fiske says in a note it "is like summer boarders in the country struggling to tell one another where they have been to drive—past a school-house, down a steep hill, through some woods and by a saw mill"; for "the same general discription will often apply well enough to several different places." This is an apt illustration of the muddled and unhelpful presentation of locality in the Flateybook, but does not apply at all to the graphic, precise, and individualized sailing directions of the earlier Hauksbook saga, or still better, its companion Eric the Red.

Bishop Bryniolf, with a discoverer's delight, no doubt impressed the importance of his ample and beautiful prize on Torfæus and the royal recipient, and it was most natural that the historian should put its version prominently forward in his history (1705), the first of all books on Wineland, though printing with it the Saga of Thorfinn Karlsefni; also that the great von Humboldt, knowing no Icelandic, should accept his verdict and consider mainly in the *Examen Critique* those two chapters from the Tryggvason saga, though not failing to note the evident effect of long continued oral transmission on an

originally simple story. Successive writers, in rather lengthened series, mainly took their cue from these works, with little heed to his warning, so that their widely differing schemes of the explorations were based on the Flateybook's entangled, blurred, disjointed and bewildering data—and likewise the objections of the sceptical dealt often with items misreported or lacking foundation. Rafn's voluminous *Antiquitates Americanæ*, though doing the great service of presenting almost the entire array of Scandinavian evidence and urging the subject effectively on public attention, repeated this time-honored error, adding to it the Newport tower, the Dighton rock, wild Indian-corn and other damaging credulities. Even Vigfusson's *Origines Islandicæ*, published long after his death, held in the text the same ground about the Flateybook, contradicting one of its own notes, and provoking Professor Olson's very natural suggestion that "some hand less cunning than Vigfusson's" had perhaps been at work. Similarly Fiske's *Discovery of America* adheres generally in the text to the Flateybook, though its notes feel the influence of new light recently received.

Dr. Gustav Storm of Christiania was the first to present effectively the true state of the case in his pivotal *Studies on the Vineland Voyages*, an English translation of which will be found in the *Mémoires de la Société Royale des Antiquaires du Nord* 1888. Reeves followed his lead (1890) in *The Finding of Wineland the Good*, a work characterized by Dr. Fiske as "the best book we have on the subject in English or perhaps in any language." Probably it is so, if by "best" we understand the most accurate and elaborate within its limits, rather than the most original. It is the only one giving facsimiles of the vellum pages of the Wineland sagas and an approximately complete list of the extant later copies, its reproductions in print of the original Icelandic, with line for line carefully stated English translations, are accepted as the most reliable and it adds by footnotes and final notes, in data and commentary, a very great amount of new and highly instructive material. But he passes by almost wholly the subject of localities which his forerunner had treated with great care and, as to most points, I think, with nearly exact insight. Dieserud¹ (1901), in a valuable paper before the American Geographical Society, and Olson in his condensed and clear preface to the *Voyages of the Northmen in the Scribner's series "The Original Narratives of Early American History"* have emphatically taken the same ground; which is not likely to be lost again.

¹ Juul Dieserud: *Norse Discoveries in America*. Reprint from *Bull. Amer. Geogr. Soc.*

10.—THE MOST AUTHENTIC WINELAND HISTORY

Reeves, treating the two parallel sagas as practically one, has presented an English version which follows the "Thq̄rfinn Karlsefni" Hauksbook almost exclusively in the text, giving by foot-notes the corresponding words of "Eric the Red," where these differ. It will be better to reverse this preference here, incidentally mentioning such divergencies of the first named saga as may seem helpful.

Two centuries at least intervened between the events narrated and the composition of the earliest form of the complete saga. We have to consider, then, just what this word means and how far what it stands for may be relied on after so long a time had elapsed. Saga, we are told, meant story, broadly; though a more restricted significance is given by later usage; and stories, of course, are of many kinds. The Book of Ruth, Freeman's Norman Conquest, Mark Twain's Innocents Abroad, and Henry James' ghastly *The Turn of the Screw*, are all undeniably stories. In early Iceland the case was the same. The *Heimskringla* is an honest rendering of history on the great scale, very picturesquely given, for a long line of northern kings, in accordance with the tests and standards then available; the *Bandamanna Saga* is an almost dainty bit of comedy, with social and political strategy for its fabric and an altogether delightful prodigal father, artfully helpful at need, for its very most winning figure; the *Volsunga Saga* is perhaps the greatest of myth stories, with Shakespearean dramatic qualities in all its later portion, as Andrew Lang has written; the *Saga of Nial the Burned*—one of the great works of the world—contains as sound and noble characterization as may be found anywhere and the most complete of all presentations of the practical working of early law; the *Grettir Saga* is a Robin Hood romance, touched with human sympathy and deepened to awful tragedy by the haunting of evil eyes, dead and damned, never relenting, which bring fear where no fear was and force him to endure the company of assassins rather than face the dark, so preparing his inevitable doom; the *Saga of Cormac* is a string of his poems or those attributed to him, like so many beads, on a fine thread of wayward northern love-story and travel; and the same may be said of *Gunnlaug the Serpent Tongue*, though in a more comforting and cheerful key. The list of deviations might be very greatly increased without effort.

In a field so varied every way, there should be room for a ship's log and business-like statement of explorers' notes, afterward filled out with items and episodes derived originally from members of the

party. This is what we seem to have in the voyage-section of the Saga of Thorfinn Karlsefni. But of course we should be on our guard against all signs of later sophistication.

It certainly means to tell the substantial truth, as did most of the writings, not avowedly mythical or fanciful, of that early time. The period of extravagances, like the Arrow-Odd Saga, of imitations and forgeries and of literary sentimental productions, often very pretty but quite openly fictitious, like Frithiof's Saga and the Saga of Viglund the Fair, was yet far ahead. The conscientiousness of the Landnamabook had set the pace, and men wrote historically, anxious not to vary from the essential truth of what had befallen.

Unfortunately only a minority of these earlier Icelandic sagas remain—some thirty-five in all; for the world has lost a great treasure. It is natural that we should prize them, even overrate them, when we are induced to know them at all; but we must not regard them quite as we should the modern painstaking work of a Parkman or a Motley. Their composers were quite without our tests of probability in many things, notably in things supernatural. Even the ghost-game was under different and prodigious rules, which we find out of keeping; for a ghost came usually in the body and veritably out of the grave or dripping from the sea, and he could be clutched and broken and killed like a man. With them the gruesome, fully believed in, quite reached its climax. What iron nerves the northern people must have had to support existence!

Moreover, like all unsophisticated non-analytical folk, these narrators were liable to confuse their own inferences with what actually was, or could be, known; the best of them is as ready as any Greek historian with his word-for-word dialogues of two centuries earlier, though these were admittedly unrecorded at the time of utterance and most unlikely to linger for a week without change in any mind. The truth of the sagas¹ is not then in all cases that of absolute precision. They aimed to present past conditions and occurrences in the most graphic and dramatic fashion, making them live again for the reader or hearer. Apparently the Old Testament narratives were their model; their own histories developing and diverging from it in so far as their customs, ideals, and beliefs differed from those of its writers, and the work of each saga-man being conditioned by the special material before him, as well as by his individual gifts.

The first sagas were doubtless very simple and oral, having for contemporaries brief stories and spell-songs in verse, occasionally

¹ Yet see Laing's preface to *Heimskringla*, p. 188, concerning the local fidelity of the Orkneyinga Saga.

carved in wood in the runic alphabet, as told us by Egil's Saga; magic formulas and sailing directions, besides other useful memoranda, being also thus preserved. Such tales were a part of education, as well as a means of entertainment, wherever people gathered, say at the Althing, or about their home-fires in the long halls during the earlier hours of winter nights.

When Ari Frodi inaugurated Icelandic prose literature a little after the year 1100, the experiment "took" as we say, but most of his disciples or emulators must have found it easier to write briefly. Later the tales of a neighborhood or those that hung about a notable man would often be welded together by other hands. If this work were done mainly by one writer there would be general unity of style and literary effect, but with the original elements yet distinguishable. The great sagas are all of this composite character; yet with this imposed artistic unity, though it may be harder to dissect Eglar or Laxdaela than the Eyrbyggja Saga, which almost dissects itself.

Our Wineland saga, though not the longest, is clearly of their class and kind. It seems that a shorter Saga of Eric the Red and one of Thorfinn Karlsefni's voyage must have been thus united in it, including also parts of a lost saga of Leif—other fragments of the latter being represented perhaps by the Thorgunna chapters of the Eyrbyggja Saga. The same hand has polished and kneaded it all, introducing some illustrative adornments like the incantation scene, chiefly, though not quite exclusively, in the preliminary Greenland section. There seems to have been great care on the part of this final saga-man, say of 1200, not to confuse or distort Thorfinn's careful memoranda of coastal geography.

As the saga comes to us, the contrast in subject matter is obvious and great. The phantoms, miracles, magic, and prophecy are all in the earlier Greenland part, the sailing directions all in that relating to Wineland. The former must be considered an historical romance, embodying all that we know of Red Eric, as well as Gudrid's ancestry and early life, her loves and bereavements; the latter is a matter of fact statement of her unique adventure in exploration with her husband, adding bits of information and episodical anecdote. The record making the backbone of this voyage-history might have been originally in very few words, not vastly exceeding the inscription found on one of the Women's Islands in Baffin's Bay. That such guides to future explorers, travelers, traders and colonists were matters of care and conscience to competent early navigators appears very clearly from Champlain's seventeenth century account of the way to get into the Penobscot, Ivar Bardsen's fourteenth century account of the way

to reach the Greenland colony and the ancient memoranda repeated by the 12th century Landnamabook. There would be plenty of opportunity for that brief Norse record, during their shipboard life and the three Wineland winters. So careful a man as Thorfinn, with such a wife as Gudrid beside him, seeking to plant a colony and show others the way, surely would not have left this important matter to the chances of memory only. Runes would have answered very well, the task being light and easy. The result is the only saga of exploration, with just one other to be doubtfully excepted.

The residuum of verse¹ in it may seem odd company for coast-notes and distances, though Thorhall's derision in that form had a very practical turn at the end of an unsatisfying winter; but verses often appear in Icelandic sagas. Sometimes they are the known productions of the poet-champions celebrated, or imitation of their work, both kinds being exemplified by the sagas of Cormac and Egil; sometimes, as in Gretla, they are chiefly foreign interpolations of no taste nor skill; or again they may be real or supposed relics of older balladry. In the Saga of the Heath-Slayings—that savage, unforgettable epic, which somehow recalls the equally intense and primitive old Scotch border-ballad with the refrain "and my gear's a gone"—the basic tales in verse are not always quoted from, but cited occasionally by the prior author's name. Both plans are largely and about equally adopted in the Eyrbyggja Saga.

In the Saga of Eric the Red, a not extravagant ingenuity may distinguish the episodes of Thorhall the Huntsman, the Gaelic Runners, the Battle at Hóp, the Death of Thorvald, the Markland Captives, and the Death of Biarni, each easily separable and individual, as probably single ballads in their original shape. That of the Gaels Haki and Hækia has been inserted in the wrong place, presumably by the final saga-writer, making them find grapes and grain before finding birds' eggs and having an overlapping joint with the context, more instantly obvious than that of the two creation legends in Genesis. This anecdote, if veracious, belongs evidently to the next autumn at earliest.

The place-names of the saga have been transferred from Iceland, for example, Hóp, Straumey, and Kjalarness, just as Oxford of Maryland or Plymouth of Massachusetts derived their names through English colonists from English towns; or they are descriptive and of general application where the same conditions prevail, as Markland

¹ Prof. Diman's critique of De Costa's "Pre-Columbian Discovery." *North American Review*, 1869, vol. 109, p. 269.

or Helluland; or commemorative, as Biarney, where they slew a bear. Furdurstrandir, The Wonderstrands, if not obviously and precisely descriptive, is descriptively explained in the sagas, only one meaning being given by them; which there is strong reason to accept. However, Dr. Nansen dissents (see *In Northern Mists*), and would make it commemorate some undisclosed wonders, or possibly a memory picture of beautiful tropical islands, seen or heard about or of mythical heavens anciently modeled thereon. The topic will be resumed in a later chapter. The name is not on the Iceland maps, and Mr. Stefánsson of the Library of Congress, a south-Icelandic by birth and long residence, does not know of it there.

Apparently this is the one invention of the explorers in local nomenclature and one of the most significant items of their saga, defining aptly the impression of the typical American sea-shore of interminable strand and dune, which they could never have encountered before and would never afterward find elsewhere. It would have been equally unknown to the later saga-man or even to Hauk Erlendson, who copied him in the first third of the fourteenth century since neither of these could be aware of anything distinctively American except from the Wineland sagas and traditions.

The methods of naming above-mentioned overlap in some degree, so that it is not always possible to say whether old, general associations or new observation have had the greater share. One would say that these Icelandic visitors were rather more careful than some of their successors to avoid such incongruities as the Naples of interior New York, or as Snow Hill, a county seat beside a small cypress-bordered river in a flat farming region near the sea. But no doubt it is safe to distrust unlikely and uncorroborated explanations of the saga names or events, especially where we are given a choice of two in different versions; for example, the alternatives about Keelness or the two accounts of the first finding of the grapes. They have the air of afterthoughts, accounting for or illustrating some item as to which there was no further light, but which the saga-men, or the composers of material which they incorporated, were not self-denying enough to merely leave as found.

The personages of the story were born, and for the most part reared, under the Northern pre-Christian religion; so it would not seem strange to find Thor's name occurring as frequently as that of Jesus still does in Mexico, or as those of St. Patrick or St. Michael do in Ireland; yet it must be admitted that Thord, Thorhall, Thorbiorn, Thorwald, the two Thorsteins, Thorgunna, and several others, occurring in a single saga, not of the longest, may be counted exces-

sive. Some of these are borne out by the *Landnamabók*; others are possibly stop-gaps of later invention occurring chiefly in the least historical parts of Eric the Red, preceding the voyage of Thorfinn.

As already indicated, the incantation scene, the death of Thorstein, and other episodes, though good Icelandic folk-lore and excellent imaginative literature, are by no means to be treated as unalloyed fact. There seems no especial reason why we should look for greater accuracy as to names. Some of those not supplied by independent and trusted authority may be derived from sound tradition; but here we have little to guide us. Their accuracy or inaccuracy does not touch the general course of the voyage—any more than errors in a roster of troops would disprove the battle of Saratoga.

II.—THE STORY OF THE FIRST AMERICAN MOTHER

Gudrid is unmistakably the heroine of the saga and fills admirably a good part of its Greenland section—as winning and nobly gracious a womanly figure as may readily be found in any literature. The greatest of feminine explorers, the inspirer of the earliest attempt to colonize America and sharer in all its hardships, and the mother of the first-born white American, she must not lightly be passed by. Her father Thorbiorn held his ground after Eric's first departure and for some years declined his invitations to Greenland. But Thorbiorn was somehow losing ground among his people; and felt this brought home to him unbearably when a disparaging offer of marriage for Gudrid (as he considered it) was urged by an old friend, of whom he expected kinder things. Apparently she felt with him; for there seems to have been no attempt at dissuasion, even when he called their numerous well-wishers together in a great banquet, made a speech about his honor and, lavishing gifts on them all, announced his intention to sell out and emigrate. Perhaps she may have shared his adventurous longing for the chances of life in a new field and found no resisting magnet in any of her numerous Iceland suitors, indicated by the saga.

All that remained to them went in that ship, and certain friends joined the company, to their cost in some instances, for there was sickness and death on the way. It was indeed a dreadful voyage, of prolonged storm and unceasing hardship and danger; but they won at last to the lowest settled peninsula of Greenland, Heriolfness, where they were received for the winter. Remains of a church and other vestiges have been considered to mark the spot; with no abso-

lute certainty, however. Judging by other sagas¹ dealing with the colony, it was the point most often first reached by all newcomers, working up toward Eric's firth or Gardar, and sometimes they had to remain there literally for a season. Presumably it was also the chief point of departure of the little Greenland fishing fleet, and any disaster to it, or any ill success, would be felt there most quickly and severely. One Thorkel was then in possession at Heriolf'sness, according to the saga.

The misfortunes of the emigrants were not yet quite ended. The storms which had quite roughly used them were unfriendly to their entertainers also, for most fishermen had come back with light catches "and some had not returned." The infant Greenland colony suffered and was stunted. As the winter drew on, Thorkel and his neighbors grew anxious and depressed. Pagan still, though with a slippery grasp on the old belief, they decided to call in the aid of a seeress or prophetess having occult powers; who shows us what Scott's Norna might have been in the palmy days of her craft and in cheerier vigor of life. It was her custom to visit on invitation various homes, where the people gathered in the hope of good words for the future as the spirits might give her light. Thorbiorg was her name and she was the youngest of nine sisters, all with this gift of prophecy, a truly formidable array. Says the saga²:

When she came in the evening, with the man who had been sent to meet her, she was clad in a dark-blue coat, fastened with a strap and set with stones quite down to the hem. She wore glass beads around her neck, and upon her head a black lamb-skin hood, lined with white cat-skin. In her hands she carried a staff, upon which there was a knob, which was ornamented with brass, and set with stones up about the knob. Circling her waist she wore a girdle of touch-wood, and attached to it a great skin pouch, in which she kept the charms. . . . She wore upon her feet shaggy calf-skin shoes, with long, tough latches, upon the ends of which there were large brass buttons. She had cat-skin gloves upon her hands, which were white inside and lined with fur. When she entered all of the folk felt it to be their duty to offer becoming greetings.

She was provided as usual with a sort of throne on a dais and with special food, a leading feature being the hearts of every animal which could be procured in that region. She would not prophesy the first night, but slept in the house; and the next day had a circle of participants formed before her. Then she called for some woman to sing a certain "spell" of subtle power; but there was none to be found who knew the song until Gudrid owned that it had been taught

¹E. g. The Saga of Thorgisl. *Origines Islandicæ*, Vigfusson and Powell.

²A. M. Reeves: *The Finding of Wineland the Good*, p. 33.

her in Iceland by her foster mother; yet it was of such nature that she must not sing it now, being a Christian. Thorbiorg made answer that she might sing it nevertheless to aid her friends and be no worse woman for that; yet left the matter in the hands of Thorkel. Under this urgency and in plain contrast to her father's course, for he had withdrawn altogether, Gudrid admitted at last that she felt bound to do her part for those about her; and all, as they listened to her singing, felt that they had never heard the mystical song rendered so sweetly. Thorbiorg was very gracious in requital, thanking her for luring among them divers spirits which most often held aloof and would answer nothing, but loved such a treat. With this aid, she promised improved conditions for the colony; and for Gudrid, abundant prosperity and distinction, ranging beyond her, in Iceland, to her lucky descendants. Then she departed and the scandalized Thorbiorn returned.

Not very long afterward the ice broke up along shore with the opening spring and Thorbiorn and Gudrid were free to sail to Ericsfirth and Brattahlid, where the redoubtable ruddy Eric met them "with both hands" of welcome. They made their home with him until another could be provided on one of the nesses protruding like that of Heriolf.

That autumn Leif appeared among them with his inspiring tale of a fruitful Wineland in the southwest and certain valued products to make his words good; also with a priest and teachers to Christianize the people and some men whom he had rescued from a wreck at sea. Seldom have so many welcome sensations been presented at once to a people hungry for tidings. Except a minority, including Eric himself, Thorhall the Huntsman, and Thorstein the Swarthy of Lysufirth, all were in the best of mood to receive his religious message favorably and this work seems fully to have claimed him. His mother was his first convert and made his father sufficiently uncomfortable. They acclaimed him "Leif the Lucky"; and so he is commonly called, with great justice, to this day.

That winter there was a great buzz and stir. Eric held out in his paganism with a genial scorn for novelties, and when his wife withdrew her countenance, he determined to withdraw himself bodily, and to accompany his son Thorstein, a fine specimen of a man, if not over successful, on a voyage of exploration to this tempting new country the next spring. Eric was the very leader for the voyage, having so thoroughly done the work along 300 miles of Greenland coast and through the most forbidding water gates to the deeply

hidden pleasing dells of the inner firths. But he was thrown while riding to embarkation, with some disabling injuries, and gave up the project, averring that he saw it was not for him to discover any more land than the region where he stood.

Thorstein and his party, deprived of that wise leadership, went sailing "cheerily out of Eric'sfirth in high spirits over their plan." But perhaps they started too far east or held a course too much inclined that way; for storms drove them into view of Iceland and then southward until "the birds of Ireland" met them. After months of being "driven hither and thither over the sea" they returned to Greenland discomfited. Yet they did not fare ill. Eric greeted them with a relieved chuckle, which still lingers in his Stevenson-like words: "More cheery were we when we sailed out of Eric'sfirth; yet we still live; and it might have been worse." Gudrid gave Thorstein the more effective solace of her heart and hand; going with him soon afterward to a new home away up at Lysufirth, a little below the present Godthaab.

An epidemic visited their little community that winter and slew Thorstein with others. When all seemed over, the outworn young bride-widow went at last to lie down, but was awakened awfully in the blackness by a voice announcing that her dead husband had arisen in his bed and called for her. The messenger was his namesake and joint owner, Thorstein the Swarthy, overwhelmed for the moment by that most hideous of Icelandic imaginings, a belief in the evil possession or soulless revival of corpses, making these bodies of loved ones the most malignant monsters. The blackness of it must have been on her too, and far more dreadfully, yet he saw that she would go notwithstanding and bade her cross herself as one in uncanny peril. She declared her trust in God's protective goodness and went in. Then the awakening dead man, as they held him, greeted her lovingly, telling her many things close in her ear which no other heard. Soon, too, he spoke aloud for all to hear, foretelling great things in her behalf, as had the prophetess, charging them to take certain measures with a dead wizard's body for ending the pestilence and to carry himself and other victims to Eric'sfirth for burial; and in especial enjoined her not to marry a Greenlander. Now this significant warning, fitting so aptly her later marriage to an Icelander, who promptly went with her to Wineland, may be considered a mere coincidence or a real cause of their adventurous effort or a touch of later art maintaining the harmonies. Perhaps the first suggestion is the least probable, but it does not greatly matter. Gudrid sailed back with her dead, a grim voyage down the rocky

and icy front of Greenland. Soon afterward her father died and she went to live with her father-in-law Eric, who took charge for her of the property that she inherited and managed it well. His own death was not so very far away.

That year two ships came out together from Iceland, one being from the eastern side, partly owned and commanded by Biarni, an historic figure; the other from the western side, belonging to Thorfinn Karlsefni, an experienced navigator and man of affairs, notable for success in his undertakings. He was prosperous, too, and able to reinforce the supply of good things very acceptably for the Yule-time entertainment at Brattahlid.

Icelanders were particular as to ancestry, and erudite in pedigree, although some of the ancestral nicknames of their records have a wild-Indian-like sound to our modern ears. Thord Horsehead, Thord the Yeller, Fiddle Mord, Biorn Chestbutter and an extravagant curiosity-shop of names developed from noses, breeches, and the like, seem more at home in the tepees of Rain-in-the-Face and Sitting Bull than as indicating eminent white men of a country which produced great literature. Omitting such uncouthness, Thorfinn Karlsefni, besides notable Danish and Norwegian lines of descent, had for father, Thord the son of Snorri, who was the son of Thord and his wife Fridgerd, daughter of Kiarval (Carroll) a "king of the Irish"—the active and formidable Cearbhall of Ossory contemporary with Alfred the Great.¹ We have already taken note of Gudrid's Gaelic descent.

It is a curious reflection that the first recorded white American was partly Celtic, both paternal and maternal. Perhaps it would be stranger were this otherwise. Iceland was Irish and otherwise Celtic to a degree rarely understood. Even the brother of the first settler brought Irish slaves with him, who revolted, leaving their name to the Westmanna (Westmen, Irishmen) islands, where they found a temporary refuge. Others were brought in afterward at every stage, perhaps the most distinguished being Melkorka,² the kidnapped daughter of another Irish "King" Kiartan (perhaps Cartan). She was bought by an Icelandic chief on the site of Bergen, Norway, passed for dumb through all the earlier years of her humiliation, but died at last, respected, in her home, the ruins of which were shown centuries afterward as "Melkorka-stead." Her grandson

¹ Eleanor Hull: *Irish Episodes of Icelandic History*. Saga Book of the Viking Club, vol. 3, p. 337.

² *Laxdæla Saga*. Proctor's transl., p. 27.

Kiartan, named for his Irish grandfather, is the most splendid figure of the *Laxdæla* Saga. In the striking hyperbole of the ancient narrative, the Gudrun who compassed his death in resentful passion and jealousy wept tears in her later days which scalded the dead out of their graves; for she had "done worst to him I loved best."

Queen Aud, the widow of the Conqueror of Dublin, brought adherents from eastern Ireland, also from Gaelic Scotland, her temporary refuge—which may possibly thus have given the most remarkable and least Scandinavian of the Eddaic poems to Iceland, as suggested by a writer in the *Encyclopedia Britannica*. Vigfusson¹ takes the same view of their general origin in the eastern islands, but without ascribing their introduction to Queen Aud,² and Bugge has presented the hypothesis again slightly modified. Her relatives and followers intermarried with most of the great Icelandic families and occupied the best lands. The names of Icelandic chieftains already given will be readily recognized as Irish. The greatest of the sagas, *Nial's*, contains a glowing tribute to King Brian Boru, as well as the most vivid account in existence of his victory at Clontarf. The sagas are thickly sown with Irish names and allusions; the *Landnamabook* displays them in almost every paragraph of a long succession; and one is tempted to think that by the opening of the eleventh century a fifth or a quarter of the Icelandic blood in all classes must have been Irish.

Thorfinn and Gudrid were married at Brattahlid after the Christmas festivities following the autumn or late summer when they first met; and they sailed for Wineland the next spring—probably that of the year 1003.

Although her influence seems to have been most active in causing and furthering this expedition, she is seldom mentioned in the saga until her return to Iceland—once as giving birth to Snorri, again as perhaps left at Straumey, while her husband went back with a party to Hóp for three months; but a woman's part in such achievements could not often be spectacular nor strike a saga-man as demanding record. The *Flateybook* saga adds a picture of Gudrid beside her infant's cradle in her palisaded Wineland home, entertaining a dubious big-eyed visitor, who bore her own name and announced approaching danger, but was invisible to all other eyes. The Indian attack followed immediately. Reeves's index calls this visitor "Gud-

¹G. Vigfusson: *Prolegomena of the Sturlunga Saga*, p. 193.

²S. Bugge: *The Home of the Eddic Poems*. Schofield's transl., Introduction. p. xxiii.

rid the Skræling woman"; but is contradicted by the items of personal appearance which are given. Some have suggested a white woman in Wineland before these Norse visitors and certainly she is described as having blonde hair and Icelandic apparel, but the prodigious eyes and invisibility seem rather to mark a non-human messenger of warning, proper to the fancy of the time. We are not told, however, that the visitation helped Gudrid or her companions in any way, for the warning came too late; so perhaps the purpose, as conceived by the saga-writer, was merely to alarm, either malignantly or as testing her constancy of mind. Whether there were any truth in this story or not, the attack seems to have been real, and one of the many ordeals through which Gudrid had to bring her little son. She saw him grow to manhood in Iceland, worthily filling his father's place after Thorfinn died.

It will be seen that this little Snorri Thorfinnson, probably born on or near Passamaquoddy Bay, is no vanishing figure of history, like pretty Virginia Dare, who came so much later to the lost colony of Roanoke, and has left us only the pathetic mystery of her fate. His descendants have been numerous in all succeeding centuries, including bishops, notable scholars, and other eminent men.

Gudrid's later career has been touched upon. It seems that she made a pilgrimage to Rome and also lived for a time the life of a religious recluse, both according to the tenets and customs of that period. She was widely known also for the aid she gave to churches, convents, and charities. At every stage of her life we find her a woman of great helpfulness, power of attraction, force of character, and upright, kindly, unsparing effort. Let us trust that this picture is as true to historic fact as to the saga-writer's ideal of a noble feminine nature.

12.—LEIF AND HIS VOYAGES

Tradition gives us likewise the year 1000 for Leif's ¹ unintended exploit, the finding of Wineland. The time is fixed also by the simultaneous conversion of Iceland in that memorable year of "the change of faith." He stands a "wise and stately" figure of history, says Dr. Fiske, but his earlier adventures were neither exalted nor generous.

Leif sailed from Greenland for Norway, perhaps early in 999, by the direct route, skipping Iceland—an unprecedented attempt,

¹G. Storm: Studies on the Vineland Voyages. Mémoires Société Royale des Antiquaires du Nord, 1888.

which ended for the while in his being driven on the Hebrides. He remained there a considerable time awaiting fair winds, and "became enamored of a certain woman named Thorgunna," of rare intelligence. When Leif was preparing to depart Thorgunna asked to be permitted to accompany him.

Leif enquired if she had in this the approval of her kinsman. She replied that she did not care for it. Leif responded that he did not deem it the part of wisdom to abduct so high-born a woman in a strange country, "and we so few in number." "It is by no means certain that thou shalt find this to be the better decision" said Thorgunna. "I shall put it to the proof, notwithstanding," said Leif. [Then she notified him of their expected child, adding:] "And though thou give this no heed, yet will I rear the boy, and send him to thee in Greenland, when he shall be fit to take his place with other men. And I foresee that thou wilt get as much profit from this son as is thy due from this our parting; moreover, I mean to come to Greenland myself before the end comes." Leif gave her a gold finger-ring, a Greenland wadmal mantle and a belt of walrus-tusk. This boy came to Greenland, and was called Thorgils. Leif acknowledged his paternity, and some men will have it that this Thorgils came to Iceland in the summer before the Froda-wonder. However, this Thorgils was afterwards in Greenland, and there seemed to be something not altogether natural about him before the end came. Leif and his companions sailed away from the Hebrides, and arrived in Norway in the autumn.

A Thorgunna, lately arrived in Iceland, is intimately connected with the portents of Frodis-water in the Eyrbyggja Saga—prodigies and hauntings charged to her occult power after death, and very deeply impressing the popular imagination.

Of this sorry little romance or incidental tragedy little need be said. But we get a glimmering view of the harrowed soul of the forsaken woman, which was conceived of as inflicting prodigious punishment even after death.

However, having successfully left her out of the main current of his story, "Leif went to the court of King Olaf Tryggvason, who could see that Leif was a man of great accomplishments" and promptly converted him into a zealous Christian (Leif did not, however, make amends) and at last committed to him the conversion of the other Greenlanders, at the same time that he sent the missionary Gizur on that errand to Iceland.

In the following very brief passage we have our only account of his Wineland discovery, except the notices already quoted and it is most natural that inquirers should direct all side lights on every word of it, eager to extract the full meaning. Only we should beware of a strained ingenuity, the temptation to perverse original paradox, or a too narrow and specialized view:

Leif put to sea when his ship was ready for the voyage. For a long time he was tossed about upon the ocean, and came upon lands of which he had previously no knowledge. There were self-sown wheat-fields and vines growing there. There were also those trees which are called "mausur," and of all these they took specimens. Some of the timbers were so large that they were used in building. Leif found men upon a wreck, and took them home with him, and procured quarters for them all during the winter. In this wise he showed his nobleness and goodness, since he introduced Christianity into the country, and saved the men from the wreck; and he was called Leif the Lucky ever after. Leif landed in Ericsfirth and then went home to Brattahlid; he was well received by everyone. He soon proclaimed Christianity through the land, and the Catholic faith, and announced King Olaf Tryggvason's messages to the people, telling them how much excellence and how great glory accompanied the faith.

Leif was a man with a mission now, and it held him tightly to the Greenland colony, which he probably never left again. If he built any house in Wineland, it must have been during the summer, when he was inspecting those "lands" with no thought of remaining, but in the assurance of more engrossing work elsewhere for the winter. In the warm months the ship itself or any temporary shelter would have sufficed, and if he had forgotten his duty as a vehicle of the faith in any futile burst of architecture, be sure the priest, ever at hand, would have reminded him. Presumably he did not build.

The natural meaning of "lands" would indicate several points of observation along the sea front; which seems likely with most of the summer ahead for gratifying a proper curiosity. Obviously he must have approached some part of the coast and then followed it one way or the other. It may be instructive to see what later navigators did on the same shore when similarly situated. Cabot and Hudson¹ with a hundred years and more between them, took the downward course perhaps as far as North Carolina, probably tempted by southern conditions, which were progressively more genial, then turned about northward and in the end went home. Thorfinn Karlsefni did the same, but apparently did not reach so low a latitude. We may reasonably conjecture that Leif turned southward, too. This supposition is fortified by the insistence of early geographers on a probable connection between Wineland and Africa; by Thorfinn's evident expectation of warmth and fertility; by the disappointment of his party when the facts of Straumey fell short of the imagined standard; by the adjective "Good" traditionally applied to the country, perhaps with the significance of blessed or supernally fortu-

¹ Hakluyt: *Principal Voyages* (1904), vol. 7, pp. 152, 154. Also Nansen: *In Northern Mists*; taking John Cabot on toward Cape Cod.

nate, and by the abundant grapes fit for wine, of which the Danish king told Adam of Bremen.

Now it becomes important to understand what manner of men were these enthusiastic observers of the vines and grapes. First, we have Leif himself, with abundant personal experience in all the northern countries at least, including intercourse with a king and his court, giving him a range of wider knowledge. Then the Icelanders and Greenlanders of his crew, some of whom would surely have traded, wandered, or served in arms in southern Europe. Theirs was the race that penetrated the Mediterranean to Lucca in the middle of the fifteenth century; that had overrun the vineyards of France and looted its wine-making cities; that later established itself as rulers in the two Sicilies and conquered the Canary Islands for Spain; the race that had already supplied soldiers and sailors to most countries of Europe. Miklegard (Constantinople) "the great city," the foremost center of the world's civilization for three centuries thereafter, was more familiar to their minds than it is to ours, and in a little time their men-at-arms were to be the palace-guards of its emperors. Besides these, we must remember the priest and teachers, who joined him in Norway and who were presumably not Icelandic but continental European of some kind. Further along in the saga, we find other outland ingredients, for:

It was when Leif was with King Olaf Tryggvason, and he made him proclaim Christianity to Greenland, *that the king gave him two Gaels*; the man's name was Haki, and the woman's Hækia. The king advised Leif to have recourse to these people, if he should stand in need of fleetness, for they were swifter than deer. . . . They were clad in a garment, which they called "kiafal," which was so fashioned, that it had a hood at the top, was open at the sides, was sleeveless, and was fastened between the legs with buttons and loops, while elsewhere they were naked.

This affidavit-like verbal photography and eye for costume mark the description as by the hand that drew Thorbiorg, yet it was probably only the hand of a romancer. They were afterward set to find the grapes and wheat for Karlsefni in all their semi-nude picturesqueness. I have elsewhere repeatedly indicated a belief that this story as presented is worse than apocryphal.

No doubt both Tyrker of the Flatey saga and this Haki have an aggressively mythical air. The Wineland products no doubt impressed popular fancy and may have seemed to call for special distinction in the matter of their finding; but whether both or either of these stories be accurate, or wholly invented, or relate to matters of fact ill understood, they reveal a general knowledge that these early

crews were not all of one nation, and a sense that the discovery of grapes in particular would probably be made by foreigners among them.

Professor Fernald¹ suggests that wild currants or more probably rock-cranberries and not grapes were found, awakening the widespread and long continued interest already stated. In support of this hypothesis, he cites Linnaeus, a better authority on botany than on vintages as holding "currant-wine" equal to the real article, if only you add a little sugar. Prof. Fernald says that rock-cranberries are a great treat to the birds of Labrador. He believes that the Norsemen, coming from Greenland, were delighted with their profusion and went no farther. Now I do not know what sort of wine may be made from cranberries, but the prospect is unpleasing. It is true enough that beverages with hyphenated names are evolved in divers rural districts and old fashioned households from currants, elderberries, blackberries, wild cherries and the like; and some people have experienced them. Every such name, for example gooseberry-wine, testifies to the pre-existence of real wine as a standard, and to the fact of feeble imitation. Are these the fruits from which the stout Danish king declared "the best of wine" could be made? Can we imagine these Icelandic broadswordsmen in armor growing ecstatic over the prospect of berry decoctions? Would it have been possible, even in later and milder days, to have sustained on them the "true vinous enthusiasm" which Dr. Saintsbury celebrates and which roared through "the tumultuous choruses of Headlong Hall"? Professor Fernald observes the phenomenon too much through the spectacles of the dry-leaf collector and specimen man, omitting the greater part of eleventh century Norse human nature. These men of Greenland and Iceland were after intoxicants. Furthermore, the Ericsfirth region was a berry-country, no less than Labrador. Even 250 miles farther up the coast, Davis² found red-currants growing wild near the end of the sixteenth century, and Dr. Rink³ attests the great practical value to the inhabitants of the crowberry-crop in southern Greenland at the end of the nineteenth century. He says that the cowberries though plentiful are not eaten. It is not at all believable that men should sail out of one profusion of small fruit into another,⁴ like in kind, but inferior and despised at home, and trumpet their experience abroad as something wonderful.

¹The Plants of Wineland. Rhodora, Feb. 1910.

²The Voyages and Works of John Davis, edited by A. H. Markham, 1880.

³H. J. Rink: Danish Greenland, pp. 86, 88.

⁴Nansen, in stating this, seems to have confused crowberries with cowberries, but his argument is sound.

Nor do we find to-day any tendency among our people to confound berries with fox-grapes in fact or in name. The mere difference in size of fruit surely ought to be safeguard enough, to say nothing of the really preposterous contrast between the plants in the same regard. This grape is larger than most of the cultivated ones on the market, whereas currants and cowberries are but little things. The wild grape-vines will sometimes have a stem diameter of six inches and often run to the upper boughs of tall trees or overspread those of somewhat lesser growth with a dense canopy of verdure; but we all know what currant-bushes are, and the other suggested competitors hardly equal their size. Would the old Norsemen have felt any close analogy between a fruit as big as a pea, growing on a small shrub and another as large as a pigeon's egg, hanging from a conspicuous feature of the woodlands? Their descendants among us do not seem to observe such matters differently from other people.

Among Dr. Storm's notes there is one curious instance of a Nova Scotian, who referred to certain grapes as "wine-berries." I take this to relate to our common tart squirrel-grape, about the size of a Zante-currant and barely edible when quite ripe, though chiefly useful for jelly, and presumably capable of yielding a berry-wine or other dubious beverage. Dr. Storm's witnesses probably establish the occasional occurrence of this little wild grape in Nova Scotia a few years ago, if not now; but no doubt Prof. Fernald is right in holding that it cannot have been plentiful. Yet, however abundant, it would be irrelevant. Not such were the bountiful grapes which King Sweyn commended to Adam of Bremen, which the sagas celebrated, and which Leif Ericsson first found.

The larger wild grapes, it appears, are divided into several species of varying habitat in New England, nowhere passing the Bay of Fundy. Gomez¹ may have found them on the Penobscot about 1525, as Champlain heard of them in 1605 on the St. John, where they have been made into wine in recent years,² and reported them plentiful near Saco. Lescarbot,³ who was with him, corroborates this, declaring that they grew as large as plums at Richmond Island; but he relates a projected experiment of their apothecary to introduce grape

¹ S. E. Dawson: *The St. Lawrence, its Basin*, p. 102.

² Haliburton: *A Search for Lost Colonies*. *Pop. Sci. Mo.*, vol. 26, p. 40.

³ M. Lescarbot: *Nova Francia*. Erondelle's transl., pp. 93, 101. I have mistaken one of our small wild plums for such a grape, the tree and vine being neighbors.

vines from southern New England and plant them at Port Royal, Nova Scotia, where they did not grow.¹

Strachey² celebrated these grapes in the same vein as the King of Denmark, but more voluminously, during the time of Powhatan's confederacy, "the Queen of Portobaco," "the Emperor of the Nanticokes" and "the laughing King of Accomac." He writes:

It would surely raise a well-stayed judgment into wonder (as Sir Thomas Dale hath writ sometime unto his majesty's counsel here for Virginia) to behold the goodly vines burthening every neighbor bush and climbing the tops of highest trees and these full of clusters of grapes in their kind, however draped and shaded soever from the sun and though never pruned nor manured. I dare say it that we have eaten there *as full and luscious a grape as in the villages between Paris and Amiens and have drunk often of the rath wine which Dr. Bohunc and other of our people have made full as good as your French British wines.* Twenty gallons at one time have sometimes been made, without any other help than crushing the grapes in the hand, which letting to settle five or six days hath in the drawing forth proved strong and heady.

This would seem to dispose of Dr. Nansen's suggestion that Leif and others had neither appliances nor leisure for wine-making.

Possibly, like the Norsemen, the Virginians overrated this vintage. It is more to the purpose to note the effect of these wine-yielding wild-grapes on the minds of early explorers and colonizers; and that, with so many centuries between them, both apply the same praise to the same thing. "Strong and heady" no doubt had much to do with the excellence ascribed.

These grapes are especially important to our present research, not only because they gave North America its first name (unless we except the more dubious Great Ireland) but because they are our best clew to one of the "lands" that Leif discovered. Being first or last where fox grapes were abundant, he must have reached southern New England at least, more likely New Jersey, or even the regions about the Chesapeake. Remembering Cabot and Hudson

¹Leif's crew, like our people of the District of Columbia and neighboring states, doubtless did not discriminate, except between the small berry-like kind (which would not be lightly valued where better berries were plentiful) and the large kind, good for table-fruit and for wine. We call the latter "fox grapes." I have picked and eaten them on a low island of the Anacostia near Benning's bridge, and only a few feet from a great bed of wild rice, a spot probably within the limits of Washington City. More commonly they occur on our hills. A few years ago a great number were gathered near the Conduit Road for our household use. Civilization clears them away; yet I have found them, both green and ripe, near the lower reservoir in a dense thicket on two occasions in August, 1911.

²W. Strachey: *The Historie of Travaile into Virginia*, p. 120.

and the reference to "Africa," my own probable limit for him would be more southerly even than Norfolk, though it is all conjecture. Juul Dieserud was perhaps the first writer to point out the probability that Leif had gone farther south than Thorfinn, though Moulton's History of New York had carried Thorvald to Manhattan or beyond it. The account of the shore westward beyond Leif's-booths in the Thorvald section of the Flateybook saga undoubtedly suggests the outer face of Long Island, N. Y., or some like low strand—possibly a reminiscence of Leif's earlier cursory visit to the coast.

Of course we must not forget that the range of a plant may change with time, a lowering or rising of the average temperature being an important factor in determining this. Indeed, in the case of the squirrel-grape a withdrawal from Nova Scotia seems to have really occurred within a hundred years. But the disappearance may be due to their sparseness and to human interference in clearing ground, rather than to a very few feet of crustal uplift or other change in conditions. During the previous 800 years, man would not be a factor, for the Indians of the region were not agricultural nor likely to work, except in fishing and hunting, beyond the absolute needs of their canoes and camp-fires. The seasons, too, during the last 300 years appear pretty constant in quality, except where modified a little by shearing off the forests. The few weather hints of the earlier Norse sagas tell the same story of relative temperature north and south, although the upper border of the grape-belt may have receded a little.

One might fancy that the increasing severity in Greenland's climate, which Ivar Bardsen noted about midway between our time and that of Eric the Red (though Dr. Nansen doubts it), would necessarily be repeated along our coast from Labrador to Cape Ann, by reason of the augmented volume and coldness of the southward-running Arctic current. But the problem is not so simple, for a mild Greenland season has been found to make a chill one in Labrador, as Dr. Fiske¹ has noted, by loosening a greater mass of ice from its moorings to float southward. On the whole, we may more safely assume approximately the same climate as at present and the same area of abundance for fox-grapes in the year 1000 until we have some proof of change.

The "wild wheat" of the saga will be dealt with more fully in a later chapter. If construed as "strand oats," for example by Prof. Fernald, it clearly contradicts the statements about grapes

¹ The Discovery of America.

and vines and excellent wine, since it confines us to northern regions which they cannot reach. If it means *Zea mays*, our ordinary "corn," as believed by Rafn and Fiske, it can add nothing, for the maize limits and fox grape limits were nearly identical on the northeast, and both extended southward far beyond any probable voyage of Leif. If, as appears most likely, wild rice (*Zizania aquatica*) be intended, our case for local identification is only a little better. This rice grows plentifully all the way from Texas to the coast mountains of Maine; it is so plentiful in Maryland as to be the dominant feature of river landscape in the tidewater region; it thrives near Boston and Providence. Indeed, Cartier's attention in 1535 was attracted to it (as blé sauvage) on the southern shore of the Gulf of St. Lawrence. As already stated he says it is like rye, and plainly distinguishes between it and maize, which he first saw soon afterward. Leif might have found wild rice at intervals anywhere below the Kennebec.

The statement that *some* of the timbers were large enough to be used for building may seem to imply a lightly timbered region, but Leif merely took "specimens," and the word "some" doubtless relates to this little miscellaneous collection and not to the general forestry of Wineland or Markland. The use referred to would probably be at Brattahlid, or at least under the direction of Eric,¹ whose ideas on such subjects were massive, as we gather from the hundred-cubic-foot dimensions of his house-wall stones. Growing trees of any reasonable bulk and height might readily have been found within the limits of the present Maritime Provinces; and Newfoundland must have been mainly a forest, as were most of the seaboard regions below.

There has been much discussion over the puzzling "mausur wood." Rafn thought it especially indicated "bird's-eye maple," found on Marthas Vineyard and elsewhere. This is probably our most beautiful native wood, having a delicate wavy and dotted grain. Prof. Fernald in his *Rhodora* article identifies mausur positively with "canoe birch." In Scandinavia some kind of birch must have been most often the source of this ornamental carving wood, for birches are the most plentiful hardwood trees of northern countries. Yet on Grand Manan, where the white birch is everywhere in evidence, the comparatively few maples would more readily yield a large specimen; and knotty parts are to be found in either. That "a veined wood," irrespective of species, is the real meaning appears from the following words of said article: "Similar growths have sometimes been found on the maple, horse-chestnut, cherry and aspen, and *have*

¹ H. J. Rink: Danish Greenland. Stated as 6 feet by 4 and "of like thickness."

sometimes been put to similar use." It is hard to believe that any birch, however contorted in grain, can equal bird's-eye maple; but no doubt these practical lovers of beautiful things were in no way concerned as to whether it were one or the other, provided it answered their requirements. They would classify by ornamental effect, and name it according to their classifying. But even if we were to accept canoe birch as the true and only "mausur," Leif might still have obtained it almost anywhere from Long Island to Nova Scotia. Besides, we do not know that he cut his prize in the same "land" where he gathered grapes. He visited "lands" and brought home these specimens; that is all.

We have no further clue. He touched a country of warmth and plenty, where wild fox-grapes abounded. The other products which he found were proper to that territory, although they may have been picked up beyond it. From allusions later in the saga, and statements elsewhere, we learn that he named this region Wineland, but not necessarily with any reference to goodness or blessedness except so far as he may have held wine to be good and blest.

Dr. Nansen discredits this achievement of Leif, though accepting the saga's previous statement that he sailed from Greenland directly to the Hebrides and Norway, and applauding it as among the greatest of nautical exploits. But surely this bold navigator would be the very man to attempt a repetition of the feat, sailing the other way; and what could be more natural than his storm-driven landfall on an unexpected shore? We do not need to go into mythology or folk-tales for precedents; such incidents are there also because they first happened to men in reality; and they keep on happening. When that which began as fact occurs as fact again, it cannot reasonably be impeached by any intervening or parallel play of fancy.

Leif's items are meager, but so far as they go they are absolutely corroborative. Evidently someone visited our coast somewhere between Casco Bay and the Chesapeake, touching also at Newfoundland and Labrador. Whether the voyager were Leif, or Biarni, or another may not be practically important, but Leif is named as discoverer in the best accredited saga, and we may as well adhere to him until a more plausible candidate is found.

13.—WITH THORFINN AND GUDRID TO THE BAY OF FUNDY

A glance at a map of these regions shows two methods of approach to mainland America from southern Greenland—the direct route over sea and the slow but nearly safe and sure northwestern journey along

the Greenland coast to the region where the shores bend toward each other near Davis Strait; followed by a dash southward or southwestward. The former aims immediately at habitable regions and pleasant surroundings; it is shorter and naturally tempted men; but it tempted the rage of the Atlantic also, which has usually been active near the Newfoundland banks and above them, providing a dangerous trap for mariners who had to guess at direction since they carried no compass. It sent Thorstein, through great trouble and hardship, all over the sea to no purpose. Very likely it sent Bishop Eric and his companions to the bottom, destroying with them all hope of a Christianized and organized Wineland.

Thorfinn Karlsefni, though an enterprising man, probably owed his especial reputation for success to his very great care in making sure. Like all such, he had the wit to profit by the mistakes of others. He was a seasoned navigator who had thus far avoided mishap, through knowing how to humor the northern seas. Moreover, in Red Eric he had the counsel of the foremost explorer in the world, who must have pondered long on the causes of his son Thorstein's failure and the best way to avoid its repetition in trying again. If he had not seen—as already suggested—the main American shore opposite Greenland in the course of his first very thorough three years' explorations, his indomitable wilderness-rangers like Thorhall the hunter, must surely have been frequently up about the straits and would be charged season after season to bring him information. So active a mind as Eric's anchored physically by increasing years and injuries, could not fail to busy itself especially with the geography of the lands beyond that water and their relation to those which Leif had seen. The coming of driftwood to him from some unknown quarter would be a continual reminder and incitement. Thorstein was dead, Leif was immersed in aggressive Christianity; in his brilliant daughter-in-law Gudrid, her husband and Leif's brother, Thorvald, Eric the explorer would naturally see the best hope of substituting success for failure.

Thorfinn's actual route is carefully given. It was from Ericsfirth to Gudrid's former home near Lysufirth in the smaller settlement; about five degrees farther west and a long distance above the junction of the western water with the Atlantic. Next they went to "Bear-Island," according to the Saga of Thorfinn Karlsefni, or "the Bear Islands," according to the Saga of Eric the Red, which is generally the safer guide where details differ. No doubt Disco was called "Bear-Island" (Biarney), as Graah,¹ the first official explorer of

¹Exploration of the East Coast of Greenland, before cited.

Eastern Greenland, pointed out nearly a century ago. But this was a common name, readily applied; indeed our narrative presents later another and very distant Biarney. Disco is unreasonably far north, involving unnecessary struggles with icy currents; and the flight from it could hardly have been made in the time given by the sagas, though perhaps this item need not be insisted on. An island,¹ off Baffin-land, on the American shore has been suggested, bidding us assume not only that this coast had been seen, as it may have been, but that it had grown familiar enough for recognized nomenclature in details. We have no warrant to go so far. A more moderate conjecture points to the Greenland islands near the present Godthaab, where Davis was attacked by Eskimo nearly six centuries afterward. They would make a good taking-off point. It was only necessary to await a strong steady wind from the north. Having this behind them, like migratory birds of long travel, Karlsefni and his company sped down "southward," or a little west of southward, on their way.

One hundred and sixty men and several women besides Gudrid went with him—perhaps children, too, as did Snorri in returning—for families took all manner of chances in those reckless days. "All kinds of live stock" owned by Greenlanders accompanied these colonists in three, or possibly four, large vessels. Clearly they intended permanent settlement.

We must not call them viking-ships, which never sailed out of Iceland or Greenland; though Dr. Fiske² inadvertently styles Eric the Red "a viking," in praising his explorations, and Colonel Higginson³ devotes much space to an account of Norse marauders, to make us acquainted with the people who tried at great risk and through much hardship to settle America. The only enlightenment is collateral, and the general effect is misleading.

Such utterances grow out of a confusion like that between sea-king and viking, which gives the first syllable of the latter its broad current mispronunciation. Three types must be distinguished: the sea-king, the viking and the settled man of the north who created what prosperity was going and offered the best hope for the future. The first—for example Olaf the White Queen Aud's husband—made conquests by his navy, and differed from other navy-wielders only in

¹J. T. Smith: *The Discovery of America by the Norsemen in the Tenth Century*. Also the *Minn. Hist. Soc. Report*, already cited p. 13. (His map with additions.)

²*The Discovery of America*.

³Higginson and MacDonald: *History of the United States*. Ed. 1905, pp. 25 *et seq.*

being less definitely anchored politically and more ready to drop anchor permanently abroad. The second was a predatory son of the vik or fiord (as his name tells us) in which he had his den, and whence he issued, to pounce on passing ships or harry the farmers along the shore.

If these things were done far afield, men counted them acts of war against the outer world and the perpetrators were considered heroes. Many generally commendable Scandinavians engaged in them. Sometimes even formidable associations were organized, to more efficiently exploit this wide opportunity. But excitement and yet more the prospect of booty were at the bottom of it all. In proportion as the achievements occurred nearer home, they were regarded with more disfavor. Especially was this true in that northern island which was colonized by picked men choosing exile rather than submission, whose natures also were modified from the beginning by other blood of more ripe and gracious culture. The home-raider was held not wholly admirable in Norway; he became in Iceland (see *Landnama*) "the most wrongful of men" and "a viking and a scoundrel." Just so, *Ospak*¹ of the northern Ere and his merry men, owned a lieutenant, one Raven, adequately stigmatized in another great saga as "by named the viking, he was nought but an evil doer." There is no compromise in the characterization of such folk by the early heroic literature. The teaching is often by example rather than precept, by dramatic exhibition rather than denunciation; but we are expected to feel that the boiling alive² of professional bullies might be overlooked, if not applauded, and that almost the very worst type of man was he who brutally afflicted his neighbors, and thus acquired their wives and goods. To the Icelander, if there were one kind of robberbully more intolerable than another, it was the local amphibious viking. Rather early in the prosperity of the island, it necessarily made an end of him. But that "viking" should be anything but a synonym for aquatic hero in these northern lands hardly seems to have suggested itself to most English-writing historians. The sea-king and the viking were the greater nuisance and the less of their period; but there was this to be said for the former, that he revived in some form the order which he overturned and often was a factor in improvement, whereas the viking was merely destructive, except in his own home or within the limits of his predatory association.

¹The *Eyrbyggja Saga*. Morris and Magnusson's transl., pp. 164, 291. Notes.

²*Eyrbyggja Saga*, p. 70.

The normal Norseman, of whom we hear less, was a good man at arms, under penalty of losing all; too ready, no doubt, to obey the battle summons even in the neighborhood or family quarrels; but less a soldier than a trader, a farmer, a fisherman or something of all three, as well as a curious traveler abroad. At heart he was anything but a pirate. The habit of industry was almost curiously dominant in all classes and exhibited in the most artless, unpretending way. The great chief and champion Gunnar is discovered sowing grain with his own hands in the crisis of his fate; at Bolli's command, his wife Gudrun goes out of the dairy, where murder is to leap on him, and providently washes clothes in the brook during that tragedy; the vengeance of Bardi falls on Gisli and his companions while their scythes are asway in the field; Hallgerda's first husband is killed, by her contrivance, over a quarrel as to whether he or another can best handle codfish; and the whole troop of Flosi the Burner postpone one of the most notable recorded instances of Norse vengeance until they have properly completed the haying. The old time Icelander was a very practical, if a very belligerent and litigious, hero, with genuine honesty as he saw it, and a real intention to be law-abiding in the main, though abiding a most topsy-turvy kind of law.

Yet, while not a viking, he might have as good ships or better. Such were the "dragons" or "serpents," built for dangerous hazards and important missions, for withstanding the worst onset of the elements—at need for hand to hand boarding with sword and axe and spear, also for the most effective pursuit or escape.

Of course they were not the only kind. A rather clumsy and dilatory craft¹ was in use more or less for ordinary trading purposes. Its modern representative was pointed out to Professor Packard² by a Norwegian, and taken as an approximate standard in the sailing calculations of the former for the time needed in the passage between Newfoundland and Greenland across the dreaded Ginnungagap. But one of the exploring vessels had already borne Thorbiorn and Gudrid with their fortunes to Greenland, when a dismal death, or life, honor and prosperity, were in the cast of a die, and all that he owned had gone to the venture; a second was Thorfinn's own; a third belonged to Biarni, a chivalric chieftain of the highest personal pride and most exacting followers. Such craft would more likely be of the dragon or serpent pattern, beautiful open ships "which were probably stronger and more seaworthy and certainly much swifter than the

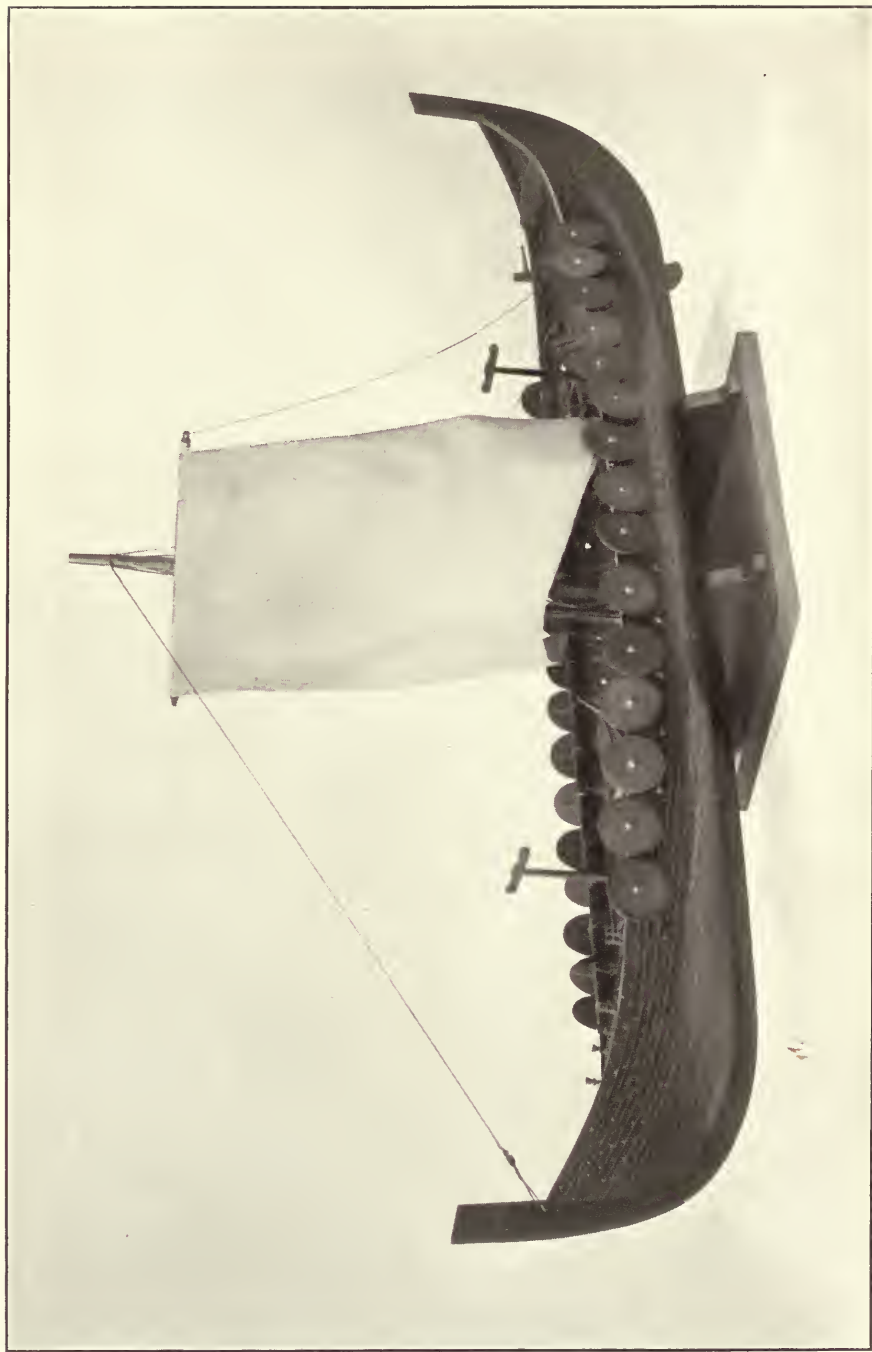
¹ Heimskringla. Laing's transl., vol. I, p. 441.

² A. S. Packard: The Labrador Coast, pp. 24, 26.



THE GOKSTAD SHIP, STERN VIEW

From photograph taken in Christiania, Norway. Belongs to period from 700 to 1050 A. D. Discovered in the "King's Mound," near Sandefjord, Norway, in 1880. Dimensions of original: keel 66 feet, length over all 79 feet 4 inches, breadth 16½ feet, depth 6 feet in middle, 8½ feet at extremities. For description and other illustrations of the Gokstad ship see Smithsonian Report (National Museum), 1891



Spanish vessels of the time of Columbus." Laing¹ gives similar testimony. One of the largest on record was King Olaf's Great Serpent, a hundred and fifty feet in the keel.

Colonel Higginson² has described this type, from a fine specimen yielded up nearly intact by the northern sands. I quote only a little :

She was seventy-seven feet eleven inches at the greatest length and sixteen feet eleven inches at the greatest width . . . and would draw less than four feet of water. . . . As a whole this disinterred vessel proved to be anything but the rude and primitive craft which might have been expected. It was neatly built and well preserved, constructed on what a sailor would call beautiful lines and eminently fitted for sea-service. . . . Many such vessels may be found depicted on the celebrated Bayeux tapestry. . . . This was not one of the very largest ships, for some of them had thirty oars on each side (instead of its sixteen) and vessels carrying from twenty to twenty-five were not uncommon. . . . Probably the sail was much like those still carried by large open boats in that country, a single square on a mast forty feet long.

Thus equipped, Thorfinn could go quite literally on the wings of the wind. Henceforward, at least as far as the Bay of Fundy, we have the benefit of their log and sailing directions. Leif has given us no such aid, but there was no such motive in his case. He had stumbled on his great good fortune, and probably acted mainly from impulse in skirting the shore awhile, and touching here and there for specimens, before hurrying home to evangelize Greenland. Thorfinn, however, aimed at permanency, and it was most important to note closely the route which must be retraced in sending tidings and establishing communication with the parent colony, and which all reinforcements must follow. It is plain sailing in the saga as in reality, with merely some uncertainty as to the exact intervals of time and distance intended. In that the swiftness of the wind-driven ships of course must be considered.

The saga tells us :

Thence they sailed away beyond the Bear Isles with northerly winds. They were out two *doegr* ; then they discovered land, and rowed thither in boats, and explored the country, and found there many flat stones [hellur], so large, that two men could well spurn soles upon them [*i. e.*, lie at full length upon them sole to sole] ; there were many Arctic foxes there. They gave a name to the country and called it Helluland.

Thence they sailed two "*doegr*," and bore away from the south toward the south-east and they found a wooded country and on it many animals ; an island lay there off the land toward the south-east ; they killed a bear on this, and called it afterwards Biarney [Bear Isle] ; but the country Markland [Forest-land]. When two "*doegr*" had elapsed, they descried land, and they sailed off this land ; there was a cape [ness] to which they came. They beat into the wind along this coast, having the land upon the starboard [right] side. This

¹ Heimskringla, Laing's Introduction, vol. 1, p. 160.

² Higginson and MacDonald: History of the United States Ed. 1905, pp. 30 *et seq.*

was a bleak coast, with long and sandy shores. They went ashore in boats, and found the keel of a ship, so they called it Keelness there; they likewise gave a name to the strands and called them Furdustrandir (Wonder Strands), because they were so long to sail by. Then the country became¹ fiord-cut and they steered their ships into a bay.²

Here the interpolated unauthentic episode of Haki and Hækia occurs. "One of them carried in the hand a bunch of grapes, the other wheat selfsown. Karlsefni said they seemed to have found goodly indigenous products." The original narrative proceeds, beginning with a repetition which is enough of itself to show the break made by the foreign matter:

Karlsefni and his followers held on their way, until they came where the coast was fiord-cut (or indented with bays). They stood into a bay with their ships. There was an island out at the mouth of the bay, about which there were strong currents, wherefore they called it Straumei [stream island]. There were so many eider ducks ["birds," Thorfinn Karlsefni]³ on the island that it was scarcely possible to walk for the eggs. They sailed through the firth, and called it Straumfiord [stream firth] and carried their cargoes ashore from the ships, and established themselves there. . . . There were mountains there and the country round about was fair to look upon. They did nought but explore the country. There was tall grass there. They remained there during the winter, and they had a hard winter, for which they had not prepared, and they grew short of food, and the fishing fell off. Then they went out to the island, in the hope that something might be forthcoming in the way of fishing or flotsam. There was little food left, however, although their livestock fared well there [*i. e.*, on the island]. Then they invoked God, that he might send them food, but they did not get response so soon as they needed. Thorhall disappeared. They searched for him three half days and on the fourth day Karlsefni and Biarni found him on a projecting crag [note, of the island]. He was lying there and looking up at the sky, with his eyes, nostrils and mouth wide-stretched, and was scratching himself, and muttering something. They asked him why he had gone thither; he replied that it did not concern any one; he told them not to be surprised at this; adding that he had lived sufficiently long to render it unnecessary for them to take counsel for him. They asked him then to go home with them and he did so. Soon after this a whale appeared there, and they went to it, and flensed it, and no one could tell what manner of whale it was. Karlsefni had much knowledge of whales, but he did not know this one. When the cooks had prepared it, they ate of it, and were all made ill by it. Then Thorhall, approaching them, says: "Did not the Red-beard prove more helpful than your Christ? This is my

¹ Olson substitutes "fiord-cut," as more exact, for Reeves' "indented with bays."

² A. M. Reeves: *The Finding of Wineland the Good*, pp. 42-43.

³ Compare Bird Island of the Gulf of St. Lawrence, where Packard in 1864 found the whole top white with nesting birds. In 1860 about 50,000 pairs of gannets nested there, 5,000 in 1874; 50 in 1882, and their nests had been rifled when found. Funk Island off Newfoundland on the Atlantic side was also often called Bird Island for like reasons.

reward for the verses which I composed to Thor the Trustworthy; seldom has he failed me"; and when the people knew this, none of them would eat, and they cast [it] down over the rocks, and invoked God's mercy. The weather then improved, and they were able to row out to fish, and they had no longer any lack of the necessities of life. In the spring they went into Straumfirth and obtained provisions from both regions, hunting on the mainland, gathering eggs, and deep-sea fishing.

Now they took counsel together concerning their expedition, and came to an agreement. Thorhall the Huntsman wished to go northward around Wonderstrands and past Keelness, and to seek Wineland; while Karlsefni wished to proceed southward along the land and *to the eastward*, believing that country to be greater, which is farther to the southward, and it seemed to him more advisable to explore both. Thorhall prepared for his voyage out below the island, having only nine men in his party, for all of the remainder of his company went with Karlsefni.

Of this picturesque dissentient and minority-leader we hear earlier in the saga:

Thorhall was called the Huntsman; he had long lived with Eric, engaging in fishing and hunting expeditions during the summer, and had many things under his charge. Thorhall was a man of great stature, swart and giant-like; he was rather stricken with years, overbearing in manner, taciturn, and usually a man of few words, underhanded in his dealings, and yet given to offensive language, and always ready to stir up evil; he had given little heed to the true faith after its introduction into Greenland. Thorhall was not very popular, but Eric had long been accustomed to seek his advice. He was in the same ship with Thorvald and his companions because he had extensive knowledge of the uninhabited regions.

Continuing the narrative:

And one day when Thorhall was carrying water aboard the ship, and was drinking, he recited this ditty:¹

"When I came, these brave men told me,
Here the best of drink I'd get,
Now with water-pail behold me,—
Wine and I are strangers yet.
Stooping at the spring, I've tested
All the wine this land affords;
Of its vaunted charms divested,
Poor indeed are its rewards."

Then they put to sea and Karlsefni accompanies them out off the island. Before they hoisted sail, Thorhall recited this ditty:

"Comrades, let us now be faring
Homeward to our own again!
Let us try the sea-steed's daring,
Give the chafing courser rein.
Those who will may bide in quiet,
Let them praise their chosen land,
Fasting on a whale-steak diet,
In their home of Wonder-strand."

¹A. M. Reeves: The Finding of Wineland the Good.

Then he "sailed away to the northward past Wonderstrands and Keelness, intending to cruise to the westward around that cape." No more was heard of him, until, after their return to Iceland, traders brought word that he had been enslaved in Ireland, where he is said to have died. Storms were given the credit of causing this unexpected and rather prodigious and disastrous journey; but perhaps he had taken the opportunity to withdraw with a ship from westward lands altogether.

To offset this defection, the baby Snorri had arrived as a little reinforcement, his birth-place being apparently the shore of the bay behind Straumey, before they moved out to that island in the winter: for we are told later that "Snorri, Karlsefni's son was born the first autumn and was three winters old when they (finally) went away." He may have been about six months old when the party divided, and "Karlsefni cruised southward off the coast with Snorri and Biarni and their people."

No doubt there was hope of establishing their home permanently in some spot which would better fulfill the expectations aroused by Leif. The absence lasted however, only a year; making an episode presenting so many special problems that it must be treated separately.

Returning from this southern sojourn:

They now arrived again at Streamfirth where they found great abundance of all those things of which they stood in need. Some men say, that Biarni and Gudrid remained behind there with a hundred men, and went no further; while Karlsefni and Snorri proceeded to the southward with forty men, tarrying at Hóp barely two months and returning again the same summer. Karlsefni then set out with one ship, in search of Thorhall and Huntsman, but the greater part of the company remained behind. They sailed to the northward around Keelness, and then bore to the westward, having land to the larboard [left]. There were wooded wildernesses there; and when they had journeyed a considerable distance, a river flowed down from the east toward the west. They sailed into the mouth of the river, and lay to by the southern bank.

It happened one morning, that Karlsefni and his companions discovered in an open space in the woods above them, a speck, which seemed to shine toward them, and they shouted at it: it stirred, and it was a Uniped¹ [onefooted], who skipped down to the bank of the river by which they were lying. Thorvald, a son of Eric the Red, was sitting at the helm, and the Uniped shot an arrow into his inwards. Thorvald drew out the arrow and exclaimed: "There is fat around my paunch; we have hit upon a fruitful country, and yet we are

¹Nansen: In Northern Mists; contains a picture of a harmless-looking one copied from the well-known Hereford map. The fancy may have come from the south; but Norsemen were ready to see Unipeds even in Scandinavia on slight provocation—much more on an inner shore of a land of mystery and dread.

not likely to get much profit of it." Thorvald died soon after from his wound. Then the Uniped ran away back toward the north. Karlsefni and his men pursued him, and saw him from time to time and it seemed as if he were trying to escape. The last they saw of him, he ran down into a creek. Then they turned back; whereupon one of the men recited this ditty:

"Eager, our men, up hill down dell,
Hunted a Uniped;
Hearken, Karlsefni, while they tell
How swift the quarry fled!"

Then they sailed away back toward the north, and believed they had got sight of the land of the Unipeds; nor were they disposed to risk the lives of their men any longer. They concluded that the mountains of Hóp, and those which they had now found, formed one chain, and this appeared to be so because they were about an equal distance removed from Straumfiord in either direction. They intended to explore all the mountains, those which were at Hóp and those which they discovered. They sailed back and passed the third winter at Straumfiord.

Then the men began to grow quarrelsome, of which the women were the cause; and those who were without wives, endeavored to seize upon the wives of those who were married, whence the greatest trouble arose.

When they sailed away from Wineland, they had a southerly wind, and so came upon Markland, where they found five Skrellings, of whom one was bearded, two were women, and two were children. Karlsefni and his people took the boys, but the others escaped, and these Skrellings sank down into the earth. They bore the lads away with them, and taught them to speak, and they were baptized. They said, that their mother's name was Vætilldi, and their father's Uvægi. They said, that kings governed the land of the Skrellings, one of whom was called Avalldamon, and the other Valldidida. They stated, that there were no houses there, and that the people lived in caves or holes.

Then follows the information before mentioned about a possible Ireland the Great; also the statement of their return to Greenland; where they passed the winter, going on to Iceland the next season.

The little epic pendant of Biarni's death, the experience of Gudrid with her mother-in-law, and the genealogy of "Herra Hauk the Lawman" end the saga.

Dr. Nansen has noticed the insertion of The Gaelic Runners episode in the wrong place, but apparently misses the significance of the words about entering a bay which precede and follow it. Evidently there was but one bay, repeated by the interpolator to keep up the story or in mere carelessness. These were intending settlers guided by Eric's advice and plan of penetrating deep inlets and establishing themselves in fertile, ample, grassy borders. Passamaquoddy Bay, just beyond Grand Manan, would be the first to tempt them one would say.

14.—THEIR WINELAND VOYAGE INTERPRETED

Some romantic matter concerning Thorhall, Thorvald, and Markland—which may well be quite true in substance yet should not be treated as historic—has been given above, not only because it is threaded on the very coherent and sensible explorers' narrative in the saga and has a certain literary interest, but because of its helpful data.

We see that this narrative deals with wide intervals, great areas, impressive features of the coast, and prodigious phenomena, ignoring minor items, except for identification or incidental entertainment. Again, wherever the explorers follow the coast for any great distance, its notable characteristics are carefully given; so, when these do not appear, we may be sure they sailed out of clear sight of land.

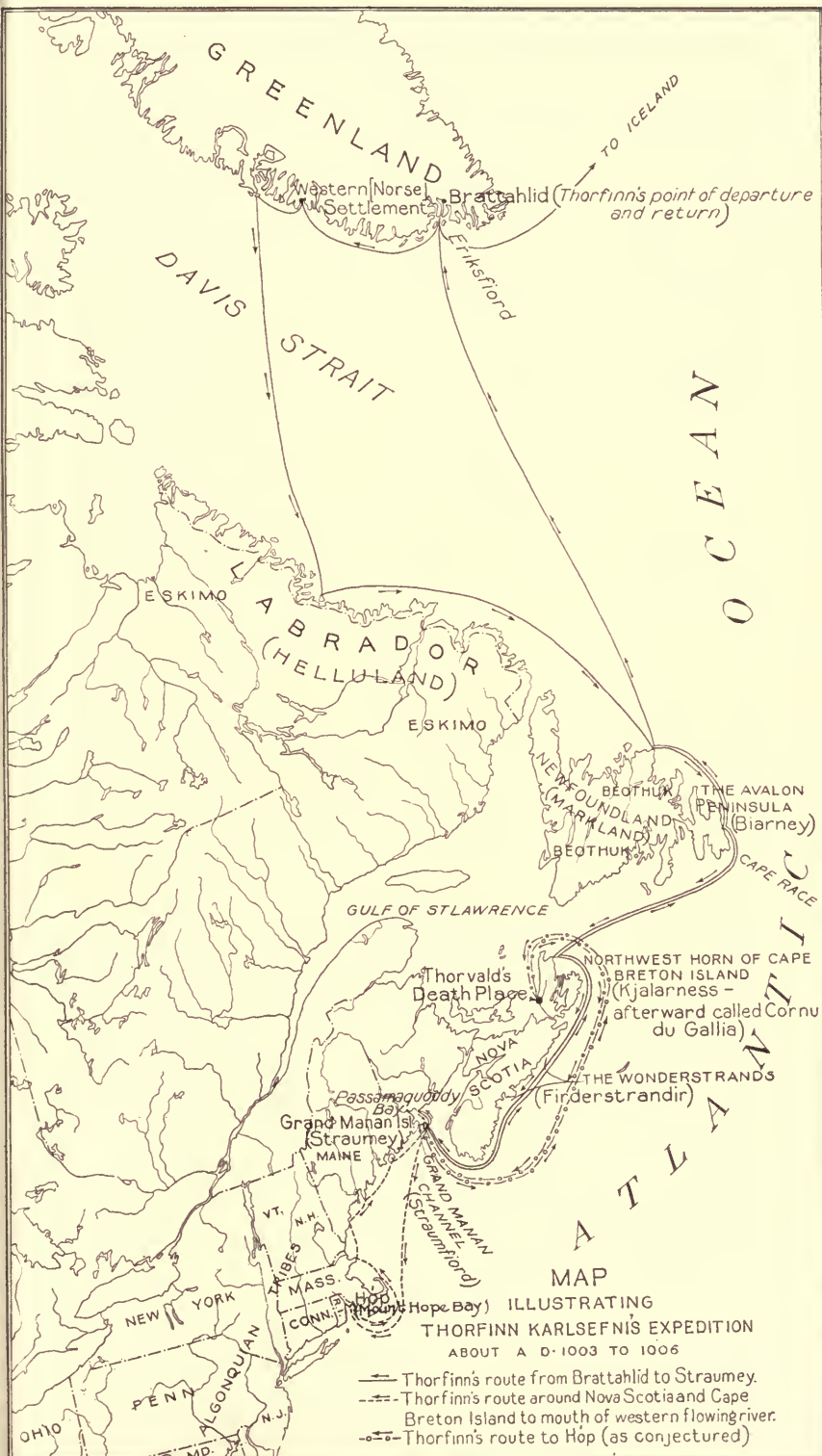
We may find something artificial in the periodicity of the "two doegr" interval, once repeated in the Saga of Thorfinn Karlsefni, twice in the more precise companion Saga of Eric the Red; and undoubtedly such conventional divisions are a stock property of old sea-exploring tales. Thus there are three periods in the outward voyage of Edrisi's¹ Magrurin, first about eleven days, then twelve, and then twelve again. But in tracing a coast for suitable settlement sites, a periodical inspection might be planned from the outset for the earlier part of the work by way of saving time, and to keep the record brief, as it should be if in runic characters. This plan would answer very well until they should reach habitable country, which would require to be examined more minutely; and, in point of fact, we hear no more of the "doegr" after the landing at Keelness. It will not do to say that every statement of regularly divided human undertaking is untrue because regular divisions occur also in stories mainly fanciful. Thorfinn comes before us as a wary, systematic, and successful personage, and the method here indicated seems quite in character. The parallel with myths and folk-tales has little value, except where the events narrated and divided are clearly fortuitous.

Newfoundland cannot be Helluland (as some used to think) for several reasons; in particular, it is not severe, bare, and stony enough, and has far too few Arctic foxes. Prof. Packard,² who had scientifically studied these regions, declares for the eastern face of Labrador, perhaps "near Cape Harrison or along the coast to the northward." Sir Clements Markham,³ another and very competent

¹ Edrisi: *Géographie*. Jaubert's transl., vol. 2, p. 27.

² The Labrador Coast, p. 11.

³ Remarks on Dr. Nansen's paper. London Geogr. Journ., Dec. 1911.



MAP
ILLUSTRATING
THORFINN KARLSEFNI'S EXPEDITION
ABOUT A D-1003 TO 1006

- Thorfinn's route from Brattahlid to Straumey.
- - - Thorfinn's route around Nova Scotia and Cape Breton Island to mouth of western flowing river.
- · · Thorfinn's route to Hop (as conjectured)

eye-witness; ¹ Dr. Grenfell, who has spent most of his life in humane service along that shore; Mr. W. S. Wallace, his historical coadjutor and Dr. Storm, ² reasoning from totally different experience and data, all take the same view, but with less local exactness. It is needless to add further corroboration. Helluland was Labrador, although it may have been first seen in the stretch between Hopedale and Nain.

From the islands near Godthaab to a point slightly below Nain may be 450 miles. The assumed impossibility of Thorfinn's making the crossing in the time stated (probably 48 hours for open sea-sailing like this) led Mr. Reeves to suggest a copyist's error, substituting "two" for seven. But this is purely hypothetical, involves a really prodigious time-allowance and would call for too much later repetition of verbal errors, as well as too great length for the entire journey.

It may be well to see what has been actually recorded in more recent times. A writer on long distance lake-racing in "Yachting," for June, 1910, page 407, cites the "Vencidor" as making 331 miles in 34 hours, with wind astern or nearly so, a third of the distance being "through rockstrewn channels, where reefs and islands furnish continually shifting currents and high shores give baffling slants of wind." This is nearly at the rate of ten miles an hour, and perhaps we may fairly suppose twelve or more for the two-thirds of open water. Again, on the Atlantic between Nassau and Havana, we learn: ³ "The 'America' logged a distance of 400 miles in 40 hours, 260 of which was made in the first twenty-four hours." This seems a reasonably fair comparison, the voyage being in about the same direction as Thorfinn's and for only a little less distance, though in much more southern latitudes. No doubt the difference between the distance made in the first day and that in the second is to be explained by some change either in the course or the wind. We are given to understand that there was neither in the Norsemen's case.

Now this schooner-yacht "America" was beaten by "the big sloop 'Maria,'" which "walked away from her" ⁴ in sea-sailing before the wind, and we are assured by the same work that this feat would probably have been repeated as often as undertaken and at any time. Further, we find that the proportions of the "Maria," 110 feet by 26 feet 8 inches, and 6 feet greatest draft, were substantially those

¹ Labrador, the Country and the People, by W. T. Grenfell and others, containing Wallace's historical monograph.

² Studies on the Vineland Voyages, already cited.

³ G. Bleckman and P. Newton, *The Blue Ribbon of the Sea*, p. 60.

⁴ *Ibid.*, p. 34.

of the old Norse pattern; why then could not Thorfinn's big sloops, with everything in their favor, duplicate the "America's" feat, or at least make 450 miles in 48 hours? That is less than ten miles an hour, a speed which has been exceeded for a long stretch by ordinary coasting craft on the Chesapeake. Twelve miles an hour would give 140 miles more than we need.

We are told that this northern wind held, and that they sailed another 48 hours to Markland, at first eastward then southward. Dr. Nansen thinks this direction unwise and unlikely, but the coastline trends that way; they had to get around the southeast corner of Labrador, and hugging the shore might be dangerous. Exactness is impossible, but it would seem that the interval stated might well bring them to the forested front of Newfoundland near Bonavista Bay, allowing for loss of speed in change of course. The experiment might be made by some of our enterprising yachtsmen and would be watched with interest.

Newfoundland has some claims to be called Markland still, according to Bishop Howley's¹ description, even most of its northern part being fairly well wooded. We have no reason to infer any other aspect then, excepting that the forest would be more general and more heavy. Whitbourne² early in the seventeenth century averred that "No country can show pine and birch trees of such height and greatness," and Blome,³ about the same time, testified to the "abundance of stately trees fit for timber." The vegetation of Markland has perhaps hardly changed at all, and the abundance of wild game mentioned by the saga has always characterized the island.

Thorfinn could not be expected to know it as such, having quite skipped the Strait of Belle Isle in the loop around the bending coast from upper or middle Labrador to middle or lower Newfoundland; but if they had followed this closely, it might have made little difference, for both Cortereal and Davis (according to Wallace) took that passage for a mere cul-de-sac, like Hamilton's Inlet farther north.

The island called Biarney to the southeast of Markland may be the large Avalon peninsula, even now almost cut off by water. If it were not quite wholly cut off then, it might well appear so, being incompletely investigated. We must not charge any early voyagers with modern knowledge of geography. Besides instances above

¹ Vinland Vindicated, already cited.

² A Discovery of Newfoundland, p. 10.

³ R. Blome: Isles and Territories. p. 1 (325).

given, Cabot¹ probably misunderstood Avalon as did Thorfinn, calling it the isle of St. John; and Cartier,² after sailing into the Gulf, could only say that Newfoundland was *probably* an island. Some of the early maps also show Avalon as insular.

The Skrellings (or savages) encountered on their return may have been Beothuk. Dr. Rink³ thought the man's name was probably Eskimo, a corruption of the word for "her husband," but Thalbitzer⁴ holds otherwise (see p. 105 ante and note 9, p. 177). The underground dwellings⁵ remind one of the Eskimo legends concerning "inlanders," presumably northern Indians, Nascopie or Tinné. The "beard" of the escaping man was possibly a mask or some misunderstood garment, though the practice of plucking out hairs proves that a beard might grow on Amerinds, and other early bearded individuals are reported along our coast. It is true that the Labrador Eskimo were contending for foothold on the upper Newfoundland coast early in the sixteenth century, and may have been thus engaged in the eleventh, but their presence in wooded regions seems unlikely. We can make little of these Marklanders, perhaps because the Icelanders tell us so little that is trustworthy about them, and the English and French so little, trustworthy or not, about the Beothuk.⁶ When we first really see the latter, they are an interior tribe hiding from the encompassing peoples, "altogether in the north and west part" says Whitbourne. Cartwright⁷ (1770) says that summers often passed without one being seen; and they kept this over-prudent habit till the end, which was probably a good deal later than the last known death (of a captive in 1829). One corpse was found aboveground in 1886; but it can hardly have lasted fifty years. Cormack,⁸ who reached their home on Red Indian Lake in 1828, thought the remnant of them hidden, not dead. Their arts, stature, and prowess may indicate some infusion of Norse blood.

In this identification of Newfoundland with Markland, Packard, Nansen, and Storm and other authorities all agree; and there are

¹M. F. Howley: *The Ecclesiastical History of Newfoundland.*

²Cartier's *Voyages*: Orig. Narr. Amer. Hist.; also J. Winsor: *From Cartier to Frontenac.*

³H. J. Rink: *Tales and Traditions of the Eskimo*, p. 74.

⁴W. Thalbitzer: *The Eskimo Language*, p. 20.

⁵H. J. Rink: *Tales and Traditions of the Eskimo*, pp. 262, 298.

⁶Alan MacDougall: *The Beothuk Indians*. Trans. Royal Inst. of Canada, 1890-1891, p. 8.

⁷Capt. Cartwright's *Journal*, republished 1911, first 20 pages.

⁸Cormack: *Journey in Search of the Red Indians in Newfoundland*. Edinb. Philos. Journ., vol. 6, 1828-1829, p. 327.

no opposing names that should carry equal weight. Also, the facts uphold them.

The words of the saga from their third start are: "When two doegr had elapsed they descried land." Then they must have been without sight of it, at least ahead. Presumably, having rounded Biarney, they kept along, nearly parallel to the lower face of Newfoundland, in "the sea flowing in between Wineland and Markland," which we know as the Strait of Cabot. They may even have gone farther, before turning to the opposite northern promontory of Wineland (now Cape Breton Island west of the Bras d'Or inland sea), for we know that Thorhall, an experienced explorer, afterward loudly complained that they had neglected this better course to Wineland, and insisted on going back to try it; and this theory of his, with other expressions like sailing "around Keelness," imply some notion of the great Gulf beyond the long promontory's tip. The Saga of Thorfinn Karlsefni does not specify the time consumed before making the new landfall and is not so clear in its indication of crossing the intervening water. Furthermore, it mentions sailing south along the land; but we must not be too literal about directions. We find Champlain saying south, when he clearly means southeast, and repeatedly parting company with the map in such details, though he had a compass to guide him and was unusually careful. With Thorfinn it was guess-work and sun-piloting or star-piloting; and they have many fogs in those regions. The two parallel versions agree substantially, here as elsewhere, and help out each other's details; but that of Eric the Red is, I think, a little the clearer.

Whether they used up 48 hours or not in the passage, they had to "beat back" a rather long way into the wind, or we should hardly have heard of the disadvantage; so they must have been well on toward the tip of Keelness before turning to tack eastward through the strait, with, of course, the land on their right. This shore was that on which they are said to have found the keel of a ship, washed down presumably by the Labrador current, perhaps a relic of Eric's broken fleet. Those investigators who have tried to pick out a particular point as Keelness are clearly wrong; for Stefánsson's equivalent "promontorium Winelandium" is a great though upwardly tapering body of land, and the suffix "ness" is to be understood, as in Snaefelsness and generally in Iceland, to include the whole jutting area of western Cape Breton Island. We have indeed a similar use of "Neck" along Chesapeake Bay, for it means in common parlance not the connecting isthmus nor any spot or tooth of land, but always the

entire mass which is nearly insulated. In this sense it is also an accepted geographic term, to be found plentifully on Maryland maps.¹ Some of these "necks" are of considerable area.

That this Keelness is in fact an island goes for nothing. Many after their time were slow in finding it out, as in the more remarkable case of the Strait of Belle Isle. Wytfliet's map of 1597 shows Cape Breton Island as a solid horn, integral with the mainland of Nova Scotia, and so, on a smaller scale, does the map attributed to Sebastian Cabot; though they multiply outlying islands. Mercator, 1587, goes to the other extreme, however, by setting it well out from shore with the significant inscription "Drogio dit Cornu du Gallia." Thus some geographers knew Cape Breton's insularity and some did not, after a century's opportunity to ascertain.

A different explanation of the name Keelness is offered by the Flateybook Saga, namely, that it has the form of a ship's keel; and this records an observed resemblance as old as the fourteenth century. A great part of the island is hollow now. When the lowlying southeastern side was under water, the resemblance of the remaining horn on the western side to a keel would be more obvious. But since there was a Kjalarness in Iceland, probably well known to some of these explorers, we may safely assume a simple transfer of the name. The saga laid stress on this northern horn of Wineland, for no navigator who might follow could miss finding a feature so conspicuous.

The course of the ships is explained by it at every turn, as though it were a main pivot of proceedings in that quarter. It is on the starboard in the saga as the ships go south along the coast; on the larboard as Thorfinn long afterward reverses the course to pass round it into the Gulf after the missing Thorhall; he anchors on its western side in a westward flowing river (the Margarie or the Mabou) and passes northward along it in leaving that region. Each point is made with precision almost as if dictating items for a map. The original narrator evidently intended that there should be no misunderstanding of this great peninsula; but every one is at the mercy of mankind and the centuries.

There is a further argument for Cape Breton Island as Keelness in the corresponding position of the tip of the former and that of Stefánsson's Promontorium Winelandium as compared with the latitude of Britain and Ireland. Also, the Stefánsson map has a range of elevations running up into it, quite inconsistent with Cape Cod,

¹ For example Lake, Griffing and Stevenson. Atlas of Kent and Queen Anne Counties, Maryland, p. 30 and elsewhere.

the only competitor that has been seriously urged. Finally, the stranding of the wreck which left its keel, if we may treat this as a verity, would be much more likely to occur on Cape Breton Island than on Cape Cod in times when the sailing was all farther northward, and in view of the arrangement and direction of the ocean streams. But we are at liberty to dismiss the keel.

A wonderful succession of beaches and low shores began with Keelness, being whatever was above water of the eastern earth-wall of the Bras d'Or and the main seashore of Nova Scotia. Apparently it was such a coast as we find now along New Jersey or Maryland, seemingly interminable strands, with nothing but low sand dunes and occasional inlets to break the monotony of desolation and loneliness. Few things in nature are more impressive, but it is not a cheering impression. We may fancy Gudrid and her companions looking over the landward gunwale at that unchanging panorama, with woods and hills of little variety for a background, and wondering if they would never have done. Surely we can give no other meaning to "This was a bleak coast with low and sandy shores. They called them wonderstrands because they were so long." The plural may indicate slight breaks in the outline here and there.

These people had swift ships. Beaches of ordinary length must also have been familiar to all of them. They would not feel a monotonous sail of but four or five hours. They would not marvel at a stretch of fifty miles; but if they had to follow down from Cape Henlopen to Cape Charles, or along any equal stretch of strand, they might well record the wearying novelty as a "wonder." It would rank equal with the great treeless wastes of Helluland or the immense forest area below, or that great "ness" which guarded the entrance to the inner Gulf. I think the Wonderstrands must have stretched for at least a hundred miles.

On grounds to be explained, it seems more than probable that the main Wineland home of these settlers was at the mouth of the Bay of Fundy. Between the tip of Cape Breton and that point, we have the outer coast-line of Nova Scotia, said to be somewhat over three hundred and fifty miles. Obviously then, the outer coast-line of Nova Scotia was their Wonderstrands. The palpable fact that Nova Scotia does not now supply these wonderstrands except perhaps on a lesser, though relatively considerable scale along the front of Richmond County over which boats are sometimes drawn, to the interior Bras d'Or, seems to have compelled Dr. Storm to piece out this part of his theory with minor beaches that the Icelanders would

have hardly glanced at as they swept by. What would a mile of sand be to such craft and such spirits as theirs? Even a man in a row-boat would not have time to weary of that. Make it ten miles, and the case is yet even absurdly hopeless; for ten consecutive miles of strand cannot be found along the mainland of Nova Scotia. Thirty miles or so of low shore may be found perhaps in eastern Cape Breton Island, but would be little better if above water then. The plain fact is that the saga must be given up as false, in this part at least, and—since this is of its very spinal cord—as untrustworthy altogether or we must assume the erroneous transfer to this point of an observation made elsewhere, unless there be some adequate explanation. And there is such explanation. The coast line now consists generally of low cliffs or banks, not comparable to the lofty precipices of Grand Manan, but let us suppose that this is not constant in height, but that, for good reason, it has been rising continually. Reckoning back, it would be correspondingly lower at any given time, supposing no counteracting cause intervened to reverse or check it or vary the rate of emergence.

Our starting point is about a present average of 25 feet, perhaps rather more—as indeed my own slight and local observations would make me suppose. But the above has been given me as a rough approximation by a journalist formerly resident in that province, and is pretty well confirmed by a Boston yachtsman and an intelligent fisherman of Grand Manan, both personally familiar with that shore. Of course it is barely provisional, exactness not being hoped for.

It does not seem to have occurred to anyone concerned in such researches that a definite and steady change may have been going on. Rev. Mr. Slafter offers the nearest approach, that I recall, to such a view, in the suggestion that islands have shifted and new land has formed, making identification impracticable—but that is obviously far from presenting a consciousness of explainable, progressive change. Now conceive the Nova Scotian seaboard lowered by the 25 feet or more of its present height, that is, brought down to water-level and dipped a little under—with slight narrowing of the peninsula, in its mainland part, and partial obliteration of the eastern side of the now hollow insular terminal part called Cape Breton Island—and you will have something not wholly unlike the long strands of New Jersey or the peninsula east of the Chesapeake, only with the hill country much nearer. It was the first introduction of the surprised northern visitors to the characteristic American coast line.

The probable reason for such a change is simple enough. The withdrawal northward of the great glacial ice-cap, from half a mile

to two miles in thickness, freed all the continent as far down as the southern border of New England from an enormous weight and chill. Forthwith the elasticity of the strata began lifting them slowly behind it, and the movement continues still in a great slow wave, even after the lapse of some thousands of years.

Prof. Packard¹ long ago quoted a previous observer as to the uplifting of the Labrador coast, adding his own testimony. Prof. McGee, whom I have consulted, puts the neutral point where there is neither ascent nor descent, on the Gulf of Maine, north of Boston, perhaps not far from the New Hampshire line, but the recent investigations of Mr. Davis² carry it somewhat farther north. All above rises; below it is the resulting depression or trough of the earth wave, gradually lessening in downward movement. Apparently the earth crust behaves like a blanket undulated. Professor Brown of Brown's University writes that five hundred feet of uplift in all are reported from Labrador, and nearly seven hundred from parts of the Hudson Bay region. Prof. Shaler³ has elaborately explained this depression and re-elevation. Mr. Davis's marsh investigations add another proof of the movement by demonstrating the complementary recent sinking below. The recent work on Labrador, the Country and the People, by W. T. Grenfell and others contains on page 118 a map giving the figures of uplift since the glacial era at various points of the Newfoundland and Labrador front, making 575 feet at St. Johns the maximum. Pages 127-135, etc., of this section, by R. A. Daly, add further discussion of this phenomenon and the general testimony of residents of the coast to its continuance.

Even these results would have seemed inadequate while men held by the prodigious periods of the astronomical glacial theories. But the observations of Shaler at Niagara, and of other investigators, all the way from the northwest to the Atlantic ocean, have built up a

¹ A. S. Packard: *The Labrador Coast*.

² C. A. Davis: *Salt Marsh Formation*. *Economic Geology*, vol. 5, no. 7 (1910).

³ N. S. Shaler: *Nature and Man in America*, p. 96 and context; also his *Aspects of the Earth*, pp. 2, 3, 6, 7, "As when a glacial sheet is imposed on a continent—as it was in the immediate past in North America—a wide area of the ice-laden land sank beneath the sea; to recover its level when the depressing burden was removed." Cf. A. R. Wallace: *The Geographical Distribution of Animals*, vol. 1, p. 152—"the weight of ice piled up in the north would cause the land surface to sink there, perhaps unequally, owing to the varying nature of the interior crust of the earth; and since the weight has been removed land would rise again still somewhat irregularly, and thus the phenomena of raised beaches of arctic shells in temperate latitudes are explained."

great array of evidence, tending to reduce the interval from hundreds of thousands to a very few thousand years.

Wright's Greenland Ice Fields and The Ice Age in North America long ago presented this matter strongly, though without converting every one. More recently in the *Anthropologist* he has suggested 5000 B. C., and perhaps the prevailing estimate of the interval since the beginning of the withdrawal of the only ice-sheet which can have directly affected the fortunes of man would now make it less than eight times the nine hundred years since the coming of Thorfinn, though there are some dissentients.

Of course the lifting forces or the resistance may have varied in stress from time to time, for reasons not readily to be fathomed, or some other crustal movements may have interposed, or there may have been counteracting influences yet unknown. Also there may have been local eddy-like exceptions of downward crumpling or earthquake depression,¹ as perhaps on the shore of the Bay of Acadia, not affecting the Atlantic coast. This depression seems to have ended long ago, and may perhaps be paired with the convulsion that sank so much land, leaving tree stumps at the bottom of lakes and in marshes near New Madrid, Missouri, early in the nineteenth century.

Perhaps there has not been sufficient search for direct evidence *in situ* of uplift along the Nova Scotian coast such as we have so strikingly from Labrador and the upper part of the Maine sea-front. Locally there is some scientific opinion or feeling that this probably has not occurred. Indeed a positive descent² of the shore at certain points, notably Louisbourg, used to be inferred from the submergence of the old French works. But later investigation³ has shown that the facts do not call for such an inference, the military architects having planted their embankments in the water; and no change either way in elevation can be said to be directly proved. There has not been time for any conspicuous effect, and the shifting of water currents and of sand, or other local conditions may apparently reduce it.

Nova Scotian direct evidence not counting either way, we must accept for guide the action of natural laws shown to have taken effect on the relatively more southern, as well as the more northern,

¹ J. W. Dawson: *Acadian Geology*, p. 3; also supplement, pp. 13-21.

² Gessner: in *Journ. Geol. Soc. London*, vol. 18, p. 36.

³ H. S. Poole: *Subsidence of the Atlantic Coast Line of Nova Scotia*. *Trans. Nova Scotian Inst. of Science*, vol. 11, p. 262 and McIntosh, p. 264.

parts of the American Atlantic coast. In the absence of any indication of counteracting forces, it would be unreasonable to arbitrarily assume them. What has happened and is happening between Norfolk and Boston implies a corresponding reverse movement in the coast between Labrador and the middle of Maine, or wherever the neutral point may be. This reach of shore almost certainly includes Nova Scotia; the sea-front of which has the air of an emerging shore, as different as possible from a descending one, where old river valleys become broadened estuaries, bordered by marshes, low islands and broad sand banks, as in the region of the Chesapeake and Delaware.

Dr. Nansen, discarding the explanation of the saga and apparently forgetting the natural transformation of a coast-line in a formerly glaciated region, supposes that the Wonderstrands were originally named for the wonders which they exhibited. He does not suggest what these may have been beyond a hesitating note concerning wonderfully beautiful islands of myth and fancy. But there is surely only a faint verbal link between the wonder of supreme beauty and the wonder of impressive desolation. Also it is most incredible that the saga should have omitted all mention of prodigies which conferred one of its most important local names. And what marvels could they own, surpassing the almost appalling interminable succession of strands and dunes, constituting now as then the dominant typical American coast-line?

Whatever else may be doubted there is no denying that some Icelander, before 1334—when Hauk died, who copied for us the passage in question, had become acquainted with the American Atlantic coast as we see it now with slight breaks in its upper part from the tip of Florida to the tip of Cape Cod. Did Hauk come here or the saga-man? There is no record of any visits before that time except those of the saga and even the Flateybook version avers that “of all men Karlsefni has given the most exact accounts of all these voyages.” Leif must already have seen that strange coast and prepared him for it. There is no great reason to doubt that Thorfinn saw it also.

The Wonderstrands (if Nova Scotia) were not remarkable for high tides and strong currents. On the contrary, these were (and are) rather feeble. Cabot found but $2\frac{3}{4}$ to 4 feet of rise and fall, and HARRISSE,¹ reporting him, says: “This diminutiveness is peculiar to

¹ H. HARRISSE: *The Discovery of North America*, p. 8.

the entire coast, from Nova Scotia to Labrador.”¹ An intelligent white native of Grand Manan, being asked in my presence about its great tides, at once mentioned the two feet or three feet tides of the Magdalen Islands, which he had visited—a contrast as sharp as that between the sea-level upper coast in 1003, and his own miles of towering cliffs. The latter would lose little in impressiveness by 30 feet or even 60 feet of lowering; and the great rush of water up Straumfiord (Grand Manan Channel) along their northwestern front, would perhaps be a little greater than it is now, but certainly not less.

The same applies to the series of more than picturesque, deep, broad, fiord-like indentions, mountain-sentined, with lofty islands out before them or in them, and contours for the most part necessarily unchanging in a thousand years, which characterize the upper sea-coast of Maine, beginning with Passamaquoddy Bay. For Grand Manan, lying across the front of the admirable inner expanse, visible, as Denys says, from afar at sea, and necessarily the next land for the explorers as they crossed the Bay of Fundy (heading a little west of north after rounding the nose of Nova Scotia, and avoiding the shoals of the Admiralty chart) was indeed the herald of a new order of things. It is no wonder that even these Icelanders, accustomed to mountains and sea-currents, were deeply impressed by the change.

Osgood's book on the Maritime Provinces wakens to something of an outburst about "Grand Manan," which "lies in the mouth of the Bay of Fundy, whose giant tides sweep imperiously by its shores." This, however, would not now apply quite perfectly to the sloping, harbor-indented, inhabited southeastern side, with its outlying fringe of low islands, though the official chart shows violent tide rips, and Dr. Fewkes testifies to "currents of great power." It is the "back of the island," as they call it, the wilderness side (whence you may look down on Campobello near Eastport and plainly distinguish many of the western mainland mountains), which enjoys the roughest kisses of the racing tide. No one who watches the gulls sway backward and forward in great fleets in the rush of water and the long eddy off the north point by the fog whistle, or keeps company a bit with the dulse-gatherers on the slippery rocks, or looks down from the southern cliffs on the foam about their bases, or considers the wave-carven

¹ The following figures are given by Verplanck Colvin in his *Calculations on "Plutarch's Account of Ancient Voyages to the New World,"* p. 3: Hopedale, Labrador 7 feet; Incosti, 5 feet; St. Johns, N. F., 6 feet; Trinity Bay, N. F., 3½ feet; Kennebec, 9 feet; Portland, 9.9 feet; Boston, 11 feet; New London, 3 feet; New York, 5 feet.

"Hole-in-the-wall," the seated "Bishop," now losing his outline, and the progressively defaced but still recognizable "Southern Cross"—no one who has ever crossed in slightly roughened weather the disturbing inflow of the western strait, or stood on Todd's Point in Eastport, the most easterly bit of land of the United States, and tossed pebbles into the hurry of the twenty-five feet of tide that chafes the rocky little promontory—will be likely to question Osgood's description, or the propriety of the names Norsemen-given. Thus Dr. Fewkes¹ reports "sometimes the moving water is irresistible, carrying everything along with it under the brow of the high land."

It is not well to be blindly confident in such matters, and any further light on the subject will be most welcome; but with the information at hand, after much endeavor, this identification seems to me most likely. The Flateybook's account is badly blurred in the telling, and too confusingly blends the characteristics of Hóp and Straumfiord (without mentioning the former) to be very helpful; but even in it we have the outlying island, which must have especially impressed all the party; and the description of the wide shallows left by the ebbing tide belongs peculiarly to the lateral branches and upper arms of the Bay of Fundy. It could not well be otherwise, with sixty-foot daily change of level at Monkton, and thirty-two feet even at the reversing falls of St. John. The Bay of Fundy is simply unique in these respects on our coast and Straumey and Straumfiord can belong nowhere else (see note 10, p. 178).

Nearly all the statements of the trustworthy and little defaced narrative of the two parallel sagas are exactly borne out by present facts. They came to "a fiord-cut shore" of mountain valleys filled with water, forming bays, and these in due succession are there still. They sailed into one of these bays or fiords, a statement twice made, curiously marking as already stated where a later hand has interpolated the apocryphal episode of the Gaelic runners Haki and Hækia. "They sailed through the firth" to reach this bay, which was included under the same name, for we read later that "in the spring they went into Straumfiord and obtained provisions from both regions." Of course the same passage has to be made still, and of course the strait and bay are connected; though their union was no doubt more obvious then, a good part of the narrow Campobello island and Lubec headland being under water. These, with Eastport island and other neighboring territory would appear as minor islets in a somewhat larger

¹J. W. Fewkes: A Zoölogical Reconnoissance in Grand Manan. American Naturalist, May, 1890, p. 424.

bay than now remains, then opening rather freely to the strait. With regard to the precise farther extension of Straumfiord, as they understood it, we need not concern ourselves; and probably they did not define this, any more than the average man of lower Manhattan who mentions and sees "the North River" has any clear idea whether its utmost north is in the Adirondacks, Vermont, or Canada. They cared mainly, though not quite wholly, for what directly affected their welfare. The eggs of the island, ducks' eggs according to the saga of Eric, birds' eggs according to that of Thorfinn Karlsefni, which is a little the better in this instance, are a case in point. They were probably gulls' eggs, cormorants' eggs, and those of the eider-duck, black duck, and other water fowl. The numerous gulls still lay some eggs in the most nearly inaccessible niches of the cliffs near South Head. Above it there is a fine level table land, which may well have been fully occupied by nesting sea-fowl in the times before the advent of men (and boys), aided in destruction, as I am told, by a great recent multiplication of hungry foxes. It is not surprising that most of the egg-laying is now done on the outlying islets, where persecution is less constant.

Denys,¹ about 1645, after defining Passamaquoddy Bay as "a cove of great circuit," says "Opposite the last cove and some distance out at sea, occur some islands, the largest of which is called the island of Menane. It can be seen from afar as one comes from the sea On all these islands . . . there is a great number of all kinds of birds which go there in the spring to produce their young."

It was the proper locality for such finds. Champlain tells us of filling a cask with cormorant eggs on Hope Island, and of an almost unbelievable number of birds, including ducks of three different kinds, on the Tusket Islands, all about the mouth of Fundy Bay. Also a little later, when the eggs had become young birds, he collected many of the latter on the Wolves, only a short distance up Fundy Bay from Grand Manan. It is not certain that he landed on the latter, though he sailed near it three times at least and anchored once in Seal Cove, a harbor of its more accessible side, with almost a shipwreck.

Dr. Nansen doubts the plentiful nesting of birds, thinks them a Norwegian reminiscence, and in particular excludes gulls and auks. But a local ornithologist of North Head, Grand Manan, who is as well informed on the subject as anybody in the world, gives me by letter

¹ N. Denys: Description of the Coast of North America. Ganong's transl., pp. 110, 111.

the places and nesting times for razor-billed auks, American eider ducks and herring gulls, all quite near him, 500 to 1,000 eggs of the last-named being still collected annually from one islet before the brief open season ends. After that they are rigidly preserved. See also Packard's account already cited of the multitudinous nesting gannets and lesser birds on rocky islands in the Gulf of St. Lawrence, and Cartwright's and Cartier's as to like conditions on Funk Island off the Newfoundland Atlantic shore.

It is a curious but easily explainable fact that our white people have largely followed Indian paths and settled in numbers on Indian village sites. The same conveniences, obstacles and allurements affect both alike, to a certain point, in the simpler matters of existence. There may be a special illustration of this in the established and ancient habit of the Passamaquoddy Indians, to cross and recross the strait annually in their canoes, having their home astride of it, so to speak, and obtaining supplies from both shores. They no longer maintain a permanent village on the island, having withdrawn for superstitious reasons (it is said) but the habit of annual or more frequent migrations across Grand Manan Channel for sport and food is hardly yet abandoned. The Norsemen did likewise and for like reasons, the resources being enumerated in the saga. It is perhaps a case where the usual procedure had been reversed, the Indian following the white man, for that region seems to have been empty of inhabitants on their arrival and during the three years (once interrupted) of their occupancy, as Strachey declares the lower course of the Susquehanna to have been, or as some parts of Kentucky perhaps were, or lower Greenland at the time of Eric's settlement; indeed, until after 1300, according to Dr. Rink¹ and Dr. Storm. It is a common phenomenon in the case of a sparse native population, not deeply anchored.

The Indians of the region at the time of our first knowledge concerning them were the Micmac or Souriquois of Nova Scotia, extending west of the head of the Bay of Fundy into Northern New Brunswick, the Malicete or Milicete of the western side of the bay and the Passamaquoddy, often referred to on Grand Manan as the American Indians. The Maguaquadevic Indians about St. George and the neighboring lakes are the border tribe of Malicete on the Passamaquoddy side. There is said to be a portrait of one in the Illustrated London News of Sept. 5, 1863. They were notable for at least one dolmen-

¹H. A. Rink: Tales and Traditions of the Eskimo, p. 74.

like stone erection¹ with an oval roof-tablet, supposed to have been set up by them but now long overturned, and perhaps for the stone medallion already mentioned, which was found in their territory.

Right there was the meeting point of two streams of Indian migration, as it had been previously the border of Norse occupancy, or at least the scene of daily Norse excursions after game. The Micmac, and presumably the rather more nearly related Malicete, followed down the St. Lawrence valley, while the Penobscot and their kindred the Passamaquoddy appear to have worked on up the Atlantic. All these people were of the ancient Algonquian stem, but the two branches had been long separated when fate thus drew them again together; for even yet the languages² of the Malicete and Passamaquoddy borderers differ considerably and the Micmac use a very different pattern of canoe (upturned at both ends) from that of the "American Indians," although occasionally visiting, from near Digby, the same island of Grand Manan.

We do not know when this first meeting took place; but, as before emphasized, the Norse date (say 1003) is very early. If we suppose that the movement down the St. Lawrence valley had not yet reached the site of Monckton nor the upper waters of the St. John and that the movement up the Atlantic coast had not yet passed the Kennebec, we shall have the requisite Indian vacuum. There is nothing to suggest that any Eskimo ever crossed the Maritime Provinces in those days or skirted their eastern border, no reason to suppose that the Beothuk extended so far down the coast, and we cannot assume any other native occupants for this corner of the Bay of Fundy shore.

Any one who will mount Battery Hill above Eastport and look about him will understand "there were mountains around"; the country is "fine" still and the hay crop both on the mainland and Grand Manan—for we were there in the height of that season—is really remarkable. They must have found excellent grazing. Excellent hunting, too, for the resources are not yet exhausted. We were told of a moose which had recently visited the bay shore near Eastport and were offered in that city the skins of seals shot by Indians very recently on or near Grand Manan. A whale had entered within a few days the cove of that name, beside which we were lodged on the island, just as another came into the hands of Thorfinn's people, to their temporary discomfiture. They would be likely to establish them-

¹ Jack: Stone Found in New Brunswick. Smithsonian Rep. for 1881, before cited.

² Trans. Royal Soc. Canada, 1904, p. 20.

selves there or near the northern point where the Indians afterward had their annually occupied settlement, and close at hand are the cliffs, on one of which they caught Thorhall worshipping Thor, and over which they may have cast the fragments of whale-flesh "on the rocks."

It was most natural that Norsemen should be deceived by the bountiful mild season into the belief that they need not provide against winter, since they felt themselves in Leif's country, which was said to be like Africa. De Monts' colonists on an island of the St. Croix, flowing into the same bay, though far better provided in every respect, had a most discouraging and even ghastly winter. Their best man, Champlain,¹ appositely declares:

It would be very difficult to ascertain the character of this region without spending a winter in it; for on arriving here in summer everything is very agreeable, in consequence of the woods, fine country and the many varieties of good fish which are found there. There are six months of winter in this country.

The summer advantages could never have been greater than when the Norsemen came. When winter struck them and the game had withdrawn to a distance and the snow impeded their landward travel, it was not unnatural that they should shift to the great island, where fish and amphibious animals were closer at hand, also from which the land animals could not well escape. Moose were found on it in the boyhood of an elderly resident, who talked with me, and there are still some deer, though partly at least of late reintroduction. It ought to have been easy to arrange a drive of animals toward some corner of the cliffs and supply themselves with meat; and when it was not possible to fish outside there were (and are) trout in the brooks, also eels, on which the Indians afterward depended, in a string of ponds, the most northerly and best known of which is in the wilderness between the old Indian site (now a hamlet of fishers and dulse gatherers) and the prosperous village of North Head. There could be no lack of good fresh water.

The migration to the island seems a wise move, and perhaps did more than anything else to carry them through without the deaths and disabling maladies of Champlain's companions. Their stock also lived, and thrive, probably on birch-twigs, dried fish (for Norwegian cattle are said to make the best of such winter fare) and the half dry grasses and other vegetable survivals of the springy inland hollows and southeastern marshes. The sea never freezes there and the tide would always wash up or lay bare something that might be of service.

¹ Voyages of Champlain. Original Narratives of Early American History.

But at the best it would be a disappointing winter, without any store of grain such as they might have had in a country where wild rice was plentiful and without the wine which Thorhall angrily celebrates between lamentation and satire. It is impossible not to sympathize with his disillusion in the matter of this Wineland. We can readily understand his disbelief that this could be the real region or even the right course for reaching it. Thorfinn was right, and matters would not have been mended by turning into the Gulf of St. Lawrence, as he afterwards found; but it was all experimental at first, opinion against opinion, the chief trouble being that Leif had given them a standard which was true for a more southern part of the coast, but very misleading and disappointing when they applied it to northeastern Maine and the neighboring corner of New Brunswick.

These occurrences bring out saliently the fact that they found no "sown wheat" nor grapevines at Straumford or on Straumey. They do not profess to have done so. There is not the least entry indicating either plant, or its grain or fruit, except the interpolated story of Haki and Hækia who ran "to the south," we do not know how far (but they were "fleeter than deer"), and brought back single specimens only. If there be any truth in this episode, and if it belongs to the narrative not of Leif but of Thorfinn, we must place it with the explorations of that first summer or early autumn. Their bunch might probably have been obtained from the Penobscot in the three half days allowed them. Champlain found a few large grapes and grapevines on the lower Maine coast, but none anywhere above Portland nor inland in Nova Scotia. According to Lescarbot,¹ the apothecary of their expedition desired to transplant Cape Cod grape vines to the lovely Annapolis valley of the latter province, which had none, though one would expect them to spring up there spontaneously, if anywhere in all that province.

The general result of inquiries among Maine people is that wild grapes of proper size and quality for table use or wine-making do not ripen in that State, owing to the shortness of the summer and the severity of the frosts, so as to benefit anybody appreciably except the botanists. But if some far ranging runners brought even two or three back to Thorfinn from the southward these might confirm his resolution to seek in that direction a country where such things abounded. When he had compromised with Thorhall and seen him "prepare for his voyage below the island"—no doubt in one of the southeastern harbors or among the outlying islets—Thorfinn must have wished that he had kept on at first, like Leif, into warmer

¹Lescarbot: *Nova Francia*. Erondelle's transl., pp. 101, 102.

latitudes, lived in comfort and held the whole party together. This seems to be his worst mistake, and Champlain has accounted for it abundantly.

I made diligent search and inquiry on Grand Manan, also inquired a little in Eastport, and it seems clear that there are no grapes worth mentioning about Passamaquoddy Bay, nor indeed anywhere near the Bay of Fundy. Southern New England is their farthest northern home in quantities and of size to be useful.

The sea-fishing, so particularly stated in the saga, is still the prime resource of the Passamaquoddy region including Grand Manan. In fact, except hay-making, there is hardly another resource of general value. Two or three thousand people of the island live by fishing in more than decent comfort, while on the nearby mainland there has been built up at Lubec the chief American center of one branch of this industry.

Considering the many coincidences of the present and past facts with the items of the saga and the absence of any real objection, it seems that Grand Manan and Passamaquoddy Bay with the strait between them may be accepted provisionally as Straumey and Straumfiord. But even if we err as to the exact places named in the saga, it seems practically certain that these were not far from the sweeping tides of Fundy. The Icelanders could not come into this region without observing them, and how could they pass by, giving such titles to lesser examples of the same kind? The verbal distinction between stream and current, sometimes suggested, must in this connection be regarded as overstrained. Besides, the official chart in its "rips" and "eddies" offers an abundance of "stream," and Dr. Fewkes characterizes them clearly in his zoölogical paper already cited.

It may be well to consider as an alternative, Long Island on the opposite side of the mouth of the Bay of Fundy, and the narrow passage, now St. Mary's Bay, between it and the mainland of Nova Scotia, where Champlain found a violent and dangerous current. But the island seems too close to the mainland for the language of the saga, since the passage could be easily and promptly made at any season; and it is hardly a sufficiently distinguishable "region."

15.—THE EXPEDITION TO HÓP

After the departure of Thorhall the Hunter, and Thorfinn's decision "to proceed southward along the land and to the eastward," the saga says:¹

¹A. M. Reeves: *The Finding of Wineland the Good*. Translation of saga continued. See footnotes.

It is now to be told of Karlsefni, that he cruised southward off the coast, with Snorri and Biarni, and their people. They sailed for a long time, and until they came at last to a river, which flowed down from the land into a lake, and so into the sea. There were great bars at the mouth of the river, so that it could only be entered at the height of the flood-tide. Karlsefni and his men sailed into the mouth of the river and called it there Hóp. They found self-sown *wheat-fields* on the land there, *wherever there were hollows, and wherever there was hilly ground, there were vines*. Every brook there was full of fish. They dug pits, on the shore where the tide rose highest, and when the tide fell, there were halibut in the pits. There were great numbers of wild animals of all kinds in the woods. They remained there half a month, and enjoyed themselves, and kept no watch. They had their live-stock with them.

Now one morning early, when they looked about them, they saw nine skin-canoes, and staves were brandished from the boats, with a noise like flails, and they were revolved in the same direction in which the sun moves. Then said Karlsefni "What may this betoken?" Snorri's son Thorbrand, answers him: "It may be this is a signal of peace, wherefore let us take a white shield and display it." And thus they did. Thereupon the strangers rowed toward them, and went upon the land, marvelling at those whom they saw before them . . . [For description see p. 143 herein] and then rowed away, and to the southward around the point.

Karlsefni and his followers had built their huts above the lake, some dwellings were near the mainland, and some near the lake. Now they remained there that winter. No snow whatever came there, and all of their live-stock lived by grazing. And when spring opened, they discovered, early one morning, a great number of skin-canoes rowing from the south past the cape, so numerous, that it looked as if coals had been scattered broadcast out before the bay; and on every boat staves were waved. Thereupon Karlsefni and his people displayed their shields, and when they came together, they began to barter with each other. Especially did the strangers wish to buy red cloth, for which they offered in exchange peltries and quite grey skins. They also desired to buy swords and spears, but Karlsefni and Snorri forbade this. In exchange for perfect unsullied skins, the Skrellings would take red stuff a span in length, which they would bind around their heads.¹ So their trade went on for a time, until Karlsefni and his people began to grow short of cloth, when they divided it into such narrow pieces, that it was not more than a finger's breadth wide, but the Skrellings still continued to give just as much as before, or more.

It so happened that a bull, which belonged to Karlsefni and his people, ran out from the woods, bellowing loudly. This so terrified the Skrellings, that they sped out to their canoes, and then rowed away to the southward along the coast. For three weeks nothing more was seen of them. At the end of this time, however, a great multitude of Skrelling boats was discovered approaching from the south, as if a stream were pouring down, and all their staves were waved in a direction contrary to the course of the sun, and the Skrellings were all uttering loud cries. Thereupon Karlsefni and his men took red shields and

¹ W. H. Dall: *The Tribes of the Extreme Northwest*, p. 238. Exact parallel in early trading. See also as to red headwear in southern New England, a later quotation from Champlain.

displayed them. The Skrellings sprang from their boats, and they met them, and fought together. There "was a fierce shower of missiles, for the Skrellings had war-slings." Karlsefni and Snorri observed, that the Skrellings raised up on poles a great ball-shaped body, almost the size of a sheep's belly, and nearly black in color, and this they hurled from the pole upon the land above Karlsefni's followers, and it made a frightful noise, where it fell. Whereat a great fear seized upon Karlsefni, and all his men, so that they could think of nought but flight . . . for it seemed to them, that the troop of Skrellings was rushing towards them from every side, and they did not pause, until they came to certain jutting crags where they offered a stout resistance. Freydis came out, and seeing that Karlsefni and his men were fleeing, she cried: "Why do ye flee from these wretches, such worthy men as ye, when, me-seems, ye might slaughter them like cattle? Had I but a weapon, methinks, I would fight better than any one of you." They gave no heed to her words. Freydis sought to join them, but lagged behind, for she was not hale; she followed them, however, into the forest, while the Skrellings pursued her; she found a dead man in front of her; this was Thorbrand, Snorri's son, his skull cleft by a flat stone; his naked sword lay beside him; she took it up, and prepared to defend herself with it. The Skrellings then approached her, whereupon she stripped down her shift, and slapped her breast with the naked sword. At this the Skrellings were terrified and ran down to their boats, and rowed away. Karlsefni and his companions, however, joined her and praised her valor. Two of Karlsefni's men had fallen, and four of the Skrellings. Karlsefni's party had been overpowered by dint of superior numbers. They now returned to their dwellings, and bound up their wounds, and weighed carefully what throng of men that could have been, which had seemed from the land; it now seemed to them, that there could have been but the one party, that which came from the boats, and that the other troop must have been an ocular delusion. The Skrellings, moreover, found a dead man, and an axe lay beside him. One of their number picked up the axe, and struck at a tree with it, and one after another [they tested it], and it seemed to them to be a treasure, and to cut well; then one of their people hewed at a stone and broke the axe; it seemed to him of no use since it would not withstand stone, so he cast it down.

It now seemed clear to Karlsefni and his people that although the country thereabouts was attractive, their life would be one of constant dread and turmoil by reason of [the hostility of] those who dwelt there before, so they forthwith prepared to leave, and determined to return to their own country. They sailed to the northward off the coast, and found five Skrellings, clad in skin-doublets, lying asleep near the sea. There were vessels beside them, containing animal marrow, mixed with blood. Karlsefni and his company concluded that they must have been banished from their own land. They put them to death. They afterwards found a cape, upon which there was a great number of animals, and this cape looked as if it were one cake of dung, by reason of the animals which lay there during the winter. They now arrived again at Straumfiord. . . .

It will be instructive to consider this return journey first and in reverse order. The nearest point down the coast from Straumei recorded by the saga is of course the headland covered by the animals. No doubt they were seals, for no land animals would congregate in

such numbers in such a place. At the mouth of the Bay of Fundy on one of the Tusket Islands Champlain in 1604 "found the shore completely covered with sea wolves," his name for the queer creatures, which still are fairly common in the region. It is not surprising that Thorfinn should find a little below Grand Manan what the Frenchman afterward found a little above. But this would be a much more likely spectacle in the cold waters of the upper Maine coast than farther southward. Any one of the jutting rock-islands or promontories north of Casco Bay might probably answer.

The three Skrellings were found before finding the seal as the party came northward, so they must have been farther south. "Lying asleep near the sea" gives the idea of a smooth beach, and would belong rather to southern or middle Maine or some lower point, though not inevitably. Their "food" was perhaps rather a relish, for Strachey tells us: "Nottowene groweth as our bents do in meadows, the seed of which is not unlike to rye though somewhat smaller; these they use for a dainty bread buttered with deer suet,"¹ This may be the earliest record of buttered rice cakes.

Their costume is more to the present purpose, buckskin jackets being Indian attire wherever not discarded for coolness. Champlain observed in this matter an interesting distinction between the regions above and below Cape Ann—the former being chilled by the northern current, the latter warmed by the Gulf Stream, so that the waters of the two shores of the projecting land are still recognized by residents as of different temperatures. Writing of Nauset and other more southern points visited in 1605,² he says; "All these people from the Island Cape (Cape Ann) wear neither robes nor furs except very rarely, moreover their robes are made of grasses and hemp, scarcely covering the body and coming down only to their thighs." Ordinarily, he reports, they wore only "a small piece of leather, so likewise the women, with whom it comes down a little lower behind than the men, all the rest of the body being naked." The next year at Chatham Harbor in this region "some five or six hundred savages" came to see him, "all naked except" that "small piece of doe or sealskin. The women are also naked. They wear their hair carefully combed and twisted. Their bodies are well proportioned, both men and women, and their skin olive-colored." He has already told of the robes worn in July at Saco near the least chilly corner of Maine, but

¹ W. Strachey: *The Historie of Travaile into Virginia*, p. 118.

² *Voyages of Champlain*. Original Narratives of Early American History, p. 73.

of course above the Cape, which were all the villagers had to sell, "for they preserve only such furs as they need for their garments." He also mentions "robes and furs," and no nakedness, at points farther north. It is like comparing the costumes of a temperate and a tropical zone, though of course the real difference was much less.

It is not denied that Verrazano tells of visits by deerskin clad "Kings" in Narragansett Bay, nor that Champlain says of the Nauset women "When they came to see us they wore robes which were open in front. I saw among other things a girl with her hair very neatly dressed with a red-colored skin and bordered on the upper part with little shell beads." But full dress is never a daily habit at all hours nor a measure of climatic requirements; and a jacket open in front plus a bead-trimmed turban, with nothing more above the waist, can hardly be called overwarm in the way of a visiting costume.

The precise border-line between the regions of habitual clothing and approximate nudity (for everyday wear) may have shifted a little during the six centuries between the dates of Thorfinn and Champlain by reason of the descent and dwindling of Cape Cod and possible consequent changes in the course and interaction of oceanic currents. But there does not seem to have been much difference during nearly four centuries that have followed; and probably there was little before. Whether the New Hampshire and lower Maine coast were a little warmer or a little chillier in 1003 than in 1605 or 1911, it is altogether likely that the buckskin-shirted victims died above Cape Ann, though perhaps below the Kennebec. At a later period this would be the place to find Almachouqui Algonquians; and perhaps this is the best guess we can make about them; but it remains a guess only.

On the earlier downward passage to Hóp, Thorfinn would seem to have briefly followed the coast, say as far as Mount Desert, and then struck across the Gulf of Maine, thus sailing chiefly on a more eastern course than if he had followed the shore all the way. This crossing might be to or around Cape Cod, or, less probably, to lower Maine. Birds in migration during two seasons,¹ and other signs not to be missed by the watchfulness of a very well-skilled early navigator, would have set him on that more direct water-road. Even the brief tracing of the nearer shore would not necessarily be carried into practice, for he had nothing to gain by it, aiming so far away.

¹ See account by Columbus of his first voyage for the aid thus given the Genoese in finding the Azores.

The choice of routes has always existed, and was promptly made known to every explorer. Hudson seems to have cut across from the Penobscot to Nantucket. Champlain tells us of the expedition in 1606: "It was decided to continue the voyage along the coast,"¹ but "it would have been much better to cross from where we were directly to Mallebarre (Nauset), the route being already known, and then use our time in exploring as far as the fortieth degree or farther south." How they learned that route is not clear, for their previous voyage to and from the same point had been strictly along shore or from headland to headland. But they had at least the same means of information as Thorfinn, and the course suggested by Champlain is almost exactly one which we have conjectured for the earlier navigator, though a change of angle would have taken him to Boston instead, or even to Portsmouth.

There is another consideration which perhaps has never before been presented. The natives who fought with them at Hóp did not attack them at Straumfiord after their return. There is no indication that they were followed at all. Doubtless they could not be, if they sailed out of sight at the start, afterward passing only from one headland to another. But if the voyage had been for a hundred miles only, the savages would have found them out and tried to take revenge—a matter of imperative duty and personal enjoyment for most wild Indians.

There is another clue. The saga, as already quoted, relates a subsequent expedition of Thorfinn with one ship, around Cape Breton Island to a river flowing from east to west, where Thorvald, the helmsman was slain by a "one footer" or "Uniped." We are told "They concluded that the mountains of Hóp and those which they had now found formed one chain (or were the same)," and this appeared to be so, because they were about an equal distance removed from Straumfiord in either direction. They intended to explore all the mountains, those which were at Hóp, and those which they discovered. They sailed back and passed the third winter at Straumfiord." The intention to "explore all the mountains" is not in the Saga of Thorfinn Karlsefni, but in the parallel Saga of Eric the Red (A. M. 557), as given by Mr. Reeves's notes, and the estimate of equal distance is in the former only. It sounds authentic, but merely as a sailor's guess.

It must mean sailing distance, for they were not given to guessing at overland air-lines, which they would never follow; but measured by "doegr" of water travel. Without knowing which river is meant,

¹ Voyages of Champlain, Orig. Narr. of Early Amer. Hist., p. 81.

and just how loosely they made the comparison, it is impossible to estimate more nearly. The application of the distance measure as a means of identification is not obvious unless the elevations were thought of as visible from both sides of a peninsula. This would put Hóp in Nova Scotia as Dr. Storm tried to do; but the climate, the absence of large wild grapes and the fact that Hóp was a long way below Straumey (Grand Manan) all forbid. Moreover the highest elevations in Nova Scotia, the Cobequid hills, though doubtless visible from the Gulf side, have only a maximum height of 1100 feet; and are a long way from the Atlantic shore, with, also in part, the upper arms of the Bay of Fundy between. If we carry the mountains in question up to the lower ridge of the western horn of Cape Breton, we pack nearly all the sites of the saga impossibly near to each other, we dispense with the distinctive violent currents of Straumey and the pleasing conditions of Hóp and we make the interval so slight that the party might have walked easily across or sent messengers, and could not possibly have felt themselves astray in a remote and dangerous region as they did. Also the Uniped or his friends would have followed them; but nobody menaced them on Straumey nor in their mainland home on the shore of the bay beyond Straumfiord, so far as we know. It must not be overlooked, however, that the statement of distances from Straumfiord occurs in one version only and may be a conjectural explanation by some saga-man of several centuries later.

Of course there must have been something unique about this one-footer, who fled so fast after shooting so deadly. Perhaps he was a wandering Eškimo with a kayak hidden in that "creek" where he vanished. If he sprang into that odd little craft and shot out of sight with the tapering rear end of the boat reaching back from his waist, and if this were their first clear view of him after woodland glimpses, the picture might have impressed them in that way, making them hurry out of a land of sorcery and death.

Lescarbot,¹ after describing a kayak as "all covered with leather" except "one hole in the midst where the man putteth himself on his knees," adds very appositely: "I believe that the fables of the sirens and mermaids come from the dunces esteeming that they were fishes, both men and women." In other words, he recognized that the rear part of the kayak might well be taken for a single member, a tail. If an Eskimo thus ensconced may be taken for a merman, why not for a "one-footer?" At least, I am not aware of any other explanation which is equally reasonable.

¹ Nova Francia. Erondelle's transl., p. 231.

It is interesting to follow these early visitors in even their slight exploration of the shore of that vast Gulf of St. Lawrence, which, with the Uniped, so weighed on their disquieted fancy; but we cannot gather anything as to distance or previous locality more than has been stated already. The calculation or conjecture simply bears out the statement that "they sailed for a long time" in their previous nearly equal journeying across the Gulf of Maine.

The commendations of their second Wineland home—"the country was attractive," "every brook was full of fish," "no snow whatever," and the like—may be taken with a slight allowance for hyperbole in matters of detail. Why should not these Norsemen speak a little loosely in praising, as well as other people? Many brooks, if not all, are really crowded with some kinds of fish in the spawning season along the coast. Yellow perch were formerly dipped out of them in quantities east of the Chesapeake; herring are often snagged by the hook or scooped up with the dip-net when they throng the water at the Little Falls of the Potomac, and alewives are said to run in multitudes up Narragansett Bay. The special method of catching flounders (which hug the bottom) in pits between tides is said by Munro's *History of Bristol*¹ to be still in practice there. As to the game, I was told of several recent instances of deer being seen near Mount Hope, and the region must once have been a hunter's paradise. There are years when, by all accounts, hardly any snow falls in this neighborhood, and Thorfinn may have happened on one of these.

The winter-grazing of stock has been claimed in one of the sagas for an especially bountiful field—the prize of a murderous controversy—in Iceland itself. More precisely, a recent writer² bears witness:

The Faroe Islands, surrounded by rocky barriers and dangerous whirlpools, are like those dragon-guarded islands of fable upon which, when the circle of enchantment was passed, the invader found pleasant gardens and balmy airs. . . . The air of the islands is mild the year round, so that even in winter cattle and sheep are herded without shelter, and snow so seldom lies upon the land that the grazing is practically uninterrupted.

From this to the "absolutely no snow" of the saga is no great interval. Perhaps in all such cases we should suspect a slight involuntary "diminution of the record."

This winter grazing, as a ranchman of the far northwest informs me, is practised even in Alberta, where the weather varies quite suddenly from Arctic severity to a very trying heat and moisture.

¹ W. H. Munro: *History of Bristol, R. I.*, p. 22.

² E. M. Bacon: *Henry Hudson*, p. 112.

On Nantucket, which is bleak in winter, sheep are often left thus uncared for, as well as on both sides of Narragansett Bay, according to the correspondence appended to Rafn's huge Latin book. Also, the Chincoteague ponies of the Maryland and Virginia shore have supported themselves independently for much more than a century, though there is some zero weather in most winters, if only for a day or two. The question is one of food rather than temperature, and there is usually food for ruminants in the marshes. When the coast line of Narragansett and Massachusetts Bays was lower than now we may suppose that marsh-grazing was much more plentiful.

There is a plain intention in this part of the saga to contrast the conditions of their northern and southern Wineland homes in the months that try all resources. Champlain¹ does the same as between the same localities. Besides his statement that no one would foresee the severity of the St. Croix winter from the summer of that region (compare with the saga) he says that the winter life of the few Indians there "seems a very miserable one." He tells of really murderous hardships endured by his own companions. But at Nauset he was told that the snow fell only to the depth of a foot or less, and he adds; "I conclude that this region is of moderate temperature and the winter not severe." Now the Nauset Indians were close neighbors and allies of those about Massachusetts and Narragansett Bays and their conditions must have been nearly identical.

As to the delightfulness of the Narragansett country we have Verrazano's panegyric of nearly a hundred years before, which declares that it will produce anything; also the commendation of many later writers and the plain testimony of the land and water themselves.

Thorfinn and his party met their first grape-vines and wild grain at Hóp, so far as we know, for we can hardly count the plants which Haki and Hækia may have reached in their dubious southern excursion. The impression was great and immediate. We are told "They found self-sown wheat fields on all the land there wherever there were hollows and wherever there was hilly ground there were vines." Not grain nor grapes at that season, for it was spring, and no interpolator has been at work here. The statement would have fitted many places in southern New England, so far as the vines are concerned, and one place about as well as another. As already explained, it would not fit any more northern coast region.

Three grains have been called "wheat" in America, which are not really so. Prof. Fernald's² *Elymus arenarius* (lyme grass, strand

¹ Voyages of Champlain: Orig. Narr. of Early Amer. Hist., pp. 25-96.

² Fernald: The Plants of Vinland. Rhodora, Feb. 1910.

wheat, or "strand oats") has had many names. It is a botanical curiosity in northern New England and the Maritime Provinces; rather plentiful along the sea shore of Labrador; and perhaps even yet used a little in Iceland. But why should these northern people announce as a novelty and a godsend what they already had at home? Besides, it will not go with the grapes at all. And to make Labrador do duty for Wineland as well as Helluland and Markland is really asking too much of a poor and distressful region.

Maize, or our Indian corn, originated—according to Dr. Harshberger's very careful and valuable investigations¹—in the uplands of central Mexico; whence it has been carried north and south a long way, everywhere calling for the care of man. Dr. Rafn supposed that it might have been found wild in Rhode Island, but that is out of the question. Leon, Mexico, would be the nearest possible point. A grain accidentally dropped by us may spring up, and if it be early in the season, may produce grain, but that, if it falls again, will die during the winter. This is true from Maryland northward, at the least; for *Zea mays* is an upland tropical exotic and helpless among us while untended.

It may have reached and passed the Bay of Fundy, for Lescarbot² speaks of agriculture as formerly practised by the Micmac. It was doubtless receding when found by Champlain³ at Saco in 1605, for on the Kennebec the Indians had told him of its cultivation along that part of the coast a little earlier. There is the same story to tell of Hochelaga⁴ (Montreal), where Cartier found it plentifully in 1535, yet whence it was driven, before the next European visit, with its Huron planters. The predatory habits of idler savages counted for more than the rigor of the climate in fixing boundaries. Yet there is no doubt that it needs a hot and rather long summer to really thrive and yield well.

One would hardly expect it to be called "wheat," but men often name by analogy, not by supposed identity; as in the familiar instances of the tulip-tree "poplar," our robin, which is a migratory thrush, the ruffed grouse, which is a partridge in some States and a pheasant in others, and the "bobwhite," which is called a quail wher-

¹ J. W. Harshberger: *Maize, A Botanical and Economical Study*. University of Pennsylvania Publications, 1893.

² *Nova Francia*: Erondelle's transl.

³ *Voyages of Champlain, Orig. Narr. of Early Amer. Hist.*, p. 60.

⁴ He had previously seen the grain, as food, near the mouth of the St. Lawrence and called it "millet as large as peas." A little earlier he had met the wild rice on the Southern Shore of the Gulf, noting that it was "like rye."

ever it is not (more accurately) called a partridge. Similarly Cartier called this grain millet.

So Strachey's¹ Virginia tells us:

The natives here have a kind of *wheat* which they call poketawes, as the West Indians call the same maize. The form of it is a man's tooth, somewhat thicker, for the preparing of the ground for which they use this manner. He then proceeds to describe girdling the forest trees, killing the roots with fire, grubbing up the dead stumps next year, planting three or five grains of *wheat* and one or three of beans in the ashes and decayed wood, the hills being four or five feet apart, weeding with hoes, hilling and the final processes of pulling and preparation, with a word also for green roasting ears.

Champlain more briefly describes the same process in New England, specifying some additional tools.

So "corn" may be "wheat"; but the real crux is in the word "unsown," evidently meaning wild, spontaneous. Dr. Fiske thought the Norsemen, seeing the small amount of work required, considered it practically so; but the above abstract of procedure ought to dispose of this rather curious fancy, which would not have occurred to him if he had raised corn on a wooded hillside experimentally in the Indian way. Besides, though a wheat-field resembles a natural field or patch of low-growing wild grain, a cornfield is obviously artificial. Dr. Fiske says that it was naturally noticed by Thorfinn's people, being one of the first objects to attract the attention of Champlain. But Champlain's first observation is: "They till and cultivate the soil. I landed to observe their tillage. . . . We saw their Indian corn, which they raise in gardens," and again, "before reaching their cabins we entered a field planted with Indian corn." Whenever he mentions this plant or its grain, it is unequivocally as an attendant on human homes and the product of human labor.

No doubt the Norsemen would have done likewise, if "Indian corn" were the "wheat" which they found; but there is not a word in the sagas to indicate any sign or product of agriculture past or present—even of the "pulse" which Verrazano found the Narragansett natives cultivating, whatever he may have meant.

This interesting omission of the saga would have a negative value in determining the general location of Hóp, if we knew that corn was then raised in any particular region which Thorfinn might have reached. But the chances are that it had not yet entered New England from beyond the Hudson. It was there in the early seventeenth

¹ W. Strachey: *The Historie of Travaile into Virginia*, p. 116. Cf. Lescarbot: *Nova Francia*. Erondelle's transl., p. 98. "A loaf of bread made with the wheat called mahiz or mais and in these our parts Turkey or Saracen wheat."

century, and perhaps even in 1500; but this leaves a margin of five centuries for its advent. Even if it were plentiful in 1000 a little beyond the Allegheny Mountains, it might not have crossed them. We do not know how fast it was carried, nor what conditions favored and what opposed it.

The wild rice naturally grows in wet "hollows," a very significant word in the saga. There are square miles of it along almost every one of the Maryland rivers. In the northwest it is equally plentiful and put to better use. Indian wars have been waged for the best gathering grounds. Many thousands of Indians depend in some degree on it for subsistence. The tending and gathering of it runs close to agriculture, so elaborate a system has developed—very fully set forth in the memoir of Dr. Jenks.¹

In its later stages it does not greatly resemble wheat, but when young there is a decided resemblance to the ordinary unbotanic eye, though its tint is softer and more luxuriant, making its great low fields a conspicuous feature of our spring landscapes. There is plenty of it in Texas, and thence all the way north as far as the low sandy typically American coast line extends; also farther north, where proper surface conditions obtain, even to a high latitude. It is equally at home, equally abundant, in Maryland and Manitoba. In "The Backwoods of Canada" Mrs. Traill reports "When seen from a distance they (the wild rice beds) appear like low green islands on the lakes." But they do not need continually even partial submergence, being only a little more nearly aquatic than cultivated rice, which must have the water let in now and then. I have tramped often about and upon the wild rice roots, after the birds that fatten almost absurdly on this grain, which is "like rye" as to height and some other characteristics in full plant-growth as Cartier says.

Climate and other conditions exclude perhaps all the territory north of Cape Ann, but hardly any place below it, near the coast. We must look next to the requirements of Hóp's topography as set forth in the saga.

The general meaning of the word is a loch or small bay. The map of Iceland² shows the particular Hóp which Thorfinn most likely had in mind and thus illustrates the description. It is a lake not very far from his home, connected by a strait to the broad bay Huna-

¹A. E. Jenks: *The Wild Rice Gatherers of the Upper Lakes*. Nineteenth Ann. Rep. Bur. Amer. Ethnol., part 2, p. 1013 *et seq.*

²W. G. Collingwood and J. Stefánsson: *A Pilgrimage to the Saga-Steads of Iceland*. But this does not show the sea connection made plain by larger maps.

foi running in from the sea. This strait or channel is practically a lower reach of the main river which flows down into the lake. There is also a tributary river or more than one which might be disregarded. Some of the maps seem to indicate that there would probably be a shoal or bar in the strait or river between bay and sea. All this is in accord with the words of the saga, concerning the American Hóp which they visited and named.

Some additional facts are mentioned. Indians rounded a cape in approaching "from the south." There were hills nearby and crags a little way up the river. There was a point or cape at the entrance to the bay. There were flats or hollows for the wild rice, as already noticed. It will be seen that there are many requirements. We simply cannot find anything to fit them even plausibly south or west of Narragansett Bay. Is there anything like Hóp between it and Cape Ann? Or rather was there any such Hóp there in 1004?

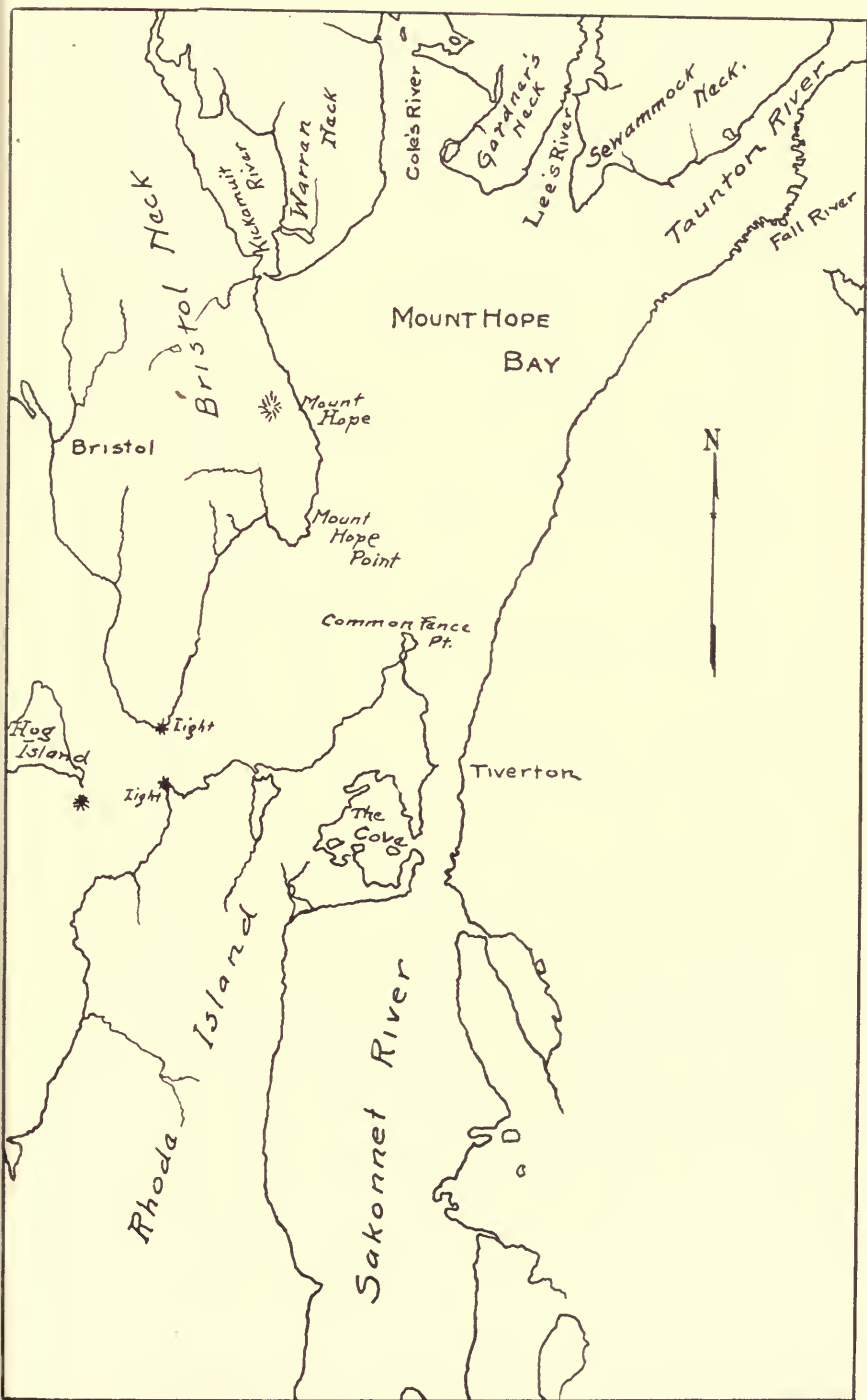
Professor Horsford thought he found an eligible Hóp in the Back Bay of Boston Harbor; also the delightful anchorage of Verrazano, where a fleet might be safe when storms do blow. But in Verrazano's time there was no such bay; far less in Thorfinn's.

As previously stated, the Superintendent of the U. S. Coast and Geodetic Survey informs me that the oldest chart to which he has access gives two fathoms for the ruling depth of the channel leading into the Back Bay and shows its flats without depth marks. Yet they may not have been wholly bare at low water, for they show on the chart like those of Dorchester, which are marked for four feet. This chart was drawn for the British government in the latter part of the eighteenth century. Obviously a fleet would have been sorely put to it for room in 1800; how then in 1523, allowing for the subsidence of the coast? In Thorfinn's time if not in Verrazano's, there can have been no more than a river winding through meadows all the way down to the harbor. This vanishing of the Back Bay Hóp makes any comment on the lack of elevations and crags beside the river seem rather superfluous.

Dr. Rafn¹ was so absurdly wrong as to so many things—in spite of the real service he rendered—that they will reflect in some minds injuriously on one point, as to which he may happen to be right. That is, the identification of Mount Hope Bay, Rhode Island, with Thorfinn's Hóp. It is a beautiful sheet, the depth of which in some parts is a guaranty against its entire absence then.

Taunton River flows into it at the upper end or side. From the lower end or opposite side two channels extend to the sea. One is

¹ *Antiquitates Americane*.



MOUNT HOPE BAY

known as Sakonnet River; the other as the eastern channel of Narragansett Bay. Aquidneck or Rhode Island lies between them. Bristol Narrows connects the above channel with Mount Hope Bay. Mount Hope is a little above the narrows near the bay side and affords a fine view over nearly the whole Narragansett region.

It has been objected that there are no bars, that a fleet may pass in without any difficulty. But the objectors lose sight of the different conditions probably obtaining then. No one can say just what the change in elevation has been during nine hundred years; yet there are some measures which have been taken recently, and there are earlier indications. The Dighton Rock inscription in Taunton River is wholly overflowed in ordinary tides; it was partly overflowed in high tides about 1700 when Cotton Mather wrote. We must suppose that it was entirely free of the tide and in no apparent danger when the figures were carven. Other inscribed rocks give like testimony. Mr. Davis's marsh experiments elsewhere cited are quite conclusive. Dr. McGee tells me that the depression at Atlantic City is found to be probably from two to four feet per century. It seems to be about that for Ocean City, Maryland, a point which I have watched for more than twenty-five years. A proven descent has occurred at New York and in Boston Harbor during the past seventy years. Of course we cannot be quite sure that this existed in older times, for reasons already given, but continuity of movement seems more probable than cessation, when there is no apparent reason for the latter. As we know of a sufficient cause for the continuous lowering of the southern New England coast, and that it has really descended during several centuries, we may at least be pretty sure that it was higher in the year 1004 than it is now; but by how many feet who can say?

Of course the action of tides and river-currents, in scouring out and in depositing, must also be kept in mind. For example, though parts of Mount Hope Bay near that hill are deep, the remainder of it seems to have been silted up by Taunton River and other tributaries, the soundings running below twenty feet. The shallows have been dredged through to make a clear channel. To get the soundings of the year 1004, we must suppose all this accumulation removed and the old elevation restored. Whether the net results would leave a Mount Hope Bay approaching its present size may be questioned; but there would be at least a small bay, unless the depression has amounted to seventy feet, which seems unlikely. A very much less descent would, however, make a bar in a curved line across the main channel where a vessel struck in 1912; would close the strait now called

Sakonnet River; and would leave the Eastern Channel with its lateral branch, called Bristol Narrows, a good title to be called a river, as the popular equivalent for a strait. The steep Fall River hills would supply the crags called for by the saga, and the upper end of what is now Aquidneck Island would be the point on the southern side of the entrance, which the Indians passed in paddling from the south and returning the same way. There would be plenty of marshland for the wild rice.

It fits well in the main, but of course the rest would go for nothing without a loch-like bay of some size; and this item looks more doubtful than if the present depth were generally greater; yet that objection is probably not fatal. Verrazano seems to describe a transitional condition of Narragansett Bay, when its mouth did not freely let in so great a volume of water as now before the sweep of the storms. Curiously he does not allude to Mount Hope Bay; but he does not allude to Mount Hope either; so perhaps his trips by land and water were rather to the westward, or those who doubt his interesting story may be right though in most of its items there is a notable verisimilitude. Certainly the hill was there, small but dominating the low landscape.

The name Mount Hope is somewhat mysterious, but probably a corruption of Montaup; which Mr. Mooney does not consider identical with Montauk, Manotuck or Montanutt, defined by Trumbull's¹ dictionary as meaning in substance a place of outlook. Montauk is at least applied to several hills, and its meaning would seem to fit the present one well enough. But the words may not be related.

Now Munro's History of the town of Bristol, before referred to, a work rather notable for care in collecting local data from deeds and records, declares in a note that Haup and Montaup were applied by Indians to this region when the white settlers came. He offers the solution that the Norsemen left the name Hóp, which the Indians turned to Haup and the English to Hope as we now write it. He thinks two or three Norsemen may have remained and married among the Indians, thus anchoring the name; an improbable supposition, considering the hostility of these natives, and one for which we have no basis whatever. The true explanation of the origin of the word must be left to our Indian linguists, who, however, are more conversant with surviving languages. No argument can be safely founded on it in the present state of our knowledge.

¹ J. H. Trumbull: Indian Names of Places in and on the Borders of Connecticut.

As against Mount Hope Bay, it must be said that the saga rather leaves the impression of an eastward-facing, nearly land-locked expanse, reached by natives who came up along the coast from the south; and that there is no reference to any course but a southern one in reaching it from Straumey, nor any but a northern one in returning. It is true that the narrative might have omitted, as not very important, the westward and eastward turns in rounding the corner of New England; but a spot on the eastern front of the latter has the advantage of requiring no such explanation. On the other hand, sites along this coast lack noticeable hills. Just what weight should be attached to each of these conflicting considerations is hard to say, but thus far no other Hóp has been suggested which seems more plausible than Mount Hope Bay, Rhode Island.

16.—CONCERNING THE NATIVES

In *The Discovery of America*, Dr. Fiske¹ has laid stress on the ignorance of eleventh century Europeans as to people so unsophisticated that they would not understand the qualities of a steel implement or the relative value of red rags and costly furs and who could be thrown into panic by the bellowing of a bull. Possibly the argument is pressed overmuch, for the civilized peoples of antiquity had, and transmitted, some knowledge of interior Africa and other outlying rudimentary regions; but, however qualified, it adds a little cumulative testimony to the genuine character of the saga. Also, these Skrellings have been found interesting by many writers and overhauled in every way, to see what they can tell us, for one thing, about the location of Hóp.

In particular, controversy has busied itself with the question, were they Indian or Eskimo? The case for the latter rests mainly on the name Skrelling or Skræling, which is known to have been applied to them centuries afterward, the "skin-boats," the slings, and certain physical characteristics. Its weakness lies chiefly in the absence of clothing at Hóp, of dogs and sleds, of winter traveling, of distinctively Eskimo appliances such as the kayak and harpoon, and of any indication of skill in carving: also in the fact that everything said of the Skrellings would apply to some Indians, who might have been there.

We have touched lightly before on the question of boundaries, yet may still add a word. We know the Eskimo only as an Arctic littoral people, ill content with a milder habitat and not thriving

¹ Vol. 1, pp. 180-185.

in it. All accounts go to prove them so wonderfully skilled in making the most of their situation that they must have belonged to it from rather ancient times though not necessarily in the New World. Rink¹ argued for their development from some Indian tribe and their gradual movement to the northern coast under pressure, there to become modified by circumstances and polar weather. Thalbitzer,² examining the question more recently, finds nothing conclusive in the reasoning. It seems at least as likely that they were here before the Indians, at least before the ancestors of any of those stocks of North American Indians which concern us or they may have come in after them from Asia as some suppose. They have often clashed in defence with Athapascan or Algonquian tribes, sometimes, though rarely, have taken the aggressive; and occasionally a particular district has been alternately occupied or overrun by one or the other contestant. But in the main it must be said that the Eskimo have been content to hold their ground along shores not desired by other people, and are to be considered as doing so from choice, not because driven thither and held there by enemies. Woods and warmth have never tempted them in historic times. While the ice-cap border was moving northward, we may suppose a slow shifting of their southern limit in the same direction. After the ice-cap was quite gone from the mainland, they dwelt still on those northern shores which gave them the life that they know. Sometimes they moved southward along these shores a little way, regaining regions of their former occupancy as to the coast-line only.

Packard³ says "When the French first frequented the coast, it was in possession of the Equimaux as far up as the end of Anticosti. Apparently they had not been long in possession." They seem also to have been contending for a foothold on Newfoundland, but it was never more than precarious. There are also a few slight and doubtful indications that parties of them landed on the northern shore of New Brunswick. It is their utmost southward point, even of reconnoissance or exploration, so far as we know; and if Professor Packard's⁴ inference be right, they would have been more remote before the movement of which he tells us. Undoubtedly they may have come southward before; but they would not wish to come far,

¹ H. J. Rink: On the Descent of the Eskimo. Arctic Papers for the Expedition of 1875, pp. 271-273. Journ. Anthr. Inst., 1872.

² W. Thalbitzer: The Eskimo Language, p. 21.

³ Packard: The Coast of Labrador, p. 260.

⁴ W. Thalbitzer: The Eskimo Language, p. 20.

this would be hardly practicable; and there is not the least sign that they came at all. If we consider the Skrellings to be Eskimo, we must suppose Hóp to be in Labrador or Newfoundland, where there are no grapes and no balmy winters and where the coastal geography of the sagas fails to apply. The Eskimo are all north of Hamilton Inlet now.

The earlier students of the subject were dominated by the idea that "Skrelling" must mean Eskimo. Putting this with the evidence for a warm Hóp, they got some curious results. Thus Schoolcraft,¹ adding yet a little more in the way of assumption, declared that successive conquests and revolutions in the Valley of Mexico sent corresponding waves of mankind northeastward by way of Tampico, till at last they drove out of New England the Skrellings whom the Norsemen found there. This may be paired off with the Arthurian conquest of Iceland, as a bit of theoretical ballooning.

Dr. Fiske² no doubt presents the kernel of the matter in reminding all that we do not assert the identity of Fuegians and Australians by calling them savages. The meaning of the word (weaklings) seems to have been about that among the Norsemen.³ We find them applying it not only to their Hóp visitors, but to the men in "doublets" found at a distant point, and to the bearded Marklander and his companions, with no thought of ethnological distinctions, but in mere facile disparagement. What else could be their view of the poor people who had no ships nor woven fabrics, no jewels nor armor, no live stock nor grain, nor steel weapons, nor good tools, nor money, nor proper European clothing; dusky people too, not pleasing in northern eyes? Such were contemptibly insignificant; it was hardly worth while to distinguish differences among them.

Dr. Nansen may be right in thinking that the name (like that of Finn for Laplanders and, as he points out, two other inferior peoples) came to have an implication of mythical beings or of magic; but the fact is irrelevant.⁴

The natives who visited them at Hóp were their very first specimens, and the Norsemen fitted the word to them in the spirit which applies derogatory nicknames like *injun*, *nigger*, *dago*, and *sheeney* to people despised by the utterer. It was then ready for any others of like status, and might even be applied conjecturally, by a loose

¹ Schoolcraft: *Indian Tribes of the United States*. Drake's edition, vol. 6, p. 84.

² J. Fiske: *The Discovery of America*, pp. 181-185.

³ Fr. Nansen: *Eskimo Life*.

⁴ In *Northern Mists*, vol. 2, pp 11-20.

analogy, in advance of discovery.* We can see the process at work after a hundred years in the surviving *Libellus* of the *Islendingabók*, written by Ari the Wise, who was no doubt the best informed man in Iceland. Here is the passage: "This country which is called Greenland was discovered and colonized from Iceland. Eric the Red was the name of the man, an inhabitant of Breidafirth who went thither from here and settled at that place which has since been called Ericsfirth. He gave a name to the country and called it Greenland and said that it must persuade men to go thither if the land had a good name. They found there, both east and west in the country, the dwellings of men and fragments of boats and stone implements such that it may be perceived from these that that manner of the people had been there who have inhabited Wineland and whom the Greenlanders call Skrellings. And this when he set about the colonization of the country was 14 or 15 winters before the introduction of Christianity here in Iceland, according to which a certain man who himself accompanied Eric the Red thither, informed Thor-kell Gellison."

Broken boats, tools, and dwellings defined as savages (Skrellings) the former occupants, who had probably withdrawn to the northward¹ or kept at home there, refraining from southward journeys and therefore they were presumably like the other Skrellings already encountered in Wineland. In other words, the Winelanders were not called Skrellings because there were Eskimo already known, but the Eskimo, long before they were seen, were called Skrellings by conjecture, because the word had come to Iceland traditionally from American adventures then a century old. Of course the two kinds of Skrelling (savage) might be utterly dissimilar, according to our modern standards.

Perhaps it was in the twelfth century,² perhaps not till the thirteenth century, that Norse hunters in upper Greenland met small "Skrellings," who used stone knives and whalebone arrowheads—Eskimo undoubtedly—as related by a manuscript discovered in Scotland in the nineteenth century.³ The greater Greenland landowners had hunting lodges, as we may call them, at the north, and kept ships to sail there; so such contact must happen at last.

In the year 1266 an expedition was sent to find out about them, as before mentioned, and seems to have gone very far north, indeed

¹Fr. Nansen: *Eskimo Life*, Chap. 5.

²G. Storm: *Studies on the Vineland Voyages*.

³W. Thalbitzer: *Eskimo Language*, p. 22.

nearly to Jones's Sound, judging by its primitive astronomical data; though Thalbitzer¹ supposes that they did not pass the site of Upernavik. At all events they found Skrelling houses here and there above the region inhabited by white men.

According to Dr. Storm,² the settlers "apparently afterward killed them or drove them away when they could." This looks as though the colony were expanding in that direction, or the Eskimo were beginning an ominous downward movement.

Professor Olson's preface to *Original Narratives, etc.*, before mentioned, says that "The *Speculum Regale* was written in Old Norse in Norway in the middle of the thirteenth century," that it discusses in a dry, matter-of-fact way divers Greenland matters, like insularity, the aurora borealis, glaciers, climate, the fauna, exports and imports, and the means of human subsistence, but has not a word for the Eskimo. Surely the writer knew nothing definite about them, although some border settler might have been able to tell him.

It was the year 1337 at the earliest when Ivar Bardsen went with a relief expedition to the western settlement, a little too late. His narrative, written later in Norway, shows that the Greenland colonists can have had no considerable contact with the natives before the fourteenth century. The Icelanders can have had no idea of them at the time Hauk's book was copied, still less a hundred years earlier when the saga was written. Neither Thorfinn, nor the unknown saga-man, nor the Lawman Hauk, who gives us the earliest surviving manuscript, can reasonably be charged with using Skrelling in the special sense of Eskimo. If the Hóp natives are to be held Eskimo, it must be on other evidence.

The Saga of Eric the Red (A. M. 557) says: "They were small men and ill looking, and the hair of their heads was ugly. They had great eyes and were broad of cheek." The Saga of Thorfinn Karlsefni substitutes "swarthy" for "small." The Flateybook *Vineland Saga* states that the native chief was tall and of good figure.

Stature and comeliness make an uncertain reliance. The Eskimo are not all squat people. Those of southern Greenland are said to be taller than those in the north. The Long Labrador Trail of Dillon Wallace tells us:

In our old school geographies we used to see them pictured as stockily built little fellows. In real life they compare well in stature with the white man of the temperate zone. With a few exceptions, the Eskimo of Ungava average over five feet eight inches in height with some six footers.

¹ *Op. cit.*, p. 23.

² *Studies on the Vineland Voyages*, pp. 307, 370.

Concerning the "Northerners," a remote unsophisticated branch of the Innuít, occupying the northwestern peninsula of the same mainland region, Mr. Turner¹ informs us: "These people are unusually tall and of fine physique. The men are larger than the average white man, while the women compare favorably in stature with the women of medium height in other countries." E. W. Nelson² says:

The Malemut and the people of Kaviak peninsula, including those of the islands in Bering Strait, are tall, active, and remarkably well built. Among them it is common to see men from five feet ten inches to six feet tall.

Yet

The Eskimo from Bering Strait to the lower Yukon are fairly well-built people, averaging among the men about five feet two or three inches in height. The Yukon Eskimo and those living southward from the river to the Kuskokwim are, as a rule, shorter and more squarely built . . . and all of the people in the district about Capes Vancouver and Roimanzof, and thence to the Yukon mouth, . . . all are very short.

Of the Norton Sound Eskimo, Dall³ writes that he has often seen both men and women six feet high and that some of the men are still taller. Also that the men have great strength, one being able to take a hundred pound bag of flour in each hand and another by his teeth and walk off thus burdened.

As to the eyes in particular, he reports that they are "small, black and almost even with the face," also that the "women are sometimes quite pretty." Lieutenant Holm⁴ admits that Eskimo have not large eyes, but asserts the same of Indians, disqualifying both; yet the Skrellings were natives of some kind. Captain Robinson,⁵ as quoted at second hand by Patterson in his valuable little work, described Mary March, a Beothuk prisoner, as having black eyes, "larger and more intelligent than those of the Eskimo." The two types were neighbors and naturally chosen for comparison by one who knew them both.

Wide divergences are noted in complexion, in physiognomy, in hairiness of the face, in the proportions of the body and limbs, between the Eskimo of different districts. Thus we have a puzzling absence of uniformity in a race which is considered unusually

¹The Hudson Bay Eskimo. Eleventh Ann. Rep. Bur. Amer. Ethnol., 1889-1890, p. 179.

²The Eskimo About Bering Strait. Eighteenth Ann. Rep. Bur. Amer. Ethnol., 1896-1897, pp. 26, 28.

³W. H. Dall: Alaska, pp. 137-140.

⁴A. M. Reeves: The Finding of Wineland the Good. Notes.

⁵Rev. Geo. Patterson: The Beothicks of Newfoundland, p. 146.

homogeneous. Now shall we say that the Skrellings were Eskimo, or not Eskimo, because they were small, or dark, or big-eyed, or ugly-haired, or what you will?

It is equally true that some of the greatest contrasts of the human race are found among Indians. As to stature, the Patagonians and Fuegians, near neighbors, offer an almost classic example. But we do not need to go so far afield. The Caddo of Oklahoma, or near it, are said to be little men; the Osage of the same prairie region have been called giants even by other Indians. The Zuñi are usually short; the Nez Percés often tall. At the east it was the same. The Iroquois and some Algonquian tribes towered over their neighbors. Strachey¹ describes the Susquehannock as "a giant-like people," the Wicomico as "of little stature and very rude"; but they both dwelt on rivers emptying into the same generous Chesapeake Bay, and their conditions were identical. The few Micmac whom I have seen appeared under medium height. The Nanticoke do not greatly pass that standard.

As to the other items, compare this description by Verrazano:²

The complexion of these people is black, not much different from that of the Ethiopians. Their hair is black and thick and not very long; it is worn tied back upon the head in the form of a little tail. In person they are of good proportions, of middle stature, a little above our own; broad across the breast, strong in the arms, and well formed in other parts of the body. The only exception to their good looks is that they have broad faces; but not all, for we saw many that had sharp ones, with large black eyes and fixed expression. They are not very strong in body, but acute in mind, active and swift of foot.

Here in close juxtaposition we have the breadth of face, which Brereton³ and Gosnold also observed on Cape Cod; the swarthiness; the large eyes, "middle stature," and such peculiarities of hair as might well displease a Norseman or a Celt; but who will take these early Carolinians for Eskimo? On the other hand, he describes the Narraganset Indians as tall and

of very fair complexion; some of them incline more to a white, others to a tawney color; their faces are sharp; their hair long and black and sharp, their expression mild and pleasant, greatly resembling the antique.

But again he found the Maine Indians "rude and barbarous" and "very different." They "made the most brutal signs of disdain."

Similarly a southwestern Federal judge, lately deceased—a man of strong intellect and keen perception, with no theories to sustain—

¹ W. Strachey: *The Historie of Travaile into Virginia*, p. 41.

² Translation in *Old South Leaflets*.

³ J. Brereton: *A Briefe Relation of the Discoverie of the North Part of Virginia* by Gosnold. *The Bibliographer*, 1902, p. 33. *Old South Leaflets*, vol. 5.

assured me about four years ago that whether Indians be superior or inferior to negroes depends on the particular tribe chosen for comparison. He instanced one as composed of "highly civilized men"; another as very low in the human scale; and they were not of those usually presented by way of typical extremes, Incas and Fuegians for example. Many tribes, gathered from every quarter, had long been within his jurisdiction, and his acquaintance with their individual members had been uncommonly close and extended.

If we turn to trained and eminent ethnologists, we find no stronger advocate of Indian unity than Dr. Brinton, author of *The American Race*; but who can read his summary of the characteristics of South American tribes, for example, without feeling that his witnesses turn against him? Some of these people, it appears, are nearly white, others nearly black, with a cavalier defiance of latitude and isothermal lines in both cases. Here is a bestial-featured tribe, there a noble one; here a tall people, there a horde of dwarfs; and on the borders of humane, ancient, widely extended civilization—or something very near it—a mere débris of human derelicts and incapables. Dr. Brinton proves that too much has been made of the homogeneity of the American Indians.

As already suggested, the truth seems to be that American Indians, when first encountered, comprised more than a few survivals of earlier rudimentary peoples often partly assimilated, as well as some intrusive elements, occasionally higher in type and culture and of uncertain origin. Furthermore they had developed heterogeneously in diverse conditions. They still differ among themselves—considering the two American continents together—in many ways. Yet if we were called on to name their most salient and generally characteristic features we should all probably select their cheek-bones, color, hair, and eyes. It is significant that these were noted particularly by the observant Norsemen. That the cheeks are usually prominent rather than broad, the eyes conspicuously keen rather than conspicuously large, and that swarthy is hardly the best word for the peculiar tint of their complexion, are matters of detail, easily variable. Subsequent transmitters would be likely to make a few careless or poetic changes, if the original narrators did not; also the visitors were judged by the standard height of the European North, for these Icelandic observers had perhaps never seen a man who was not of the white race. If the word "short" were used, as in one saga, we have only to suppose that Indians of the Wicomico pattern stood before them; Micmac visitors might call forth the statement. In all this,

there is nothing which confines us to the Eskimo, and little which would fit the Eskimo equally well.

Hawes¹ says of the Saghalien Gilyak: "I was struck with their resemblance to North American Indians, their swarthy features, high cheekbones, raven hair and moccasined legs, the impression being heightened by their paddling a dug-out canoe." Kennan² mentions the "swarthy" faces of the Kamchatkan Koryak; adding "their high cheekbones, bold black eyes and straight coal-black hair suggested an intimate relationship to our own Indians." Thus we have two independent observers of different nations instructively selecting as Indian the same features as the saga and even using its most doubtful adjective.

The general impression left by their conduct is surely the same. Love of bright colors; improvidence in bargaining;³ impulsiveness in curiosity, suspicion, alarm, and vindictive retaliation; readiness to discard a tool which they could not understand; sudden panic, before what must have seemed to them an outburst of insanity—all are surely unsophisticated Indian in psychology, though they might happen to be displayed by Eskimo. The last item is an impressive typical example, for all accounts agree that such visitations are peculiarly daunting to the red-man, being looked upon as divine or diabolical possession, in the ancient way. From Cooper down they have been a stock expedient of Indian romance-writers. His "Deerslayer" presents vividly the consideration accorded by the Iroquois—most merciless of all fierce peoples—to even a mild form of dementia.

On their part the Icelanders behaved better than many later colonists; dealing fairly, after their light, though getting the better side of the bargain with these simple folk, and not using their weapons except in defense, until after they had lost one of their best men by a wanton attack, as it would seem to them, and had been forced to abandon their pleasant homes and their hopeful venture. Karlsefni's quick-tempered bull was the chief culprit, bringing trouble and loss to all human beings concerned. He stands out as one of the few quadrupeds which have meddled with history.

From this episode, common to all these Wineland sagas, it has been inferred, not quite convincingly, that these natives had never seen a bison. Hence Laing (preface to *Heimskringla*) believes they

¹ C. H. Hawes: *In the Uttermost East*, p. 135.

² G. Kennan: *Tent Life in Siberia*, p. 171.

³ W. H. Dall: *Tribes of the Extreme Northwest*, p. 238. ("A piece of coarse cloth for a dressed deerskin".)

could hardly be mainland Indians. Fiske replies: "Bisons on the Atlantic coast, Mr. Laing?" Now they *were* found near the sites of Washington and Richmond in the early seventeenth century,¹ hunted in the marshes of Georgia long afterward, and not wholly extirpated from the Appalachian mountains until 1800 or later; so that stragglers of their advance guard almost certainly reached salt water. But so far as concerns New England, Dr. Fiske's note of exclamation may well be right, although the Orkneyman's position is not really absurd. A straggling bison² was killed about 1790 or 1800 near Lewisburg on the Susquehanna, and there are indications of their former presence about as far east at other points. They were plentiful in parts of the Pennsylvania mountains, yet it is unlikely that they ever crossed the Hudson.

Moreover, the bison herds came late into the Appalachian region, and left early. Shaler's³ excavations near a Kentucky saltlick showed, lowest, a considerable depth of mammoth bones; then, those of a muskox when the glacier front was but little way northward; finally, the bison, with every appearance of recentness. Few of their remains are found in even the later mounds of the Mississippi drainage. From all indications and with the aid of the best ethnologists, Shaler inferred that the culture of these agricultural people and builders of the great defensive earthworks was in full flower about the year 1000 (Leif's date) and that the bison at that time had not crossed the Mississippi, coming eastward, but were all probably still near the Rocky Mountains. He suspects them of tempting the mound builders afterward out of their incipient civilization and into burning the woods to make buffalo pastures. But the menace of these wild herds to the hundred acre cornfields, also the attacks of hordes of savages traveling with or after them, would perhaps have still more to do with the final breaking up.

How far an acquaintance with bison would prepare the Hóp natives to receive with equanimity the charge of the settlers' bull is a metaphysical question I can not answer. Perhaps they supposed his challenge to be incited by their entertainers, especially if the Norsemen laughed at them, as we may guess they unwisely did. Thus viewed, Indians might see insult, treachery, and deadly danger

¹W. T. Hornaday: The Extermination of the American Bison. Ann. Rep. U. S. Nat. Mus., 1887.

²Allen: History of the American Bison. U. S. Geol. and Geogr. Survey of Colorado (1875), p. 443.

³Nature and Man in America, pp. 181-186.

in it. One cannot be sure that the memory of any wild animal would soothe them adequately.

But they seem to have offered no buffalo robe for sale, such as the scouts of De Soto bought in the Carolina mountains, and in view of the limitations of period and range above stated, we are no doubt safe in acquitting the Hóp Skrellings of any acquaintance with any kind of cattle; and moose would not help the case at all.

Indians in general had few metals; but gold ornaments were scattered through the south as far as the outer Bahamas, where Columbus found them, and copper in like manner through the northeast, being shown to Gosnold¹ on Cape Cod in 1620, besides some earlier entries. The few survivors of the Roanoke massacre, according to Powhatan (see Strachey), were employed as slaves in beating it out for a chief. Some of it may have been mined in the mountains, but the chief source of supply regularly worked seems to have been the shores of the upper lakes, as the chief source of gold supply was probably central Mexico. But the transfer of such articles or materials, whether by barter or through migration, must depend on intervening peoples, and the conditions of one century are not necessarily those of another even among uncivilized men.

The earthwork builders of Ohio might, if they chose, absorb and hold most of the southeastern flow of copper until they were driven from their strongholds; whether they were Sioux, Cherokee, Mandan, Appalachian, or of the remoter southwest; whether a temporary league of the Algonquians and the Iroquois overcame them, or they fell under the attack of hunting Dakota; and whether they went westward beyond the Mississippi, or into the mountains as Cherokee, or were scattered among many tribes—all debatable hypotheses which have been advanced, but need not be rediscussed here; and we do not know when the working began of the meager supplies afterward obtained, as we are told, in Virginia and New Jersey. In this view of the case, copper would not probably reach New England from any quarter by Thorfinn's time. Whatever the reason, the seaboard tribes about Hóp do not then seem to have possessed it. But this does not at all imply any lack of such adornments at that place a few centuries later.

As already noticed, these people apparently wore no garments worth mentioning, very likely only Nauset grass aprons or a diminutive form of breech-clout. They can not then have been Eskimo.

¹ Brereton's Briefe Relation, before cited. Old South Leaflets; and The Bibliographer, 1902, p. 33.

They did not make any visits in the winter, when the Eskimo prefer to journey. They had no sleds, no dogs, no harness, though these promptly attracted Frobisher's¹ attention in Labrador, and Davis tells of fighting off the Greenland dogs which the Eskimo set on him. Nansen² even lays stress on the use of this method of land transportation, as making against the theory of the development of these Innuits from the Indians; adding, "In this the Eskimo more resembles the races of the Asiatic polar regions." It is true that dogs were not uncommon in many Indian villages as pets or sacrifices, or to aid in hunting or serve for food. But these people came to Hóp always by water, apparently from some rather distant point southward, and on such excursions the dogs would most likely be left behind. Besides lack of room in the boats, they might interfere with the plans of a war party or even disturb trading. Moreover, early travelers often do not mention them, and presumably they were rare in some tribes. The Indians had no such imperative need for them as the Eskimo, and might be much later in acquiring them along the Atlantic coast. We have no real reason to suppose their presence among the New England Algonquians in the year 1000, but it would be a marvel if they were not then drawing the Eskimo of Labrador, and indeed of all quarters, over the snow.

There is no hint, either, in the saga of the faithful and spirited bone-carving and other sculpture and artistry, which made Prof. Boyd Dawkins in *Cave Hunting* conjecturally identify the Innuits with the paleolithic European cave-dwellers. Both had the seeing eye and the cunning hand, also a sense of the picturesque, along with patient industry in embodiment. Our northeastern Indian picture makers were infantile and freakish in comparison. The Norsemen would neither have heeded nor mentioned such "Skrelling" efforts.

It may be repeated as important that we hear of no kayak, nor of any of the accouterments which ordinarily pertained to the kayaker. Why should Thorfinn be less impressed by this unique Eskimo craft than were Antonio Zeno, Baffin,³ and Lescarbot? We have seen reason to suppose that one Eskimo and his kayak quite appalled Thorfinn's party in the Gulf of St. Lawrence. Surely the reappearance of the phenomenon, multiplied, would not have been disregarded—whether in confirmation or explanation. By "boats" we must

¹ Hakluyt's *Principal Voyages* (1904), vol. 7, pp. 225, 413.

² Fr. Nansen: *Eskimo Life*, p. 8.

³ C. R. Markham: *Voyages of Baffin*, p. 14. (Catonle's Relation). See also Olaus Magnus: *A Compendious History*, p. 20 (transl. pub. by Streater); as to Greenland boats "not so much above, as beneath the surface."

naturally understand open boats, which were all that they had ever seen—except in ill-understood fragments on the Greenland shore. It is not merely, however, that kayaks would be decked over; they are more of a garment or personal appendage than a mere vehicle for water transit. “As a rule each hunter makes his kayak for himself, and it is fitted to the man’s size just like a garment,”¹ the central “kayak-ring” being a boat-combing and a man’s water-tight belt in one. The world does not present anything else quite like this Eskimo invention, and few of that race on open waters are without it.

If we consider the Skrellings (“weaklings”) of Hóp to be Indians, the above items offer no difficulty. They went naked or nearly so, because the weather was mild, as at Nauset, except in the depth of winter. They did not use a harpoon and float, nor carve spirited animal figures in bone, because the former did not belong to the customs nor the latter to the tendencies and capabilities of their race. Probably they had never seen anything so Arctic and un-Indian as a dog-sled or a kayak. But what can be said for an old-time Eskimo in Labrador without any of these things? Yet Professor Fernald, for example, seems to think that the Hóp Skrellings were Eskimo and that Wineland was in Labrador.

The brandishing of staves (paddles?) in the direction of the sun’s course to show amity, or reversely by way of defiance, cannot be called indicative of either people. Norse folklore would predispose the observers to illusion on such points—witness the direful Moon² of Wierd which traveled in the latter fashion about the hall of Frodiswater before the eyes of living men and women doomed to ghostly hauntings or to death. The normal circuit would bear the contrary and conciliatory meaning. Of course Thorfinn and Snorri interpreted these movements by the facial expression, the tones, and other indications of the mood of the approaching men. Finding themselves understood, the latter would emphasize and repeat the gesture, even if it were at first accidental, or would naturally reverse it to convey a contrary message. But after all the signs may also have been customary with them exactly as seen, for these might suggest themselves by the contrast of natural and unnatural in any mind. They tell us nothing.

The native boats came three times, with dramatically presented climax. First “nine skin canoes” drawn by mere curiosity; secondly,

¹Fr. Nansen: *Eskimo Life*, p. 46.

²Eyrbyggja Saga. Morris’s and Magnusson’s translation.

“ a great number of skin canoes rowing from the south past the cape, so numerous that it looked as if coals had been scattered broadcast out before the bay,” for they had come to trade and to feel safe in trading; thirdly, “ a great multitude of Skrelling boats approaching from the south as if a stream were pouring down.”

There may be no significance in the substitution of Skrelling for “ skin ” in the third mention. As they mistook paddling for rowing—unless the saga-man, centuries after the occurrence, changed the words—perhaps we ought not to be very certain about such a detail. They had seen at least fragments of skin-covered boats in Greenland, as we know from Ari and Thorkel Gellison,¹ and may have been predisposed to assume identity of covering in two articles not unlike at a distance, or even very near, as Dr. Storm has suggested. A dark-tinted birch-bark-covered canoe, such as I have seen on the shore of Lake Superior, might well be taken for one covered with equally dark and smooth porpoise hide or cured sealskin or the prepared and hairless skin of any marine animal, especially by a man who expected the latter and was uncritical in distinguishing. Moreover the saga-man would remember the hide-covered boats of Ireland and other European countries, but would never think of tree-bark as a probable covering material. He might even suppose that he was making a strictly necessary correction by such a change. Indeed both coverings are really skins, animal or vegetable. The name “ woodskin ” is still commonly applied to the bullet-tree bark boats in use on the Essequibo River. Mr. Kirke’s *Twenty-five Years in British Guiana*² presents a neat parallel (by reversal) to an error of observation such as Dr. Storm suggests in this case. It appears that a “ woodskin,” being suddenly lifted from the water, was taken for an alligator or some other animal, hide and all, creating a brief panic, which even the Indian boatman shared. So, vegetable skin has been and may be mistaken for animal; then why not animal for vegetable?—and what is there in the bark of the “ black birch,” more than in that of the rubber tree, to secure immunity from mistake? It may be that many people, considering the matter, have the pretty delicate bark of the white paper birch in mind; but that would not answer. Indeed, no bark is so good as some woven fabrics, and the Passamaquoddy at least have now generally accepted the latter as canoe-covering; for the Indian is not so hopelessly unadaptable as he is painted.

¹ G. Storm: *Studies on the Vineland Voyages*.

² Page 466.

But if these were skin-boats in the animal sense, what then? The Eskimo use such undoubtedly, excepting the most northerly group, Rasmussen's People of the Polar North. Practically it has been the only covering material available, as well as the one best fitting the conditions of Arctic life. They have two kinds, the larger open umiak and the smaller kayak,¹ the latter being closed on top quite to the wearer's body, so that an expert kayaker can turn somersault in the water. One can hardly believe that any such multitude of the great umiaks could have been gathered as the saga calls for; or that the Norsemen would fail to note instantly such an anomaly as a little boat hugging the occupant's body. It is not to be doubted, either, that the ancient conservative Eskimo had the kayak in Thorfinn's time.

But some say that Indians never used skin-boats. It appears that they did when there was a reason. The Dakota² women crossed prairie rivers in coracles, or "bull-boats" of buffalo-hide; the Omaha³ also made skin-covered boats and used them; the same assertion is made of the Nascopie,⁴ and Dr. Brinton⁵ presents a more strictly relevant instance in the statement that the Beothuk of Newfoundland had both "bark-canoes and skin-canoes." They were not confined to inland navigation, either, till the last. Whitbourne (1622) says: "Which canoes are the boats that they used to go to sea in," and the Rev. George Patterson,⁶ who quotes him, remarks: "Their seamanship was evinced by their visiting Funk Island 40 miles from the nearest point of land"—a trip which they seem to have made twice a year after eggs and young birds. Cartwright⁷ also lays stress on this seafaring skill. Unless Dr. Brinton be in error, we have only to suppose a sufficient southward extension of the Beothuk at the opening of the eleventh century, and nothing remains of the skin-boat argument in favor of the Eskimo. Nor were these Beothuk half-way between the races, as Lieutenant Holm, by analogy with the Aleut, seems to fancy; for their appliances, works, ways, and language, so far as yet rescued by ethnologists, reveal a surprising individuality, distinctly of the Indian type, though a few things may have been

¹ W. H. Dall: *Alaska and its resources*, p. 138.

² W. J. McGee: *The Siouan Indians*. Fifteenth Ann. Rep. Bur. Amer. Ethnol., p. 172.

³ F. S. Dellenbaugh: *The North Americans of Yesterday*, p. 284.

⁴ R. C. Haliburton: *A Search for Lost Colonies*. Pop. Sci. Mo., vol. 27, p. 42.

⁵ Brinton: *The American Race*, pp. 40, 67.

⁶ Rev. Geo. Patterson: *The Beothiks or Red Indians of Newfoundland*, p. 126.

⁷ Journal republished 1911.

borrowed from their northern neighbors. But we are not at all confined to this Beothuk hypothesis.

The question is mainly one of convenience as to material. The Indian takes what is best adapted to his purpose within the limits of what he can get. In Venezuela and the St. Lawrence basin and near one tributary of the Amazon¹ he used bark (of the bullet tree, the elm tree, the black birch and perhaps others); in Newfoundland he sometimes used "animal hides"; at the mouth of the Bay of Fundy he now most often uses water-proof fabric; but for temperate America generally the old-time typical canoe was the "dug-out," hollowed and shaped from a tree-trunk and heavy but durable. Something lighter was needed for the northern portages in the region torn by the glaciers, and there only the canoe-birch offered itself, with the elm as a poor substitute when the former was not plentiful; also, going northward, the size of tree trunks lessened until at last a canoe could not be hollowed and carved but must be put together as a frame and covering.

The word "canoe" on the Chesapeake still means primarily a vessel made from one or more tree-trunks. They are often large, often swift and graceful under sail, besides being the most unsinkable craft afloat; and "canoe-regattas" in this sense have been held annually off Talbot County for many years.

This was almost as exclusively the case in southern New England, where canoe-birch trees of good size were rare, if existent, and there was little or no need for portages. Verrazano was visited at Narragansett Bay by Indians in dugouts only, and describes them; Champlain tells us just how they were manufactured farther north. Thus far, following the general trend of these arguments, I have compared one kind of frame-boat with another, but it is most likely that the boats which were paddled into Hóp had no need of any frame or any covering, although their dark and water-polished sides might resemble smooth bark or smooth hide. Their material of course would be really more akin to the fireplace brands or dark wōden "coals," with which in the distance they are compared by the saga. But in truth our Norsemen would trouble themselves little about the details of such matters. The furs for sale and the unusual weapons were far more interesting.

Naturally, emphasis has been laid on the latter; which were near bringing destruction on the colony, and which surprise us yet.

Slings have long been considered by many a non-Indian weapon;

¹ A. R. Wallace: Narrative of Travels on the Amazon, p. 358.

and they were used by Eskimo near Godthaab in 1586. Davis¹ narrates: "They with slings threw stones very fiercely into the moonlight and strake one of the men, then boatswain, that he overthrew." Thorbrand may have been overthrown more fatally by one at Hóp, for a "flat stone" killed him. This, of course, might be a tomahawk; but, the "war-slings" are distinctly mentioned by the saga, leaving no room for doubt. Thus far the eleventh century Skrellings and sixteenth century Eskimo agree very well.

But it appears that some of the northeastern Indians of the late fifteenth century were slingers too. The map attributed to Sebastian Cabot and now in the National Library at Paris is provided with notes in Spanish and Latin, which HARRISSE² attributes to Grajales, an early Spanish editor. Note 8 is in both languages, and includes a list of weapons used by the inhabitants of the Isle of St. John. HARRISSE's English translation is: "This land was discovered by John Cabot a Venetian and Sebastian his son the year of the redemption of the world 1494 on the 24th of July at the fifth hour of daybreak, which land they called the first land seen and a large island opposite the same St. John, because it was discovered on the solemn festival of St. John. The inhabitants³ of that country are dressed in the skins of animals. They use in war bows, arrows, darts, lances, wooden clubs and *slings*." Note 17 declares that the map was delineated in 1544.

Hakluyt appears to have known of an extract from a map which was "hung up in the privy gallery at Whitehall." His copy in Latin repeats the words *sagittis, hastis spiculis, clavis ligneris et fundis*.

A German work in Latin, brought to light by Dr. Major, copies nineteen inscriptions from a map which the author had seen in Oxford in 1556, containing the same entry. Its seventeenth note avers that "Sebastian Cabot, Captain and Pilot, of his Sacred, etc., Majesty put upon me the finishing hand in a plane figure in the year 1549." The map at Paris⁴ was obtained from a Bavarian clergyman, and its earlier history seems unknown. But it seems reasonably well established that a map was made about the middle of the sixteenth century by or under the direction of Sebastian Cabot which attributed slings to the Indians of St. John Island on the American coast in

¹ Hakluyt's *Principal Voyages*, vol. 7, p. 400. Also Markham's *Voyages, and Works of John Davis*.

² *Trans. Royal Soc. Canada*, 1898, p. 105.

³ Quoted also in Packard: *The Coast of Labrador*, and in several other works before cited.

⁴ G. E. Weare: *Cabot's Discovery of North America*, vol. 1, p. 261.

1497. His testimony has incurred some doubt where matters pertaining to his own achievements are concerned, but in this instance there would be but little temptation to misrepresent.

Many have supposed the Isle of St. John of the Cabots to be Newfoundland itself; but that they should have recognized, from merely skirting the seaboard, the insular character of this great mass of land is in the highest degree unlikely, in view of Cartier's¹ uncertainty even after he had passed into the Gulf through the Strait of Belle Isle, which Cortereal² missed altogether. Cape Breton, Prince Edward Island, and Sable Island have each borne this name on maps or in speech at various times, but there are reasons against them all. Most likely Avalon Peninsula,³ shown as an island by some of the older maps, was Cabot's Isle of St. John. Its slingers would have been Beothuk, then, or perhaps invading Micmac—whom Fiske may have had in mind when stating in *The Discovery of America* that slings would be as proper to Micmac as to Eskimo.

At the present time slings⁴ are not found in use at any nearer point than the Pueblos of the upper Rio Grande; but they hold their ground very well in many parts of South America, always, with Mexico and intervening regions—the main home and headquarters of their race.⁵ Sling-using begins at the bottom of the map, with the almost Antarctic and altogether wretched Yahgans of Tierra del Fuego; and Bandelier has lately found it as active as ever in the village fights beside Lake Titicaca, the cradle of the most humane culture and the widest and best ordered governmental organization in the New World before the white man came. He writes:⁶ "A number are badly wounded now and then and some of them are killed, for the Indian is a dangerous expert with the sling." Again we read of "his sling, for which the women provide round pebbles in their skirts."

At the opening of the sixteenth century, the sling-territory extended very much farther northward. Maya cities employed this weapon. Aztec armies had their slingers no less than those of the Incas.⁷ Dr. Friederici,⁷ gleaned from early Spanish, French, and English narra-

¹ J. Winsor: *From Cartier to Frontenac*. Narr. Crit. Hist. Amer.

² W. S. Wallace's *Historical Introduction to Labrador*, by W. T. Grenfell and others.

³ M. F. Howley: *The Ecclesiastical History of Newfoundland*, p. 53.

⁴ Where they are chiefly in use by children, as Mr. Spinden of the Am. Museum relates.

⁵ Brinton: *The American Race*, p. 331.

⁶ A. F. Bandelier: *The Islands of Titicaca and Koati*, pp. 88, 115.

⁷ A. Petermann's *Geographische Mitteilungen*, 1911, Heft 2 (pl. 13).

tives, offers us a map based on the use of slings and blowguns in which the former are given an immense area of the Rocky Mountain country and the Pacific coast; also extended in a very narrow fringe along the shores of the Gulf of Mexico and the Atlantic as far as Hudson River. Even allowing for some misreports and misunderstandings, we cannot fail to see a progressive yielding of territory through the centuries. Apparently the sling¹ is an archaic American weapon, once of general prevalence, which has gradually given way to the bow and vanished before the rifle, holding out best in isolated nooks, or for special uses, or where favored by natural conditions. That it was not found by Miles Standish at Plymouth and Narragansett by no means makes its presence there improbable six hundred years earlier.

The great noisy body which was cast on the ground behind the Norsemen is something quite unique in historic Indian warfare. Higginson² suggested that it might be a harpoon with a bladder float. Schoolcraft³ more plausibly identified it with a traditional but long obsolete form of giant club wielded by several men and said to have been in use during the severe wars of the Ojibwa, fiercest and most powerful of Algonquian tribes, as they moved westward to the upper lakes. It was prepared by shrinking a deer's hide around a large and heavy stone and on the end of a pole, to which it was bound. Of course the crashing effect would be great. But it does not fully correspond to the Skrellings' monstrous and unheard of creation.

The Skrellings raised up on poles a great ball-shaped body, almost the size of a sheep's belly and nearly black in color, and this they hurled from the poles upon the land above Karlsefni's followers and it made a frightful noise where it fell. Whereat a great fear fell upon Karlsefni and all his men, for it seemed to them that the troop of the Skrellings was rushing toward them from every side.

The nearest analogue would be a hand-grenade; but Thorfinn could not know of such a thing. Before the arrival of the next white men, it was utterly forgotten. Whether truly reported in the saga or not, it stands an unsolved mystery, having a very ancient look.

Dr. Fiske accepted Schoolcraft's Ojibwa explanation as conclusive. Nevertheless, Mr. James Mooney, who has spent much time among divers Indian tribes, tells me that he cannot make it agree

¹For instances of former use in what is now Spanish-America consult Herbert Spencer's *Descriptive Sociology*, part 2, the works of Brinton, Markham, H. H. Bancroft, and others already cited.

²T. W. Higginson and W. MacDonald: *History of the United States*. Edition 1905, p. 39.

³H. R. Schoolcraft: *American Indians*, vol. I, p. 73.

with what he knows of Indian fighting. Besides, though a four-man club, for all its clumsiness, might cause alarm and do damage, it could hardly strike on the ground beyond the enemy, making such an uproar as to suggest an attack from the rear by another "troop" descending on them "from the land" to cut off their retreat.

Here was the situation: Karlsefni's men drawn up before the first houses near the bay shore, with the river on their right, the ground sloping up behind them to the woods, and assailed in front by a multitude of enemies who sprang from their canoes as these touched the land. Almost certainly some of them would turn the position by ascending the river, awakening disquiet. Amid a shower of sling-stones, arrows, and tomahawks, which the Icelanders were too few to adequately answer, there is a rush of a group of Indians carrying great poles, with something huge, black, and uncanny poised above them, and this is cast, amid such a pandemonium of sound as wild Indians best can raise, over the heads of the defenders, beyond them on the ground, where there is a tremendous additional uproar, reinforced by the echoes from the wood border. At once the Norsemen feel, hear (and so see) enemies, on every side; panic takes them and they rush for a more defensible position, the women streaming out of the string of cabins to join the race, and Thorbrand, son of Snorri, Karlsefni's friend, being stricken down just ahead of Freydis within the wood-border by one of the missiles that come showering after them. She snatches his sword and turns, wild with fear and defiant anger, just as the Norsemen, rallying, turn also on the wooded Fall River Bluffs behind her, and come back ashamed of their fear. Then the Indians, not always good at pressing home a victory won, (or they might have annihilated Braddock's force notwithstanding the rear-guard stand of the colonial rangers), yield in their turn and paddle away.

This is all consistent and most probable, granting the original panic, but something more than "a giant club" is required to explain it. Thus far a satisfactory explanation is not forthcoming. Possibly the solid "demon's head" suggested a hollow one, capable of being detachable from its support and cast by several poles together a good way up the hillside. If not some such clever invention of the moment, it must be a Norse reminiscence incorporated by the saga-man, as Dr. Nansen¹ has acutely suggested.

¹ Fr. Nansen: In *Northern Mists*, vol. 2, p. 8.

17.—REVIEW OF DR. NANSEN'S CONCLUSIONS

The more significant of Dr. Nansen's¹ observations in regard to the Norsemen in America have been briefly considered in relevant parts of the foregoing chapters. He has certainly added some valuable items of fact and gathered a most welcome array of ancient and medieval description, folk-lore, and mythology concerning delightful islands, real or fancied, such as the fourteenth, fifteenth, sixteenth and seventeenth century maps show to us plentifully and the beliefs concerning which have long been known in a general way to readers interested in such topics. Perhaps he has not sufficiently set forth the great contrast between the florid and preposterous extravagances of the Celtic sea stories and the sanity of the exploring part of Thorfinn Karlsefni's story, and of all that concerns him, indeed, Leif's story also, wherein can be found only a bare hint of the occult, such as people even of our own time never quite wholly and conclusively disbelieve. He may have made it even more nearly certain if possible than before that the Celtic and Scandinavian sea tales, meeting in Ireland and Iceland, had a moderate reciprocal influence; but if the Icelanders were indebted mainly to Ireland for the name and story of Wineland, it seems entirely probable that their borrowing would have included in great measure the distinctive extravagances of Bran, Maelduin, St. Brandan, and their kind. It almost passes the bounds of possibility that the saga-man who wove the spectral marvels and picturesque magic of his own people into the Greenland part of his narrative should have ignored all the prodigies and impressive insular unrealities of the Irish writings and traditions if really familiar with them and drawing from that source in the exploring part of his story—and have confined himself almost entirely to matter-of-fact items, which fit with such astonishing accuracy the probable American shoreline of his time and the absolute certainties of American vegetable and animal life. The voyage record seems to be an accurate report, detailed though brief, as sensible and as credible in all essentials as any modern official document.

Dr. Nansen asserts that the Norsemen "steered straight across the Atlantic itself and discovered North America";² that the "open craft of the Norwegian Vikings, with their square sails, fared north and west over the whole ocean, from Novaya Zemlya and Spitsbergen to Greenland, Baffin's Bay, Newfoundland and North America";³

¹ Fridtjof Nansen: In Northern Mists. Arctic Exploration in Early Times; translated by Arthur G. Chater; New York, 1911, vol. 2, pp. 58-62.

² *Ibid.*, p. 234.

³ *Ibid.*, p. 248.

also that they visited Cape Breton (Keelness), the Wonderstrands below it, and some point yet farther down the coast where they met Indians and not Eskimo. He accepts their Helluland as probably Labrador, Markland as Newfoundland, and, as above, the discovery of the region called Wineland in the saga, though questioning the name or its implication.

He lays even an excessive stress, it seems to me, on the entry in Icelandic annals, one at least being nearly contemporary, of the Greenland ship driven by stress of weather to Iceland in 1347, her crew reporting an intervening visit to Markland. But, after all, how can he be sure that these seamen told the truth? Why are they more trustworthy than Gudleif, whose visit to Biorn in some land of the west has been mentioned already, except that he gives us tests of accuracy which fail, and their meager story supplies no tests? Moreover, are we quite sure of the accuracy of the first annalist and possible intervening narrators? The statement is a bare sentence or two in length, credible enough in view of what we know from the saga and valuable as cumulative corroboration. But it will not do for the historic cornerstone of any evidence; nor does it make Markland a whit more historic than Helluland or Wineland. The main features of the exploring part of the saga tale are connected in a chain and of the same degree of reliability. They must stand or fall together.

If the name Wineland be objectionable, we might give up the poetry of it without disaster. As above indicated, Dr. Nansen seems to agree exactly and fully with our version of the itinerary of these early explorers, at least as far as the Atlantic coast below Cape Breton island and their temporary settlement in a more southerly Indian-populated region, called Hóp, in the saga. Beyond that he summarizes his conclusions under the following twenty-two points which it seems proper here to consider in succession, with some comments from my own observations. Dr. Nansen says:¹

If we now look back upon all the problems it has been sought to solve in this chapter, the impression may be a somewhat heterogeneous and negative one; the majority will doubtless be struck at the outset by the multiplicity of the paths, and by the intercrossing due to this multiplicity. But if we force our way through the network of by-paths and follow up the essential leading lines, it appears to me that there is established a firm and powerful series of conclusions, which it will not be easy to shake. The most important steps in this series are:

(1) The oldest authority,² Adam of Bremen's work, in which Wineland is mentioned, is untrustworthy, and with the exception of the name and of the

¹ In *Northern Mists*, vol. 2, pp. 58 *et seq.*

² The Ringerike runic stone is not given here, as its mention of Wineland is uncertain.

fable of wine being produced there, contains nothing beyond what is found in Isidore.

Adam of Bremen wrote true things as well as marvels, just as many writers from his time and long afterward have done. He may be trusted within reason, as well as those. He is careful to insist that this statement in regard to the wheat and wine is no marvel, but literal truth. What he wrote would be true of the American coast and would be especially true of its distinctive conspicuous food supplies in the latitudes we have pointed out, before the coming of maize. The wine-making fine large grapes have Strachey's corroboration, also Lescarbot's. They are here still. They make strongly for verisimilitude and to the saga's credit.

(2) The oldest Icelandic authorities that mention the name of "Vinland," or in the "Landnáma," "Vindland hit Góða" say nothing about its discovery or about the wine there; on the other hand, Ari Frode mentions the "Skrælings" (who must originally have been regarded as a fairy people). The name of Leif Ericson is mentioned, unconnected with Wineland or its discovery.

Full statements could not be expected in each relic of an ancient fragmentary literature. Ari's lost *Islendingabók* probably set forth the full account. Entries a little later present the above items together. Mere evidence by omission is rarely cogent. It cannot reasonably override the positive evidence referred to and the general prevailing tradition. If it could, it would merely change the name of the discoverer, for it is admitted that some one sailed from Norway and found America by the direct passage. If not Leif, who shall be named? And is there more evidence that an anonymous Norseman did it rather than that Leif did it?

(3) It is not till well on in the thirteenth century that Leif's surname of Heppni, his discovery of Wineland ("Vinland" or "Vindland"), and his Christianizing of Greenland are mentioned (in the "Kristni-saga" and "Heimskringla"), but still there is nothing about wine.

This fact may be unfortunate, but what does it disprove? His father Eric was never called "Lucky" so far as we know, yet he created Norse Greenland. It does not seem important that a man's epithet should always be found with his name in the few surviving pre-thirteenth-century manuscripts.

(4) It is not till the close of the thirteenth century that any information occurs as to what and where Wineland was, with statements as to the wine and wheat there, and a description of voyages thither (in the *Saga of Eric the Red*). But still the accounts omit to inform us who gave the name and why.

In other words, the location of Wineland was not mentioned so far as we know, till Hauk Erlendsson made the earliest copy of the

saga and of Landnamabók that happens to survive. In merely Icelandic records and stories we have no right to expect such information unless from Islendingabók, which is lost. The situation is a natural one. If Hauksbook had happened to be destroyed the date must have been carried along further still, and that would yet prove nothing, except that our evidence would be less in volume and force.

(5) The second and later principal narrative of voyages to Wineland (the Flateyjarbook's "Grœnlendinga-pátttr") gives a very different account of the discovery, by another, and likewise of the later voyages thither.

That is true. The natural course of development is for a later version to elaborate hints and weave stories about names, filling in any floating legendary data which may come to hand. This is especially true in a decadent artificial period, even at its beginning. The Flateyjarbook narrative is not unique in its method and qualities, but is a very bad example.

(6) The first of the two sagas, and the one which is regarded as more to be relied on, contains scarcely a single feature that is not wholly or in part mythical or borrowed from elsewhere; both sagas have an air of romance.

This is far from the case, for Helluland, Markland, Kiallarness, are all admitted by Nansen to exist. Straumey, Straumford, the mountains, Hóp, the seal headland are veritable. The courses around the great ness into and out of the Gulf are accurately and carefully given. Biarney is true to fact. The Wonderstrands are the typical American coast line found on no other Atlantic shore of which any Icelander short of the fifteenth century would be likely even to hear. The Indians, products, climate, and breeding places are authentic. The Uniped was probably an Eskimo in his kayak. The Greenland part of the tale has many embroideries of fancy. There are divers ballads turned to prose attached to the exploring narrative; but they do not invalidate or obscure it. The saga-man might have chosen *ad libitum* magical cats and dog-footed monsters, the roc-phoenix and the island of unending laughter, holy white-furred hermits and angels who waited on the table, Judas and his hounding devils, the sea-monster that took the saint a-traveling on its back, the isle of women, the pool of youth, and the river of death. His Celtic sources (as supposed) would have done this. Why did he stick to the facts instead? Surely because he was not following Celtic models, but relating facts.

(7) Even among the Greeks of antiquity we find myths of fortunate isles far in the western ocean, with the two characteristic features of Wineland, the wine and the wheat.

It is true that men learned very early of lovely Mediterranean islands and drew on their memory of reality to picture others, sometimes real, sometimes unreal. Myths attached themselves to both. Afterward the Canaries supplied material in the same way. Sometimes they were called isles of the blest or earthly paradises, with good reason and decorated by the exaggeration of poetry and legend with supernal additional delights; sometimes their lovely characteristics were transferred by sailors' fancy to islands farther out at sea. Some of the latter were real; we know them as the Azores and Madeira; the fourteenth century map-makers knew them undoubtingly as The Fortunate Isles of St. Brandan. Their obvious attributes corroborated the ideal. We are not justified in saying conclusively that this was or was not the end of the process. But if anyone crossed the Atlantic in warm latitudes, as Cabral did by accident and Columbus by intention, they would find like beauties repeated. Before "mythical islands" can justly be used to disprove anything we must be sure they were mythical. Even then it would not be necessary to assume that men, in reporting things that really are, had borrowed from fanciful stories.

(8) The most significant features in the description of these Fortunate Isles, or Isles of the Blest, in late classical times and in Isidore are the self-grown or wild-growing vine (on the heights) and the wild-growing (uncultivated, self-sown or unsown) corn or wheat or even cornfields (Isidore). In addition there were lofty trees (Pliny) and mild winters. Thus a complete correspondence with the saga's description of Wineland.

Great trees are common in many parts of the world, so are mild winters in southerly regions on the same longitudinal line. But Isidore says nothing to strongly suggest wild growing grain seen in low places by men entering an estuary with grape-vines on the hills above it. Neither does Pliny nor any other authority cited. The combination is distinctly American on the Atlantic slope not far from the sea and within the limits of the large fox grape though no doubt it might occur elsewhere. Thorfinn gives this for *Hóp*.

Nansen, however, has certainly shown (if *messis* be taken to necessarily mean grain) a fair anticipation of Adam's celebrated statement, but the coincidence may well grow out of parallel facts. There is no real evidence of derivation by him from Isidore of Seville or from Pliny; but there may well have been grape-festooned islands of the eastern Atlantic on which some form of wild grain or grain run wild might be found. It is not pretended that fox-grapes and our wild rice are the only wild grapes fit for wine and the only self-sown grain in the world.

(9) The various attempts that have been made to bring the natural conditions of the North American coast into agreement with the saga's description of Wineland are more or less artificial, and no natural explanation has been offered of how the two ideas of wine and wheat, both foreign to the Northerners, could have become the distinguishing marks of the country.

The coast line has changed in nine hundred years by the lifting of the northern part, which probably included Straumey and all above it and by the depression of the lower part, which probably included Hóp and all below. I believe I am the first one to call attention to this change in the coast line in connection with the present subject.¹ There has also been error in confusing the little squirrel grapes with the large fox grapes, which were probably not plentiful along the shore above southern Maine and only locally there. We find also a like error as to wild rice, which ought not to be expected in any quantity on or near bold shores like those along the Atlantic above the Kennebec.

It may be that Norsemen could not raise wheat or make wine at home, but they were acquainted with both from their service in more southern countries and their hostile expeditions, even as early as the fifth century (see Nansen's *In Northern Mists*), into the middle of the Mediterranean. Some of their men would be sure to have a general knowledge of wine-making. The very fact that these things were not to be had at home, but grew wild in the new world would make them prized and held as characteristic of the new found lands. That the "wheat" was not real wheat, but only a wholesome and abundant substitute, would make no difference; though the wine would take first place. The country where such things were to be had for the gathering could be nothing but "Wineland the Good," with no need for aid from fairy attributes, though the peculiar form of the name perhaps might be influenced by the Fortunate Islands, namely the Canaries or Madeira (*d'Legname*—that is, *Markland*), Porto Santo and perhaps Pico and companions, with their undeniable beauty and the half classical half northern-pagan myths, which persistently clung to them.

(10) In Ireland long before the eleventh century there were many myths and legends of happy lands far out in the ocean to the west; and in the description of these wine and the vine form conspicuous features.

As a matter of fact the vine is not very conspicuous in Irish voyage legend. Still Irishmen often reached countries which had the vine

¹ See Chapter 16 herein, also article in the *Smithsonian Report for 1897 on the Rising of Land Around Hudson Bay*, by Robert Bell, of the Geological Survey of Canada.

and there must have been divers European and perhaps Atlantic spots where good grapes yet grew wild. If they reached America, as they probably did, they would find such in abundance. But Irish fancy working on cultivated grapes might add the element of wildness, even without any information as to the latter in either hemisphere.

(11) From the eleventh century onward, in Ireland and in the North, we meet with a Grape-island or a Wineland, which it seems most reasonable to suppose the same.

We also meet apple islands, for example, the Hesperides? From memory, I think the latter fruit more common in Irish and other northern legend. Nevertheless the saga and the old Icelandic writings omit to place apples in America; and in fact none were there. Why were not the apples borrowed from Ireland, if the grapes were?

(12) From the Landnamabook it may be naturally concluded that in the eleventh century the Icelanders had heard of Wineland, together with Hvítmanna-land, in Ireland.

Each country may have heard it from the other, both items being common property by that time. Perhaps the name Great Ireland or Whitemen's Land may have a presumption in favor of Irish origin. There can be none for the Irish origin of Wineland. It is likely that Ireland first heard it from Iceland soon after Thorfinn's return to the former.

(13) Thorkel Gellisson, from whom this information is derived, probably also furnished Ari Frode with his statement in the *Islendingabook* about Wineland; this is therefore probably the same Irish land.

He is given as one transmitter of the Ari Marsson story, deriving it from the Earl of the Orkneys. He supplied the Greenland information of Ari Frode, having visited that country; perhaps also some about Wineland. But how can this disprove the existence of the latter?

(14) The Irish happy lands peopled by the *síd* correspond to the Norwegian *huldrelands* out in the sea to the west, and the Icelandic elf-lands.

There is a general correspondence in fairy lore and the like everywhere. But we know that there were real far western islands, as well as dubious and fanciful ones, and that everything between Europe and Asia was held to be an island until after Vesputius.

(15) Since the *huldre-* and *síd*-people and the elves are originally the dead, and since the Isles of the Blest, or the Fortunate Isles, of antiquity were the habitations of the happy dead, these islands also correspond to the Irish *síd*-people's happy lands, and to the Norwegian *huldrelands* and the Icelandic elf-lands.

These mythical folk probably are not always nor usually the "happy dead." Many different elements combine in the fairies and people of the underworld, for example, traditional memories of real aborigines who hid underground; fancies born of the play of light and shade; and ideals of gods fallen from their high estate.

The Fortunate Isles of St. Brandan continued to be called so for at least half a century after they were accurately mapped and well known. Must we suppose that the Genoese and Norman skippers persisted in regarding them as the abodes of the happy dead?

(16) The additional name of "hit Góða" for the happy Wineland and the name "Landit Góða" for huldrelands in Norway correspond directly to the name of "Insulæ Fortunatæ," which in itself could not very well take any other Norse form. And as, in addition, the huldrelands were imagined as specially good and fertile, and the underground, huldre- and síd-people, or elves, are called the "good people," and are everywhere in different countries associated with the idea of "good," this gives a natural explanation of both the Norse names.

Brazil Island, sometimes called the Fortunate Island of the Irish, and St. Brandan's Fortunate Islands, one of which still bears its fourteenth century name of Porto Santo, would influence the ideal no doubt, but we cannot wipe Porto Santo off the map and Brazil probably was as real.

(17) The name "Vinland hit Góða" has a foreign effect in Norse nomenclature; it must be a hybrid of Norse and foreign nomenclature, through "Vinland" being combined with "Landit Góða," which probably originated in a translation of "Insulæ Fortunatæ."

The combination and translation may have happened. It is no more surprising that Insulæ Fortunatæ should be transferred in this way than that Markland should be shifted from one of them to Newfoundland. Either name of the saga may commemorate such a transfer; and either may be a very natural coincidence. A name of mythical association may well be applied, and often has been applied, to a real region. Moreover, the saga is not accountable for this phrase, nor does Adam of Bremen use it. What men reported in the eleventh century should not bear the burden, however light, of adjectives or fancies of the twelfth or thirteenth.

(18) The probability of the name of Skrælings for the inhabitants of Wineland having originally meant brownies, or trolls, that is, small huldrefolk, elves, or pygmies, entirely agrees with the view that Wineland was originally the fairy country, the Fortunate Isles in the west of the ocean.

If so, the word was doubtless applied to the natives in the same spirit that Icelandic men in fight sometimes abusively addressed their opponents as "trolls" for example, see The Saga on the Heath-Slay-

ings. But was it used prior to the voyages of Thorfinn and Leif? If used in Greenland, it might easily be transferred to other savages. It does not seem to prove anything, although, if shown to have a magical implication, it would establish the existence of the same point of view for Eskimo and Indians as for Lapps—in itself not unlikely. Dr. Nansen supplies an excellent precedent in the use of Finn for three races and with implication of magic. But what is the proof that Skrælings originally meant fairy folk and to what period does "originally" refer? Our first introduction to them is through Thorfinn, who trafficked with them as human beings and fought and killed them.

(19) The statement of the Icelandic geography, that, in the opinion of some, Wineland the Good was connected with Africa, and the fact that the Norwegian work, "*Historia Norvegiæ*," calls Wineland (with Markland and Helluland) the African Islands, are direct evidence that the Norse Wineland was the *Insulæ Fortunatæ*, which together with the Gorgades and the Hesperides were precisely the African Islands.

Not of identity, but of supposed neighborhood in extension; also of a warm climate and luxuriance. This I have said elsewhere. It does not touch the saga, but only the theories of Abbot Nicholas or some one else, and perhaps the general tradition. It was natural that they should think so, if Leif reached the Chesapeake. Since Edrisi in the twelfth century clearly distinguished between the Canaries and the other islands which lay farther at sea, since the classical geographers before him well knew the former, and since the early medieval maps kept and emphasized Edrisi's distinction, there seems no great probability of any real confusion of identity.

(20) Even though the Saga of Eric the Red and the "*Grönlendinga-rátttr*" contain nothing which we can regard as certain information as to the discovery of America by the Greenlanders, we yet find there and elsewhere many features which show that they must have reached the coast of America, the most decisive among them being the chance mention of the voyagers from Markland, in 1347. To this may be added Hertzberg's demonstration of the adoption of the Icelandic game of "*knattleikr*" by the Indians. The name of the mythical land may then have been transferred to the country that was discovered.

Fortunately the fact that the Icelanders reached the coast of America does not rest wholly on the veracity of the sailors on the small Greenland ship, or on any annal. America was reached by Thorfinn, and more or less explored as far as southern New England. Leif had previously reached the same region and probably passed a long way below it. Our reasons for believing so are fully stated elsewhere.

(21) Hvíttramanna-land is a mythical land similar to the Wine-island of the Irish, modified in accordance with Christian ideas, especially, perhaps, those of the white garments of the baptized—as in the “*Navigatio Brandani*” in reference to the Isle of Anchorites or the “Strong Men’s Isle” (= Starkramanna-land)—and of the white hermits.

Dr. Nansen cannot know that it was a mythic land. I do not know that it was not. It may be the American coast below Wineland, for example New Jersey or the Carolinas.

(22) Finally, among the most different people on earth, from the ancient Greeks to the Icelanders, Chinese, and Japanese, we meet with similar myths about countries out in the ocean and voyages to them, which, whether they be connected with one another or not, show the common tendency of humanity to adopt ideas and tales of this kind.

We meet such stories everywhere and no doubt many of them are based on real adventures often wildly distorted. The Zeno tale is in point. It developed into something portentous and inexplicable; and is still in dispute; but most likely they made voyages and encountered adventures, which were a kernel of truth for their repeatedly distorted story. But one ought not to call it a myth, although it contains a short myth as an episode; nor can any light be extracted from it in that way. The voyage stories of different countries have not yet rendered much aid in the Wineland investigation; but it is greatly to be desired that the veil should be lifted from the origin of the names Antillia, Brazil, and others which men call mythical to cover uncertain knowledge.

Some of the above conclusions by Dr. Nansen make in favor of the position taken in the present book; others can hardly be said to weigh either way. Only a minority of the remainder have seemed to need moderately extended treatment, partly because Dr. Nansen is in so many respects in accord with what I had already written and as to others he could be best convinced by showing him the places, flora, fauna, and conditions. It was inevitable that he should make some errors in dealing with foreign and unfamiliar things and very plainly he had never thought of the progressive changes in coast outline during 900 years, nor the difference in nature and distribution between the large wild grapes out of which the early colonists made good wine and the small wild grapes which are tart and more like berries. When Dr. Storm so naturally went astray it is not surprising that Dr. Nansen should do likewise. There are doubtful inferences and conjectures even in von Humboldt. Like many others Dr. Nansen has failed to distinguish adequately between the mountainous northern home of Thorfinn’s party on the bay connected with Straum-

fiord and their much warmer southern home Hóp with its loch and river, marsh-grain and grape-covered hills; though the saga makes the distinction clear, if read without misconception.

His elaborate treatment of the insular myths and legends will find its most abiding value as a study toward elucidating the problem of the Mythical Islands of the Atlantic, closely allied to such questions as those of Great Ireland and Wineland and calling aloud at the present time for a more thorough investigation than has ever yet been attempted.

But we must insist that the Icelanders could never have borrowed from the mass of Irish and antique myths and northern fairy stories such a log-book-like narrative as that of Thorfinn Karlsefni, hitting without fail such a great number of items accurately distinctive of the Atlantic coastline of North America with practically no introduction of European elements except possibly one or two arms and gestures from Norse experience. And if we find the narratives accurate in so very many items, why cannot we believe the voyagers in the reasonable statement that they gave the name of Wineland to a country which surprised them by its luxuriance of grapevine growth and its abundance of large fine grapes good for wine making? Since wild grain in plenty was also there, with plentiful fish and game, shore-birds and their eggs, great trees for house-building and ship-building, wood of finely veined and dotted grain for ornamental work, tall grass excellent for hay and grazing, and, in the more southern parts, a climate so mild as to remind them of the Canaries and Mauritania, why should not they call it "good," even if that word had come to especially imply something supernally fortunate and blessed, as in the case of Teneriffe, Porto Santo, and Madeira?

Such an instance as the sea currents of Straumey and Straumfiord, found nowhere on our coast except in and near Grand Manan, of such notable volume and power and nowhere corroborated by so many coincidences of fact and statement, ought surely to show Dr. Nansen (who expresses no doubt of them) that this saga-narrative can not be mainly the product of old legendary lore and the same is at least equally true of the emphatically and almost exclusively American Wonderstrands.

18.—GENERAL SURVEY

We find, then, that there is no trustworthy record of any Norse settlement in America existing continuously for more than one year; nor of any Norse voyages to America, excepting those of Leif and Thorfinn and the visit of a small vessel more than three hundred and forty years afterward. We may suspect what we will of that long

interval and there is always the possibility that new facts may be discovered; but such is the present status of the question.

We find further that Leif reached the fox-grape-bearing coast of the continent, probably as low as southeastern Massachusetts at the least; that he touched at several points and brought back certain products; that the chances would favor the Gulf of Maine for his storm-driven landfall and a subsequent long run down the shore after the fashion of other navigators; but we know little of the voyage except the general impression of warmth and natural bounty which his report made at home.

We find also that Thorfinn successfully carried his colonists to Labrador, Newfoundland, and Cape Breton, thence along the Atlantic coast of Nova Scotia to the great Bay of Fundy, near which they made their first home, probably on the Passamaquoddy shore and Grand Manan.¹ Afterward they removed to a much more southern spot, and remained there for a year, then returned to the Fundy region, making an incidental exploration of Nova Scotia and the southeastern shore of the Gulf of St. Lawrence, and at last regaining Greenland and Iceland after three years' American experience. Hóp, their most southern point, was either on the eastern coast of New England below Maine or in the basin of Narragansett Bay, with a slight preponderance of probability for the latter.

Besides these voyages, two attempts were made, Thorstein's in 1002 and Bishop Eric Gnipson's in 1121. The former failed, the latter vanished; and nothing ever came of their endeavors.

The three "lands" explored by Karlsefni kept their names until more modern ones were substituted. Helluland soon came to mean all the desolate country above the forest, whether with flat stones or without them, and was a favorite field for later fictitious sagas.

Markland probably stood always for Greenland's nearest supply of growing timber, that is for Newfoundland, perhaps with some vague extension to neighboring shores. The traditional view of the errand of the little ship of 1347 as a timber-gatherer may have originated in a knowledge of prevailing custom or in some unrecorded statement of its crew. If it had not been torn from its anchorage and driven to Iceland we should never have heard of it, any more than of the many others which we may conjecture to have made the trip successfully, escaping or outliving the storms.

¹ Dr. Nansen believes in a visit or visits to these points and an encounter with Indians, not Eskimo, somewhere on the Atlantic coast below Cape Breton; but he is uncertain as to the particular explorers and thinks the name Wine-land wholly mythical, though calling Markland "historic."

Wineland seems to have been understood as beginning with Cape Breton, below the Strait of Cabot, and extending a long way southward. The most general conjecture was that it joined Africa somewhere in the tropics; until the Spanish discoveries made this untenable and later explorations revealed a long coast-line independent of the eastern world and broken by a few deep inlets, the greatest of which was the Chesapeake. Then they pitched upon some such "fiord" as marking Wineland off from America of the Spaniards. But at all times its warmer and more prolific regions made the dominant ideal of the new country among the northern people.

Of course "discovery" in its fullest sense calls not only for finding but for adequate disclosure. But what is adequate in this connection? Must we demonstrate a full understanding of the matter by the more prosperous nations around the Mediterranean, or some effective influence on exploration and colonization in later centuries? It is a matter of definition only, but these requirements would be perhaps a little immoderate.

In Scandinavia the results were so effectually announced that they remained sensational topics of conversation in a royal court nearly seventy years afterward—a court and kingdom very indirectly concerned. The same information was published by Adam of Bremen about the same time in Germany, so amply that manuscript copies of his book were to be found at widely separated points of central Europe for half a millenium afterward. It is incredible that none of them reached Italy, and equally so that the story of the three years' Wineland adventure should not have been freely told there by Gudrid during her eleventh century pilgrimage to Rome, and repeated from time to time by the many Icelandic pilgrims and soldiers of fortune whom we read of in other sagas. Furthermore¹ the tithes for the support of Crusaders were paid by Greenland from time to time during the thirteenth and fourteenth centuries at least, though in a dilatory way; and men who were sometimes sent to collect them must have wonderfully lacked curiosity if they made no inquiry concerning Markland, if only to find out whether it might prove another resource. What they learned would surely find its way back, in general outline, if no more, to the central authority. On all grounds, we must believe that the Vatican was aware of these new western lands, but probably with little more interest than attached to the reports of upper Greenland. That such knowledge should have been possessed and allowed

¹ B. F. De Costa: *The Pre-Columbian Discovery of America*, p. 322 *et seq.*; also most of the other works before cited concerning Greenland.

to lapse away out of mind is no more remarkable than that Edrisi should have known of the lake sources of the White Nile in the twelfth century and drawn them conspicuously on his map; although the unheeding world of Europe forgot them and they had to be laboriously rediscovered seven hundred years afterward. We are learning that the world's memory has had many trances of oblivion.

As to influence on succeeding voyages, Nansen has called attention to the many Scandinavians who had settled in Bristol before the discovery of North America. Storm very reasonably urged long ago the identity of Markland and the Irish Brazil, the quest for which passed from Limerick to this same Bristol; Fischer¹ has treated the same subject rather more conspicuously; and, as we have seen, the fourteenth and fifteenth century maps afford very curious corroborative indications along several converging lines. Moreover, John Cabot in his first voyage turned northward for a time (Payne² thinks to Iceland) from his first westward course, a proceeding that cost him some trouble, according to Sebastian, and which would hardly recommend itself to one who had never heard of discoveries made from that quarter. Also he promptly gave the land³ which he found substantially the name currently in use then, or not very long before, by Icelanders, for some western region of uncertain identity which, on the whole, is most likely to be this same Newfoundland. Finally, soon after his return that summer, as reported by an Italian envoy who was his friend and whose letter is still extant, he and his mercantile backers reported that they thought brazil-wood grew there, this being the characteristic product which was popularly believed to have given the great Isle of Brazil its name. Everything goes to prove that he had the former Irish and Icelandic voyages and legends in mind, and that these and like influences would soon have impelled him or some other to success along this line, even if there had been no Spanish discovery of the Antilles.

Apart from this effect in Britain, Adam of Bremen's account of Wineland and its products was circulating in print from Holland before the seventeenth century, and Ortelius also was presenting Wineland by name as a Norse discovery identical with Estotiland, in theorizing about the origin of the American Indians; while in Iceland itself there was a continuous succession of sagas and other works touching the subject, oral, written and printed, original and

¹The Explorations of the Northmen. etc., p. 105. Cf. E. J. Payne: History of America.

²As above, p. 233.

³E. J. Payne: History of America, p. 217.

copied, besides the entries in the annals, until more modern kinds of books took up the task of preservation and exposition, the first formal History of Wineland, that of Torfaeus, appearing in 1705. Since that time there has never been a total dearth of such literature, nor any real break in the chain. Surely in all this we have disclosure, not indeed at all times voluminous, but extending over a great area and through the march of centuries. Is not this, following the actual finding of our coast and its partial exploration, quite enough to justify the use of the word discovery?

This does not diminish the merit of Columbus in rediscovery, primarily for the benefit of Latin peoples and with no aid from the northern sources, which he and they agreed in holding lightly. While in "Frisland" or Iceland or during his dubious voyage yet farther westward, he may well have heard of Wineland; but if so he has given no sign; and he surely would have used it against his adversaries had he recognized an available argument. There simply was nothing in the tradition which savored of Ind or Cathay; and he was as far as could be from the ambition to discover a new continent. Its existence appeared so dreadful a negation of all his hopes that he would not admit it, even when suspicion must have been haunting him; but compelled his followers by cruel and extravagant threats to join in an affidavit that they had reached Asia instead.

It has also been lightly said¹ that the Norse journeyings up and down our coast compare with the voyages of Columbus as the sport of children with the achievements of men. But is this true? The chief motive of Leif was to carry the gospel of Christ to his Greenland home, at the same time rejoining those of his blood from whom he had been long parted; this he effected perfectly and promptly, incidentally presenting the data which he had collected, as the result of an accidental discovery and hasty explorations on the way. The chief motive of Thorfinn was exactly that which we admire in our first, hardy, English-speaking settlers, the finding of new homes for their families and incidentally upbuilding a new country. He failed in this, because the odds were too heavily against him, not from any lack of competent planning or sturdy endeavor; and he brought back from Wineland a notable accession to human knowledge, besides adding another heroic figure to the picture gallery of human effort. The chief motive of Columbus was to find a shorter route to Asia, with consequent profit and glory to his sovereign and himself, and a wider opportunity for converting the heathen. He failed utterly in

¹ J. Fiske: The Discovery of America.

his immediate aim. Yet he brought the New World into the light and demonstrated that the Sea of Darkness was no formidable barrier.

Which of the three should stand foremost is debatable, depending largely on the "spectacles of the judge." Perhaps we may fairly say that Thorfinn was the most practical and modern; Leif, the most unselfish, and exempt from failure in what he aimed to do; and Columbus the most picturesque, the most conspicuous, and the most important for the future.

It was the ill luck of Leif the Lucky and Thorfinn the Promising to discover and begin exploring America before the world was ready. The Genoese came with the rising tide of modern life and it ensured that his work should go on after him. But neither Columbus nor Leif made any radical change in the course of the world's history.

If he had remained in Spain, and so found nothing in 1492, Cabral, rounding out too far from Africa in his East Indian voyage, would quite as certainly have struck the South American coast in 1500. By then, too, or not long afterward,¹ success would surely have come as well to the plucky and persistent merchants of Bristol and their captains, who had twice essayed before 1480 to reach that Brazil which probably included Markland and had repeated² such attempts annually or oftener for some seventeen years, until the successful one landed them with Cabot on the American mainland before either Vesputius or Columbus. Possibly mankind might have prospered even better if sixteenth century access to the new world had been by this upper gate alone. No doubt many records would be preserved which went up in flames before Spanish bigotry; and it is hardly imaginable that the native semi-civilization could have fared worse. At any rate, toward the end of the fifteenth century the speedy discovery of America was quite inevitable.

The situation has never been paralleled. Europe, so long facing eastward, had turned about the other way and was all alive on its Atlantic front. Besides the swarm of Basque, Breton, and Norman fishermen, continually urging their industry farther afield, there were three lines of approach, making a gigantic race of most absorbing interest, across the great sea. At the north, English seekers after the half-forgotten memories of our race which had turned to myth; in the middle, a man who sought a certainly known goal by an impossible route; below him, the Portuguese navigators, who well

¹ J. Winsor: *Narr. and Crit. Hist. of America.*

² Letter of Soncino given in original Italian and translation by G. E. Weare, before cited.

knew both route and goal, but swayed out into the unknown ocean on their loose-flung way, with altogether unsuspected opportunity for great discovery; and all the time the long-waiting double continent barred every path and was by no means to be missed. It was a mere question of miles and degrees and of first overcoming them. The man of the middle line won and is rightly praised for his persistence and successful endeavor, as well as for his wide views of the problems then confronting mankind.

But in Leif's time there was no European pressure westward except that of the sparsely populated adventurous Scandinavian North, and this did not wholly suffice. The wave touched Wineland but soon receded; even falling back several centuries later from Greenland also, after a wonderfully tenacious occupancy, while the rest of the world hardly perceived the loss. But a discoverer is not in fault for the lack of wit of his generation. He should not be deprived of his honors by any overstraining of language. Leif Ericsson, or Thorfinn Karlsefni, if we follow Dr. Nansen in doubting Leif, remains the first authentically recorded discoverer of America. Gudrid, his wife, holds her place as the first white American mother, and their son, Snorri, is sufficiently well attested as the first-born white American.

NOTES.

- 1 (p. 20). Thus Peter Martyr believed—"the cosmographers well considered" that Columbus reached "The Islands of Antillia" (Peter Martyr d' Anghiera: *The Decades of the New World* (1511); Eden's translation (1555), the First Decade, pp. 2, 3). Cf. A Portuguese anonymous map of 1502 shows the "Antilie" applied to Cuba and neighboring islands by explicit inscription.
- 2 (p. 21). The peasantry and fisher folk of the Arran Islands still call it the Great Land (Westropp: *Brazil and the Legendary Islands of the North Atlantic*, 1912, p. 257).
- 3 (p. 22). Perhaps *montonis* originally was *montanis* (mountains, Italian); as we know that Pareto's Roillo had been Reylla—besides other like instances of accidental change. I. de Montonis—the Isle of Sheep; which is conspicuous in the sea-tales of St. Brandan and the Magrurin of Lisbon.
- 4 (p. 24). Westropp, in his very recent work on Brasil and the Legendary Islands of the North Atlantic, published by the Royal Irish Academy, 1912, p. 255, mentions a mythical King Breas and a missionary Bresal of about the year 480 and suggests that Brasil may have been named after the latter; also Hardiman's *The History of Galway*, p. 2, quotes from one of the 16th century Four Masters, who compiled much older material, a mention of Breasail (apparently a pagan Gaelic hero or deity), having a very ancient look, but there seems a lack of data to fill the wide gap between the fifth and fourteenth centuries. The Italian and Catalan maps of the fourteenth and fifteenth centuries generally present the name as I. de Brazil, sometimes Y de Brazil, with divers variations in orthography, such as Berzil, Brazi, Bracir and Buxelle, beside those given below.
- 5 (p. 25). The word *Bracile* (obviously Brazil) occurs in a treaty or compact of peace and trade, dated 1193, between the "Bononienses and Farrarienses," copied into volume 2 of *Antiquitates Italicæ Medii Aevi* by L. A. Muratori, beginning at page 891. In a list of specific commodities embodied in this compact, and including indigo, incense, wax, and certain hides or furs, we find also (p. 894) "*drapis de batilicio, de lume zucarina, de grana de Brasile.*" On page 898 Muratori mentions that a deed of the year 1198 uses the same words "*grana de Brasile.*" The use of the word "grain" on two occasions in different kinds of documents at an interval of five years cannot be an accidental error. There is nothing to hint at any confusion with woods or dyes. The name suggests "blé Turquoise" for maize and other like names of a later time. We must suppose that Brazil was believed to be a country capable of supplying a distinctive grain and that the grain in question had acquired a settled name of commerce at this early date. The *Memorias Historicas sobre la Marina Comercio y Artes de la Antiqua Ciudad de Barcelona*, by Antonio de Capmany y de Montpalu in Vol. 2, presents a series of copies of orders or regulations

establishing impost and seignorage tariffs for different ports and of course mentioning many commodities. On pages 4, 17 and 20 are found in separate documents "carrega de Brasill," "faix de bresil"; and "cargua de brazil," the earliest dating 1221, the second 1243 and the third a little later in that century. As they accompany sugar,⁶ paper, alum, perfumes, wax, and other miscellaneous goods, nothing can be inferred as to the meaning of the word except that brazil was some generally recognized and packaged article of Catalan trade. In one list grain is mentioned generally and separately, but this need not exclude brazil from being some special grain. Also the words "de qualibet centeria de brasile venali" occur in a 1312 grant of murage rates to Dublin—Patent Roll V. Edw II, Part 2 m 7, as quoted in a recent letter by Mr. Westropp, author of *Brasil*, etc. But, as he says, it has no necessary relation to dye-woods. It may obviously mean any commodity associated with "Brasil."

- 6 (p. 26). Several old maps show the main island of the Bermudas exaggerated, and of approximately crescent form, for example, that of F. de Witte, 1660, and another in the U. S. National Museum, unnamed and undated, but bearing 1668 as its latest discovery entry and belonging apparently to the early eighteenth century.
- 7 (p. 38). In point of fact this same feat of blending all the Faroes in one with change of place had been performed long before, as appears from an eleventh century map in the British Museum reproduced by Santorem, presenting Ysferi (apparently meaning Island of Fari) as a large island west or northwest of Ireland. Of course Y was a common equivalent of I (Insula) and the name was currently changed slightly, for example, to Frisland by Christopher (or Ferdinand) Columbus as well as Nicoló Zeno.
- 8 (p. 40.) Mr. V. Stefansson has recently reported certain Eskimo of white racial characteristics on Coronation Gulf near the middle of the top of the continent, with the suggestion that they may possibly be descendants of these Greenlanders. But there are several other ways of accounting for the phenomenon, though perhaps none is perfectly satisfactory, and until we have further light on the subject the safest plan is to treat it as irrelevant.
- 9 (p. 109). A more recent interpretation (the Athenæum, London, September, 1912), derives two of the Skrelling words from Eskimo. The Athenæum says: "M. Henri Cordier in the current number of the *Journal des Savants* calls attention to a proof of the discovery of America in the eleventh century which has hitherto passed unnoticed. In the Saga of Eric the Red it is said that when Thorfinn Karlsefni returned from 'Markland' or Newfoundland, in 1005, he took back to Greenland with him two children from the northern land of the Skrælings, and four words of their language are preserved in the Saga. These words were thought by the Greenlanders to be the names of the children's parents or chiefs; but M. Cordier shows that they can be traced to Esquimaux phrases of the present day, two of them meaning something like 'Wait a moment' and 'the Northern Islands' respectively." But Dr. Nansen's derivation of these words from the Norse has a more persuasive air. Since the Icelanders apparently lent their

legends to their captives or read them into the utterances of the latter we may well suppose a like contribution of words or a transformation beyond any retracing.

- 10 (p. 118). James Wallace in "A description of the Isles of Orkney," 1693 (John Small, editor, 1886), p. 5, writes, "In this firth about two miles from Caithness lies Stroma a little isle" and a note probably by Malcolm Laing adds, "*i. e.*, Straum Island from the furious streams that pass by it." The name Straumey occurs also at divers points around the coast of Iceland according to the late Mr. Steingrimur Stefansson, an Icelander. *Cf.* Debes (L. J.): Faroe and Faeroa Referata. (Description of the islands and inhabitants of Faroe.) Translated by J. S., "Osteroe and Stromoe are as it were bound together by a ground, over which runs a very rapid stream . . . From this stream it is that Stromoe is so called."

PARTIAL BIBLIOGRAPHY.

For extended bibliographies see Hermannsson's "Bibliography of the Icelandic Sagas" in *Islandica*, Vol. 2, published by Cornell University Library, also "In Northern Mists" by Nansen, E. F. Slafter's *The Discovery of America by the Norsemen*, and Winsor's *Narrative and Critical History of America*, Vol. 1.

ALLEN, J. A.: *History of the American bison*. U. S. Geol. and Geogr. Survey of Colorado and neighboring states (1875).

————— *American bisons, living and extinct*. Kentucky Geological Survey Memoirs, 1876. Part 2.

AMERICAN ABORIGINES: The problems of the unity or plurality of the probable place of origin of the. *Amer. Anthr.*, Vol. 14, No. 1, Jan.-March, 1912.

ARI THE WISE: *Islendingabók*.

ARNOLD, C. and FROST, F. J. T.: *The American Egypt; record of travel in Yucatan*. New York, 1909.

d'AVEZAC, M. P.: *Les îles fantastiques de l'océan occidental au moyen-âge*. Paris, 1845.

ANDERSON, R. B.: *America not discovered by Columbus*.

ANGLO-NORMAN Trouveres of the 12th and 13th centuries (unsigned) including the voyage of St. Brandan. *Blackwood's Edinburgh Magazine*, Vol. 39.

BABCOCK, W. H.: Review of Westropp's *Brasil*, etc. *Current Anthropological Literature*. September-December, 1912, pp. 296-300.

————— Eskimo long distance voyages. *Amer. Anthr.*, Jan.-Mar., 1913.

BACON, E. M.: *Henry Hudson*, New York, 1907.

————— *Narragansett Bay*. New York, 1904.

BANCROFT, H. H.: *The Native races of the Pacific Coast of North America*, Vol. 1.

BANDELIER, A. F.: *The islands of Titicaca and Koati*. *Hispanic Society of America*, 1910.

BARRING-GOULD, S.: *Curious myths of the middle ages*.

BATALHA-REIS, J.: The supposed discovery of South America before 1448. *Geographical Journal* (London), Vol. 9, p. 185. Elaborate review of the Portuguese sources and the A. Bianco map of 1448, especially with regard to coast line, inscribed as 1500 miles away (or 1500 miles long). Supports Oldham's interpretation and position.

BEAMISH, N. L.: *Voyages of the Northmen to America*. Introduction by B. F. Slafter.

BEAUVOIS, E.: *La découverte du Nouveau monde par les Islandais et les premières traces du christianisme en Amérique avant l'an 1000*. Nancy, 1875.

————— *Les dernières vestiges du Christianisme frêché du 10^e au 14^e siècle dans Markland et la Grande Irlande*. Paris, 1877.

- BEAUVOIS, E.: *L'elisee transatlantique*.
 ———— *Les Skrælings ancêtres des Esquimaux dans les temps pre-Colombien*.
- BEAZLEY, N. L.: *John and Sebastian Cabot*.
 ———— *The dawn of modern geography* (especially Vol. 2, pp. 48-83 and 547-548; Vol. 3, p. 422 and pp. 494-529).
- BECCARIA'S map of 1435 showing Antillia and neighbors as newly reported islands. Plate 8 of *Studi. Bibl. e. Biog.*, 2d and 3d Ital. Geogr. Cong.
- BELL, R.: *Rising of land around Hudson Bay*. *Smithsonian Report for 1897*.
- BIDDLE, R.: *A memoir of Sebastian Cabot*.
- BIGGAR, H. P.: *The precursors of Jacques Cartier*.
 ———— *The voyages of the Cabots and of the Corte-Reals to North America and Greenland 1497-1503*. Paris, 1903.
- BLACKET, W. S.: *Researches into the lost histories of America*.
- BLOME, R.: *Isles and territories belonging to His Majesty in America*. London, 1673.
- BOGGILD, F.: *Runic inscription at the Great Falls of the Potomac*. *Historical Magazine*, March, 1869.
- BONTIER and LEVERRIER. *The Canarian or book of the conquest*. Translated by Major. Hakluyt Society, 1872.
- BORY DE SAINT VINCENT: *Essai sur les îles Fortunées*.
- BREHART, ERNEST: *An Encyclopedist of the Middle Ages*, Isidore of Seville.
- BRERETON, J.: *A briefe relation of the discoverie of the north part of Virginia* by Gosnold. *The Bibliographer*, 1902; *Old South Leaflets*, Vol. 5; and *Original Narratives of Early American History*.
- BRINTON, D. G.: *The American race. A linguistic classification and ethnographical description*. Philadelphia, 1901.
 ———— *On the position of Huitramannaland*. *Hist. Mag.*, Vol. 9, 1865.
- BRITAIN, A.: *Discovery and exploration*. (Vol. 3 of *History of North America*, edited by Guy Carlton Lee.)
- BROWN, A. S.: *Madeira, the Canary Islands, and the Azores*.
- BRUNN, B.: *Excavations in Greenland*. *Medelelser om Gronland*. Vol. 16.
- BUACHE, N.: *Recherches sur l'île Antillia et sur l'époque de la découverte de l'Amérique*. *Mémoires de l'Institut. de la Classe des Sciences. Mathématiques et Physiques*. Vol. 6, pp. 85 *et seq.*
- BUGGE, S.: *The home of the Eddic poems, with special reference to the Helgilays . . .* Translated by W. H. Schofield. London, 1899.
- BUREAU OF AMERICAN ETHNOLOGY. *Annual reports and bulletins*.
- BUSHNELL, DAVID, JR.: *An early account of Dighton Rock*. *Amer. Anthr.*, 1908.
- CABOT, W. B.: *In Northern Labrador*.
- CANTWELL, E.: *Pre-Columbian discoveries of America*. A. D. 545 to A. D. 1492. *Mag. West. Hist.*, Vol. 13, New York, 1890
- CARTIER'S VOYAGES: *Original narratives of early American history*. Also in *Cartier to Frontenac*, by Justin Winsor.
- CANADA: *Transactions and proceedings of Royal Society of* (most volumes).
- CANTO, E.: *Arch. dos Acores*, IX.
- CARADOG OF LLANCARVAN: *History of Cambria*. Translated with notes by H. Lloyd about 1559, extended by D. Powell with notes. 1584.

- CARTLAND, J. H.: Ten years at Pemaquid: Sketches of its history and its ruins. Pemaquid Beach, Me., 1899.
- CARTWRIGHT (G.) and his Labrador journal. Edited by C. W. Townsend, 1911.
- CASEY, THOMAS L.: Subsidence of Atlantic shore line. *Science*, July 21, 1911.
- CELTIC REVIEW (THE).
- CHAMBERLAIN, A. F.: Origin of American aborigines.—Linguistics. *Amer. Anthr.* (1912), Vol. 14.
- CHAMPLAIN'S VOYAGES: Original narratives of early American history.
- COLLINGWOOD, W. G. and STEFÁNSSON JÓN: A pilgrimage to the saga-steads of Iceland (1899) (with map showing Hóþ beside Hunafloi but not the connection between them, which is plain in larger maps.)
- COLVIN, V.: Plutarch's account of ancient voyages to the New World (with tidal figures along coast).
- COOK, O. F.: History of the coconut palm in America. Contributions from the National Herbarium, U. S. National Museum, Vol. 14, Part 2, 1910.
- New chapters in the history of the coconut palm. *Amer. Anthr.*, 1909.
- CORDEIRA, A.: A history of the islands subject to Portugal in the Atlantic Ocean.
- CORMACK, W. E.: Journey in search of the Red Indians in Newfoundland. *Edinburgh Philosophical Journal*, Vol. 6, 1829.
- CRANTZ, D.: The history of Greenland.
- DALL, W. H.: Alaska and its resources.
- DALORTO, ANGELINUS: Map of 1325. With monograph of A. Magnaghi entitled *La Carta Nautica Constuita nel 1325 da Angelino Dalorta*. In record of third Italian Geographical Cong. In honor of Toscanelli and Vespuccio. Monograph and map also issued separately.
- DALY, D.: The legend of St. Brandan (*Celtic Review*, Vol. 1).
- A sequel to the voyage of St. Brandan (*Celtic Review*, January 13, 1909).
- DALY, R. A.: The geology and scenery of the Northeast Coast. (Illustrated by map with measurements of elevation at divers points of the Newfoundland and Labrador coasts since glacial times.) (Labrador, etc., by W. T. Grenfell and others.)
- The origin of the Innuit. The tribes of the extreme Northwest.
- DASENT, G.: Translation of Saga of Njal the Burnt, with introduction.
- DAVIS, C. A.: Salt marsh formation near Boston and its geological significance. *Economic Geology*, Vol. 5 (1910).
- DAVIS, JOHN: Voyages and works of. Edited by A. H. Markham, 1880.
- DAWSON, J. W.: Acadian geology.
- Fossil man.
- Geology and natural history of Nova Scotia.
- DAWSON, S. E.: The St. Lawrence, its basin and border lands. 1905.
- DEBES, L. J.: Faroe and Faeroa referata. (Description of the islands and inhabitants of Faroe.)
- DE COSTA, B. F.: Arctic exploration. *Amer. Geogr. Soc. Bull.*, 1880.
- The Pre-Columbian discovery of America, by the Northmen, illustrated by translations from the Icelandic Sagas. Albany, 1868.
- Note on Boggild's article (*Hist. Mag. March*, 1869).

- DELEENBAUGH, F. S.: The North Americans of yesterday. Pop. Sci. Monthly, Vol. 27.
- DENYS, N.: Description and natural history of coasts of North America (Acadia). Translated and edited by W. F. Ganong. Champlain Society, Toronto.
- DE ROO, P.: History of America before Columbus according to documents and approved authors. Vol. 1, American aborigines. Vol. 2, European immigrants. Philadelphia and London, 1900.
- DICUIL: De Mensura Orbis Terrani.
- DIESERUD, JUUL: Norse discoveries in America. Reprint from Bull. Amer. Geogr. Soc., Vol. 23. New York, 1901. Separate.
- DIMAN, J. L.: Critique of De Costa's "Pre-Columbian Discovery." North American Review, Vol. 109, July, 1869.
- DONNELLY, I.: Atlantis, the antediluvian world.
- DU BOIS, B. H.: Did the Norse discover America. Mag. Amer. History, Vol. 27, 1892.
- DUICERT, ANGELINO, of Majorca (usually identified with the Italian Angelinus Dalorto). Map of 1339—The first to show The Fortunate Islands of St. Brandan, the Madeiras. Reproduced in Nordenskjöld's Periplus. Discussed by Hannay and others.
- EDEN, R.: Translation of Peter Martyr d' Anghiera's "Decades of the New World."
- EDRISI: Geographie d' Edrisi. Translation by P. A. Jaubert, Paris, 1836-40.
- EGEDE, HANS: A description of Greenland, showing the natural history, situation and face of the country. . . . Translated from the Danish. London, 1745. 2d ed. 1818.
- ENCYCLOPEDIA BRITANICA articles on the Azores, Iceland, and other relevant titles.
- ERLINGSSON, TH.: Ruins of the Saga time.
- ERONDELLE's translation of Lescarbot's "Nova Francia."
- ESPINOSA, ALONSO DE: The Guanches of Teneriffe, etc. (Edited by C. R. Markham; published by Hakluyt Society.)
- EVERETT, E.: The discovery of America by the Norsemen (North American Review, Vol. 98, 1838).
- FERNALD, M. L.: Notes on the plants of Wineland the Good. "Rhodora," Feb., 1910. Journ. New England Botanical Club.
- FEWKES, J. W.: A zoölogical reconnoissance in Grand Manan. Amer. Naturalist, Vol. 24, May, 1890.
- FISCHER, J.: The discoveries of the Norsemen in America, with special reference to their cartographical representation; from the German by B. H. Soulsby, London, 1903.
- FISKE, JOHN: The discovery of America with some account of ancient America and the Spanish Conquest. 2 Vols., Boston and New York, 1892.
- FRASER, W.: Brasil (Royal Geogr. Soc. of Ireland, 1879-1880).
- FRIEDERICI, G.: Verbreitung von Steinschleuder und Blasrohr in Amerika (A. Petermans Geographische Mitteilungen, 1911, heft 2, plate 13).
- FUNDY, BAY OF: Hydrographic Office chart of.

- FORMALEONI, V.: *Essai sur la marine ancienne des venitiens.* (D. Henin Fr. Trans., 1788.)
- *Description de deux cartes ancienne* (Bianco, 1436, is one found with above).
- GAFFAREL, PAUL: *Histoire de la découverte de l'Amérique depuis les origines jusqu'à la mort de Christopher Colomb.*—Rousseau, Ed. 1892.
- GALVAO: *The discovery of the World.* (Reports visit to Antillia in 1447.)
- GANONG, G. W.: *LeClerc's new relation of Gasparia.* Translated with introduction.
- *Monographs of the place, nomenclature, etc., of New Brunswick* (numerous papers in Proc. and Trans. Royal Soc. Canada).
- GANONG, W. F.: *Translation of Deny's "Coasts of North America."*
- GEIKE, A.: *Fragments of earth lore.*
- GESSNER, A.: *Elevations and depressions of the earth in North America, 1861* (supposed depression at Louisbourg, N. S.) *Journ. Geol. Soc., London, Vol. 18.*
- GOSLING, W. G.: *Labrador: Its discovery, exploration and development.* New York, 1911.
- GRAAH, W. A.: *Narrative of an expedition to the East Coast of Greenland* Translated from the Danish by G. Gordon Macdougall. London, 1837.
- GREENWOOD, J.: *Letter 1730.* *Amer. Anthr., 1908* (in paper by David Bushnell, Jr., "An Early Account of Dighton Rock.")
- GRENFELL, W. T., and Others: *Labrador, the country and the people.* New York, 1909.
- GUDMUNDSON and ERLENDSON's appendix to Cornelia Horsford's "Vinland and its Ruins."
- HAGAR, S.: *Origin of American aborigines.* *Astronomy, read Dec. 27, 1911, in symposium of Amer. Assoc. Adv. Sci. Amer. Anthr., Vol. 14, 1912.*
- HAKLUYT's principal voyages (1904). Vol. 7.
- *Voyages of the English Nation.* Hakluyt Soc., Book 1, 1897.
- HALIBURTON, R. G.: *A search in British North America for lost colonies of Northmen and Portuguese.* *Proc. Royal Geogr. Soc., N. S., Vol. 7, London, 1885.*
- *Lost Colonies of Northmen and Portuguese.* *Pop. Sci. Monthly, Vol. 26.*
- HAMY, J. T. E.: *Hist. and etudes géographique.* Appendix 1 concerning Dulcert's map of 1339.
- HANNAY's History of Acadia.
- HARDIMAN, J.: *The history of Galway.*
- HARRISSE, H.: *The discovery of North America.* London, 1892.
- *Article on the discovery by Cabot.* (Trans. Royal Society Canada, 1898.)
- HARSHBERGER, J. W.: *Maize, a botanical and economical study.* University of Pennsylvania Publications, 1893.
- HAWES, C. H.: *In the uttermost East; being an account of investigations among the natives and Russian convicts of the island of Sakhalin,* New York, 1904.

- HERMANNSSON, H.: The Northmen in America, 982—C1500. A contribution to the bibliography of the subject. "Islandica," published by Cornell University Library. 94 pp. 1909.
- HERTZBERG, E., cited by NANSEN, FR.: The Norsemen in America. *Geographical Journal*, London, Vol. 38.
- HEIMSKRINGLA: S. Laing's translation of.
- HIGGINSON, T. W. and MACDONALD: History of the United States from 986 to 1905. Edition of 1905.
- HILL-TOUT, C.: Oceanic origin of the Kwakiatl-Nootka and Salish stocks of British Columbia (Trans. Royal Society Canada, 1898).
- HOLAND, H. R.: The Kensington rune stone. *Records of the Past*, Jan.-Feb., 1910. Washington, D. C.
- HOLM, G. F.: Explorations of the east coast of Greenland. *Meddelelser om Grönland*, Vol. 6, Copenhagen, 1882.
- HOLMES, W. H.: Some problems of the American race. *Amer. Anthropol.* Vol. 12, No. 2, 1910.
- HORN'S History of the literature of the Scandinavian North. Anderson's translation. 1884.
- HORNADAY, W. T.: The extermination of the bison. *Ann. Rep. U. S. Nat. Mus.*, 1887.
- HORSFORD, CORNELIA: Vinland and its ruins. In *Appleton's Pop. Sci. Monthly*, Vol. 56, No. 2. 1899.
- The graves of the Norsemen.
- Dwellings of the Saga-time in Iceland. *Greenland and Vinland. Nat. Geogr. Mag.*, Vol. 9, 1898.
- HORSFORD, E. N.: The landfall of Leif Erikson, A. D. 1000 and the site of his homes in Vinland. Boston, 1892.
- The defence of Norumbega and a review of the reconnaissances of T. W. Higginson . . . Boston and New York, 1891.
- The discovery of the ancient city of Norumbega. Boston, 1890.
- Review of the problem of the Northmen . . . Boston, 1890.
- HOWLEY, M. F.: Vinland vindicated. *Proc. and Trans. Royal Soc., Canada*, 1898.
- The ecclesiastical history of Newfoundland. Boston, 1888.
- HRDLIČKA, ALĚS: Early man in South America. *Bull. 52 Bur. Amer. Ethnology*, 1912.
- Skeletal remains suggesting or attributed to early man in North America. *Bull. 33, Bur. Amer. Ethnology*, 1907.
- Remains in eastern Asia of the race that peopled America. *Smithsonian Misc. Coll.*, Vol. 60, No. 16, 1912.
- HULL, ELEANOR: Irish episodes of Icelandic history. *Saga book of the Viking Club*, Vol. 3.
- HULBERT, A. B.: Indian thoroughfares (in historic highways of America).
- HUMBOLDT, ALEX. VON: *Examen Critique*, etc., and *Cosmos*.
- HUTTON, S. K.: Among the Eskimo of Labrador.
- JACK, J. ALLEN: Stone found in New Brunswick. *Smithsonian Report*, 1881.
- JAUBERT'S translation of Edrisi's *Geography*.
- JENKS, A. E.: The wild rice gatherers of the Upper Lakes. *Nineteenth Ann. Rep. Bur. Amer. Ethnology*.
- JOCHELSON, W.: Mythology of the Koryak. *Amer. Anthropol.* (1904), Vol. 6.

JOMARD'S monuments, etc.

JOYCE, P. W.: The voyage of Maelduin.

KENNAN, GEORGE: Siberia and the exile system.

————— Tent life in Siberia. 1910.

KIRK'S "Twenty-five years in British Guiana."

KOHL, J. G.: History of the discovery of Maine. Portland, 1869.

————— Map collection of, in Library of Congress.

KOHLMEISTER and KNOCK, G.: Journal of a voyage from Okkak on the coast of Labrador to Ungava Bay, 1814.

KRETSCHMER, K.: Die Entdeckung Amerikas (The discovery of America), with atlas.

KUNTSMANN, F.: The discovery of America, with atlas.

LAFRER'S Atlas of Mediæval maps. Rare copy in Library of Congress.

LAING'S (S.) translation of the Heimskringla.

LAMPY, CHAS. L.: Article on stone near Hampton, N. H., as Thorvald's tomb. Quoted in Philadelphia Times, July 27, 1902.

LANDNAMOBÓK.

LEE, GUY CARLTON: History of America.

LELAND, C. G.: The Algonquin legends of New England. 1885.

————— The Edda among the Algonquin Indians. Atlantic Monthly, Aug., 1884, p. 223.

LELEWEL'S Atlas.

LESCARBOT, M.: Nova Francia. Erondelle's translation.

————— Histoire de la Nouvelle France.

LINGUISTIC MAP in Bull. 30. Bur. Amer. Ethnology.

LLOYD'S (H.) translation, with notes, of history of Cambria.

LOW, A. P.: Explorations in the Labrador peninsula.

LUCAS, F. W.: The annals of the voyages of the brothers Zeno (1895).

MACDOUGALL, ALAN: The Beothuk Indians. Trans. Royal Inst., Canada, 1890-1891.

MCGEE, W J: The Siouan Indians. Fifteenth Ann. Rep. Bur. Amer. Ethnology.

MCLEAN, J. P.: Crit. Ex. Norse discovery of America (American Antiquarian, Vol. 14).

MAGNAGHI, A.: Il Mappomondo del Genovese Angelinus de Dalorto (1325). (Papers of the Third Italian Geographical Congress, 1899. Separate with map.)

MAJOR, R. H.: The voyages of the Venetian brothers Zeno.

————— The site of the lost colony of Greenland determined, etc. (and other works by same author).

MALLERY, G.: Pictographs, etc. (Fourth Ann. Rep. Bur. Amer. Ethnology.)

MAPS and PAPERS of the Italian Geographical Congresses.

MARKHAM, A. H.: The voyages and works of John Davis. Edited in 1880.

MARKHAM, C. R.: Voyages of Baffin. (In part Catonle's Relation.)

————— On the origin and migrations of the Greenland Esquimaux. In Journ. Roy. Geogr. Soc., Vol. 35, London, 1865; also in Arctic papers for expedition of 1875.

- MARTYR, PETER: *Decades of the New World* (Eden's translation).
- MEADE, WILLIAM: *The old churches, ministers and families of Virginia.*
- MILLER, W. J.: *King Philip and the Wampanoags of Rhode Island.*
- MINNESOTA HISTORICAL SOCIETY: *The Kensington rune stone* (Report with route map modified from that of J. T. Smith; and adverse addenda).
- MOONEY, J.: *The Powhatan Confederacy.* Amer. Anthr. (1907).
- *The Siouan tribes of the East.*
- MORGAN, L. H.: *The league of the Iroquois.* 1904. Lloyd's notes in.
- MORLEY, S. G.: *The correlation of Maya and Christian chronology.* Amer. Journ. Archeol. (1910.)
- MORRIS and MAGNUSSON's translation of *The Eyrbyggia* (Ere dwellers) Saga.
- MOULTON, J. W.: *History of the State of New York.*
- MUÑOZ: *Hist. del Nuevo Mundo.*
- MUNRO, W. H.: *The history of the town of Bristol, R. I.*
- NANSEN, FR.: *Eskimo life.* London, 1893.
- *In northern mists.* Translated by A. G. Chater, 1911.
- *The first crossing of Greenland.*
- *The Norsemen in America.* Geogr. Journ., Vol. 38.
- *The race for the South Pole.* Scribner's Mag., March, 1912.
- NELSON, E. W.: *The Eskimo about Bering Strait.* (Eighteenth Ann. Rep. Bur. Amer. Ethnology, 1896-97.)
- NARRAGANSETT BAY: U. S. Coast and Geodetic Survey chart of.
- NORDENSKJOLD, A. E.: *Periplus.* An essay on the early charts and sailing directions, translated from the Swedish original by Francis A. Bather. Stockholm, 1897.
- *Facsimile atlas.*
- NUTT, ALFRED: *The voyage of Bran. . . .* London, 1895-97.
- OLAUS MAGNUS: *A compendious history, etc.,* Streeter's translation. (His map is very fully given on large scale in Lafreri's atlas.)
- OLDHAM, H. YULE: *A Pre-Columbian discovery of South America.* Geogr. Journ., Vol. 5, p. 225, 1895. Advocates hypothesis of voyage from Cape Verde Islands to America as indicated by A. Bianco's map of 1448, which it copies. Discussed by Royal Geog. Society.
- OLD SOUTH LEAFLETS.
- OLSON, J. E.: *The voyages of the Norsemen.* Original narratives of early American history. Vol. 1.
- ORIGINAL NARRATIVES of early American history. Vol. 1.
- OSGOOD's "The Maritime Provinces."
- PACKARD, A. S.: *The coast of Labrador,* 1891.
- *Who first saw the Labrador coast?* Journ. Amer. Geogr. Soc., Vol. 20. New York, 1888.
- PAPERS and MAPS of the Italian Geographical Congresses.
- PATTERSON, GEORGE: *The Beothuks or Red Indians of Newfoundland.* Proc. and Trans. Royal Soc., Canada, Vol. 9. Montreal, 1892.
- PAYNE, E. J.: *The age of discovery.* Cambridge Modern History, Vol. 1.
- *The history of the new world called America.* Oxford, 1892.
- PIERCE's Report to U. S. Government on Iceland (1868).

- POOLE, H. S.: Subsidence of the Atlantic coast line of Nova Scotia. (The Sunken Land of Bus.) Trans. Nova Scotian Inst. Sci., Vol. 2, 1902.
- POORE, B.: Address mentioning Norsemen's visit. Proceedings 250th Anniversary of Ipswich, Mass.
- POWELL, D., Editor: History of Cambria, with notes.
- POWER, L. C.: The whereabouts of Vinland. New England Mag., Vol. 13.
- PRICHARD, H. V. H.: Through trackless Labrador.
- PROCEEDINGS and TRANSACTIONS Royal Society of Canada. 1898 (Cabot's map legends). 1904 (Indian sites, Grand Manan, etc.). Also most other years.
- PROCTOR'S translation of Laxdaela Saga.
- RAFN, CARL CHRISTIAN: Antiquitates Americanæ. Copenhagen, 1837.
[Abstracts of the historical evidence for the discovery of America by the Scandinavians in the tenth century. Extracted from above. In Journ. Roy. Geogr. Soc. of London, Vol. 8, 1838.]
- RAU, C.: Observations on cup shaped and other lapidarian sculptures. Contributions to North American Ethnology. U. S. Geol. and Geogr. Survey, Vol. 5.
- RAVENSTEIN, E. G.: Martin Behaim. His life and works. 1908.
- REEVES, A. M.: The finding of Wineland the Good. The history of the Icelandic discovery of America. . . . Vol. LXXII, 205 pp., London, 1895.
- REVUE CELTIQUE. (Various volumes.)
- RHYS, SIR J.: The birth, life and acts of King Arthur. . . . Text by Malory. Introduction by Rhys.
——— Studies in the Arthurian Legend. . . . Oxford, 1890.
- RIGGS, S. C.: The Dakota, etc. Edited by J. O. Dorsey (Contributions, Geogr. and Geol. Survey).
- RINK, H. J.: Danish Greenland, its people and its products. Edited by Dr. Robert Brown, London, 1877.
——— On the descent of the Eskimo. Arctic papers for the expedition of 1875. Journ. Anthr. Inst., 1872.
——— Tales and traditions of the Eskimo with a sketch of their habits, religion, language and other peculiarities. Translated from the Danish by the author. Edited by Robert Brown. Edinburgh and London, 1875.
- ROBINSON, CONWAY: An account of discoveries, etc.
- ROBINSON, E. C.: In an unknown land.
- RODOLICO, NICOLÒ: Di una carta nautica di Giacomo Bertran, Maiorchino Atti Congresso Geographico Italico 3. Florence, 1898, p. 546.
- ROSSELLI, P.: Map of 1468.
- SAGAS concerning the Norse visits to America in facsimile Icelandic type and English translation with relevant auxiliary data and notes, in Reeves's The Finding of Wineland the Good.
——— In general translated in Origines Islandicæ, the series of Morris and Magnusson, the publications of the Viking Club, and the separate works of Dasent, Proctor, and others. Comparatively few are left untranslated.

- SCHARFF, R. T.: Origin of European fauna. Proc. Royal Irish Acad., Vol. 4, Series 3, p. 427; Vol. 8, Sec. B, p. 268, 1902.
- Some remarks on the Atlantis problem. Proc. Royal Irish Acad., Vol. 24, p. 275.
- SCHOOLCRAFT, H. R.: Indian tribes of the United States. Drake's edition, Vol. 6 (and various other issues of the work under other titles).
- SCHOTT, G.: Geographie des Atlantischen Ozeans. 1912.
- SCISCO, L. D.: The tradition of Huitramannaland. Amer. Hist. Mag., 3.
- SCORESBY, WM.: An account of the Arctic regions.
- SHALER, N. S.: Aspects of the earth. . . . New York, 1889.
- Nature and man in America. New York, 1891.
- SHIPLEY, MARIE A.: The Icelandic discovery of America.
- SKENE, W. F.: The four ancient books of Wales. . . . Edinburgh, 1868.
- SLAFTER, E. F.: The discovery of America by the Northmen.
- SMITH, J. T.: The discovery of America by the Norsemen in the Tenth Century, comprising translations of all the most important original narratives of the event; together with critical examination of their authenticity, to which is added an examination of the comparative merits of the Northmen and Columbus. Boston, 1839, London, 1842. (Map also copied in Minn. Hist. Soc. Report.)
- SOULSBY, B. H.: Translation of Fischer's The discoveries of the Northmen in America, etc.
- SOUTHEY, ROBERT: The history of Brazil. Vol. I. Appended notes.
- SPENCER, HERBERT: Descriptive sociology.
- SPINDEN, H. J.: A study of Maya art and its subject matter and historical development, 1913.
- STEARNS, W. H.: Labrador.
- STEFANSSON, JON: Iceland, its history and inhabitants. Smithsonian Report for 1906. Published, 1907.
- STEFANSSON, V.: The Icelandic colony in Greenland. (Amer. Anthr.)
- STEPHENS, J. L.: Incidents of travel in Central America, Chiapas, and Yucatan. With illustrations by F. Catherwood. London, 1854.
- Incidents of travel in Yucatan. New York, 1843-1847.
- STEPHENS, THOMAS: Madoc: An essay on the discovery of America by Madoc ap Owen in the Twelfth Century. London and New York, 1893.
- STEVENSON, E. L.: Portulan charts, 1911. Hispanic Society of America.
- STOKES, WHITLEY: The voyage of Maelduin (Revue Celtique, Vol. 9).
- The voyage of Snedgus (Revue Celtique, Vol. 9).
- The voyage of the Hui Corra (Revue Celtique, Vol. 14).
- STORM, GUSTAV: Studies on the Vineland voyages. English translation in Mémoires de la Société Royale des Antiquaires du Nord, 1888. Copenhagen, also separate. 64 pp. 1889.
- STRABO: Hamilton's translation.
- STRACHEY, W.: The histoire of travaile into Virginia Britannia, . . . London, 1849.
- STUDI BIBLIOGRAFICI E BIOGRAFICI (first and second Italian Geographical Congresses).

- THALBITZER, W.: A phonetical study of the Eskimo language. "Medd. om Grönland," Vol. 31. Copenhagen, 1904.
- THEVET, A.: The new found world or Antarctic (Hacket's translation, 1568).
- THOMAS, C. and MCGEE, W J.: Prehistoric North America. Vol. 19, Lee's Hist. of America.
- TILLINGHAST's monograph in Vol. 1 of Winsor's narrative and critical history of America.
- TORFÆUS, T.: Grönlandia Antiqua.
 ——— History of ancient Vinland (Shea's Trans. Cath. Hist. Mag., 1888, N. S.).
- TRUMBULL, J. H.: Indian names of places in and on the borders of Connecticut, with interpretations of some of them. Hartford, 1881.
- TUCKER, E. W.: Five months in Labrador and Newfoundland.
- TURNER, L. M.: The Hudson Bay Eskimo. Eleventh Ann. Rep. Bur. Amer. Ethnol., 1889-1890.
- VERRAZANO's voyage. Translation in Old South Leaflets.
- VIGFÚSSON, G.: Prolegomena to the Sturlunga Saga. Oxford, 1878.
- VIGFÚSSON and POWELL: Origines Islandicæ.
- VINING, E. P.: An inglorious Columbus.
- WALLACE, A. R.: Narrative of travels on the Amazon.
 ——— The Geographical Distribution of Animals, Vol. 1.
 ——— Island Life.
- WALLACE, DILLON: The long Labrador trail.
 ——— The lure of the Labrador wild.
- WALLACE, W. S.: Historical introduction in "Labrador, the Country and People," by W. T. Grenfell and others.
- WALLACE, JAMES: A description of the Isles of Orkney, 1693. (John Small, editor, 1886).
- WATT, W. J.: Across the Vatna Jokull.
- WEARE, G. E.: Cabot's discovery of North America, Vol. 1.
- WEISE, A. J.: The discoveries of America to the year 1525.
- WESTROPP, T. J.: Brazil and the legendary islands of the North Atlantic. (Proceedings of the Royal Irish Academy, Vol. 30, Sec. C, No. 8.)
- WHITBOURNE, SIR RICHARD: A discourse and discovery of Newfoundland. . . . London, 1622.
- WILLARD, EMMA: History of the United States.
- WILLSON, BECKLES: Nova Scotia, The province that has been passed over. (Includes a few pages on the Norse visits and Yarmouth inscriptions.)
- WINSOR, JUSTIN: Christopher Columbus and how he received and imparted the spirit of discovery. 1891.
 ——— From Cartier to Frontenac.
 ——— Christopher Columbus.
 ——— Narrative and critical history of America, Vol. 1.
- WRIGHT, G. F.: The great ice age.
 ——— The Greenland ice fields.

INDEX.

	PAGE
Acadian Bay, coincidence of names at.....	53
depression of shore at.....	115
Thorvald at	69
Adam of Bremen, account of Wineland by....	56, 57, 90, 160, 161, 163, 166, 171, 172
Africa in relation to America....	8, 9, 10, 11, 15, 18, 20, 21, 60, 61, 63, 94, 139, 167, 170, 174
Age of discovery, The (Payne).....	21
Albania, name for asserted region.....	30
Alberta, winter grazing in.....	131
Aleut, Holm on.....	153
Alexander the Great at the Azores.....	18
Algonquian myths, Leland on.....	50
Algonquian family.....	5, 6, 7, 121, 128, 129, 140, 145, 147
Allen, J. A., history of American bison.....	148
Almachouqui Algonquians	128
Al-Tin, origin of "Antillia".....	18
"America of the Spaniards".....	29, 63, 171
American characteristic coast (Wonderstrands)....	69, 80, 102, 112, 113, 116, 135, 162
American Indians. <i>See</i> Indians, Eskimo, and Skrellings.	
American race (Brinton).....	2, 146
Amerinds (<i>See</i> Indians and Skrellings).....	3
Amund, Bishop of Skalholt.....	39, 40
Angels in bird-form.....	14
Anticosti, Eskimo at.....	140
Antillia, Island of.....	17, 18, 19, 20, 25
Antilles, The	20, 21, 26
Antiquitates Americanæ, cited.....	28, 44, 60, 74, 136
Appalachian region, bison in.....	148
Aquidneck Island, carven rock at.....	45, 138
Arabic names	12
Araucanians, Spanish Chilians absorbed by.....	36
Arctic Foxes mentioned in Saga.....	101, 106
Ari. (<i>See</i> Frode & Marsson.)	
Ari the Wise.....	28, 58, 59, 142, 152, 161, 165
Arne Magnean Codex 770.....	60
Arne Magnean Codex 194.....	60
Arne Magnean Codex 557 (Eric the Red).....	66
Arne Magnean collection.....	28, 64
Arnold, Bishop of Greenland.....	55
Arnold, Governor, windmill of.....	44
Arthurian Legend of Iceland.....	12, 141

	PAGE
Asia, migration from.....	2, 3, 4, 7, 140
Asmayda or Asmada, location of.....	17, 25
Athapascan Indians	3, 5, 140
"Atillie" (the word) on Pizigani map 1367.....	59
Atlantic Ocean	3, 11, 17, 18, 26, 35, 46, 74, 107, 130, 163
Atlantis, legend of.....	10, 18
Avalon Peninsula	108, 109, 156
Avezac, M. de.....	8, 11, 16, 18, 24
Ayllon, de, Colony of.....	63
Azores	8, 9, 10, 11, 17, 18, 19, 20, 22, 24, 128, 162
Aztecs	6, 156
Back Bay, Boston, Hóp at.....	48, 49, 136
Bacon, E. M., cited.....	45, 46, 131
Baffin Bay, miniature monument at.....	43
Baffin Land. Thorfinn at.....	5, 54
Bahamas, asserted early visits to.....	14, 15
Ballads in Saga.....	79
Bancroft, H. H., cited.....	7, 157
Bandelier, A. F., on use of sling.....	156
Bardsen, Ivar, relief expedition in 1337.....	39, 78, 94, 143
Baron of Castine, mentioned.....	49
Basque fishermen, voyages of.....	9, 49, 52, 174
Bear Island, Greenland.....	33, 97
Beauvois, E., cited.....	29, 40
Beccaria's (Becharius) map (1435) considered.....	19, 20, 25
Behaim globe (1492), inscription as to Antillia.....	19
Belle Isle Strait.....	108, 111, 156
Benincasa Map (1482) considered.....	19, 25
Beothuk (Beothik) Indians in Newfoundland.....	5, 6, 42, 109, 121, 144, 153, 154, 156
Bering Strait	2, 144
Bermudas, possible early visits to.....	12, 26
Bertran, G., map considered.....	19
Bianco Map (1436) considered.....	19, 20, 25, 26
Biarni, death of.....	105
discovery by	69
Biarney Island	33, 108, 116, 162
Biggar, H. P., cited.....	33
Biorn, lost Saga of.....	28, 29, 160
Biørnsland	54
Bird Islands	61, 62, 102, 119, 120, 162
Bison, American, former distribution of.....	147, 148, 149
Blacksark, Greenland	66
Bleekman and Newton cited.....	107
Blome, R., cited.....	108
Blood feud in Iceland.....	31
Blowguns	157
Boats, Eskimo and Indian.....	139, 150, 157
Boats, Norse	100, 101, 108, 112, 159
Boggild, F., cited.....	48

	PAGE
Bonavista Bay, forests at.....	108
Boston as Norse site.....	46, 47, 48, 49, 129, 136, 139
Botoner's voyage of 1480.....	21
Bran, Voyage of.....	12, 159
Brandan, Saint.....	13-16, 159
Brand, Bishop.....	67
Bras d'Or.....	110, 112
Brattahlid, Greenland.....	34, 83, 85, 86
Brazil, Island of.....	17, 21-26, 36, 62, 166, 172, 174
Brazil-wood.....	24, 172
Brazir, Ysole.....	21
Brereton's voyages.....	57, 145
Breton fishermen.....	49, 50, 174
Brinton, D. G., cited.....	2, 6, 27, 146, 153
Brion Island.....	22
Bristol, England.....	21, 172, 174
Bristol, R. I.....	131, 137, 138
Brittany.....	8, 10, 25, 42, 111
Broadfirth, Iceland.....	32
Brown, Professor, on coast uplift.....	114
Bryniolf, Bishop.....	64, 74
Bugge, S., cited.....	63, 86
Bus, sunken land of.....	17
Buxelle (or Brazil) Island.....	24
Cabeza de Vaca.....	41
Cabot, John.....	9, 21, 22, 23, 26, 109, 116, 155, 156, 172, 174
Cabot, Sebastian.....	155, 156, 172
Cabot Strait.....	23, 110, 171
Cabot turned southward from course.....	71
Cabral, landfall of.....	9, 20, 163, 174
Caddo Indians.....	145
Cadiz, Phenician town.....	8, 9, 10
Cambrensis, Giraldus.....	37
Campobello, Bay of Fundy.....	117, 118
Canaria, Ysola.....	16
Canary Islands.....	8, 9, 10, 15, 16, 17, 21, 57, 163, 164, 167
Canoes, Indian and Eskimo.....	121, 150, 151, 152, 153, 154
Canso, Strait of.....	41, 62
Cantwell, E., cited.....	14
Cape Ann.....	127, 128, 135, 136
Cape Breton Island.....	23, 29, 42, 62, 110, 112, 113, 129, 130, 156, 170, 171
Cape Charles.....	112
Cape Cod.....	29, 44, 46, 89, 110, 111, 116, 123, 128, 145, 149
Cape Harrison.....	106
Cape Hatteras.....	29
Cape Henlopen.....	112
Cape of Good Hope.....	11

	PAGE
Cape Race	8
Cape Verde Islands.....	11
Caporizzia Island, Capraria, Legname, Madeira.....	16
Capraria (Legname) Island	16
Caradog of Llancarvan, his history of Cambria.....	36
Caribbean Sea	9
Carmack, W. O., cited	42, 109
Carolina coast	169
Carthage, Phenicians of.....	10
Cartier, cited	23, 43, 57, 62, 109, 120, 133, 135, 156
Cartland, J. H., cited.....	50
Cartwright, Capt.	6, 42, 109, 120, 153
Carving, Innuit	150, 151
Casco Bay,	127
Castine, "rune stone" at.....	50
Catalan Map (1375).....	16, 21
Cave hunting (Dawkins).....	150
Celts	9, 12
Celtic Review, cited.....	14
Chamberlain, A. F., cited.....	3
Chambers, Robt. W., cited.....	53
Champlain's voyages.....	5, 42, 48, 49, 51, 57, 71, 78, 92, 110, 119, 122, 123, 124, 125, 126, 127, 128, 129, 132, 134, 154
Champlain's Cape Ann costume line.....	127, 128
Charles River	46, 47, 48, 49
Chart of derelicts (Horsford).....	8, 71
Chatham Harbor	127
Chesapeake Bay.....	4, 5, 29, 63, 108, 110, 116, 124, 131, 145, 154, 167
Chesapeake Peninsula	113
Chickahominy Indians	4
Chile	4
Chincoteague ponies	132
Chinese and Cambodian resemblances in sculpture.....	7
Christie, M., cited.....	23
Climatic changes along American Coast.....	94
Coast of Desolation.....	33
Coast uplift and depression.....	114, 115
Cobequid hills, Nova Scotia.....	130
Cocoa palm, O. F. Cook on distribution of.....	7
Collingwood, W. G., cited.....	135
Columbus, Christopher.....	1, 9, 11, 14, 19, 20, 26, 49, 128, 163, 172, 174, 175
Colvin, V., cited.....	117
Compass, early lack of.....	8
Conigi Island	10
Connecticut, Indian names in.....	138
Connecticut River	6
Conquest of Iceland (Apochryphal) by Arthur.....	12, 141
Cook, O. F., cited.....	7
Cooper, James Fenimore, cited.....	147

	PAGE
Copan, Cambodian figures at.....	7
Cornu du Gallia.....	41, 111
Correlation of Maya and Christian chronology (Morley).....	6
Cortereaf's voyage	108, 156
Corvo Island	11, 20, 21
Costa, B. F., de.....	12, 34, 48, 79, 171
Costumes (Indian)	125, 127, 128, 141, 149, 151, 155
Crags mentioned in Saga.....	138, 158
Crossness, burial at.....	70
Crusaders, tithes for.....	171
Cuba and neighboring islands called Antilles.....	20
Cuba compared with Antillia as to position, etc.....	19
Cup stones, Indian.....	45
Currents, ocean.....	9, 117, 118, 124, 127, 128
Dakota Indians	149, 153
Dall, W. H., cited.....	2, 125, 144
Dalorto map, 1325.....	17, 22
Daly, Dominick, cited.....	13, 15
Daly, R. A., on coast uplift	114
Dams, Indian	46, 47
Danforth, Dr., cited.....	44
Danish Greenland (Rink).....	33, 39, 43, 44, 95
Dagmalastad (breakfast time).....	73
D'Avezac, M., cited	8, 11, 16, 18, 24
Davies, cited	36
Davis, C. A., cited.....	114, 137
Davis, John, cited.....	33, 108, 150, 155
Davis Strait	33
Dawkins, Boyd, cited.....	150
Dawson, S. E., cited.....	92
De Ayllon, colony of.....	63
De Costa, B. F., cited.....	12, 34, 48, 79, 171
Debes, L. J., cited.....	177
Delaware coast	116
Delaware, Indians of.....	47
Dellenbaugh, F. S., cited.....	153
"Demon's head," of Indians.....	157, 158
De Mont's colonists.....	49, 122
Denys, N., cited.....	117, 119
Depression, glacial of upper American coast.....	113, 114, 115, 116
Depression of shore of Acadian Bay.....	115
Depression, post glacial, of American coast below Maine.....	37, 164
De Soto in Carolina.....	149
Derelicts, movements of.....	8
De Roo, P., cited.....	14
Devil Rock	25
Dicuil, Irish geographer	27
Dieserud, Juul	1, 54, 75, 94
Digby, Nova Scotia.....	52, 121

	PAGE
Dighton rock pictures.....	44, 45, 137
Diman, J. L., cited.....	79
Diodorus Siculus, Phenician legend of.....	8, 21
Disco Island	33
Dogs, Indian and Eskimo.....	139, 150, 151
"Doegr," meaning of.....	101, 106, 110, 129
Dolmen-like stone structure of Malicete Indians.....	120
Dorchester flats	48
Dragon on maps.....	18, 21
Drogio or Drogeo.....	40, 41
Du Challu's "Viking Age" cited.....	50
Duelling in Iceland.....	31
Du Guast, River.....	49
Dulcert map, 1339	16
Earthly paradise, legend of.....	14, 15
Easter Island	9
Eastern settlement, Greenland.....	39
East-outland	40
Eastport, Maine	74, 117, 118, 121
Eddic Poems, Home of the (Bugge).....	86
Edrisi's geography	10, 11, 18, 38, 106, 167, 171
Egede, Hans, cited.....	39, 40, 51
Egg-islands.....	61, 62, 102, 119, 120, 162
Egypt, ships of.....	9
Elevation, post glacial, of upper Atlantic coast.....	113, 114, 115, 116, 164
Elymus arenarius (strand oats).....	94, 95, 132, 133
English settlement relics.....	5, 46, 47, 50, 52
Eric the Red.....	26, 31, 32, 33, 34, 44, 52, 55, 56, 58, 59, 67, 69, 81, 97, 105, 110, 120, 161
Eric Gnuption, Bishop.....	54, 55, 170
Fric, King	61
Eric'sfirth or Gardar.....	82, 83
Ericsson, Leif. (<i>See</i> Leif.)	
Ernulphus	14
Eronnelle translation of Nova Francia, cited.....	40, 56, 71, 92, 123, 130, 133, 134
Escociland as perhaps the original form of the name Estotiland.....	40, 62
Eskimo....	2, 3, 5, 6, 34, 39, 51, 109, 121, 130, 139, 140, 142, 145, 147, 149, 150, 151, 153, 154, 155, 156, 160, 167
Eskimo Legends	53, 109
Espinosa, Father	14, 15, 16
Essequibo River	152
Estotiland	40, 41, 62, 172
European Islands, western visitors to.....	8
Examen Critique (Humboldt) cited.....	7, 8, 74
Explosive body used by Indians.....	157, 158
Eyktaarstad of the sun.....	73
Eyrbyggja Saga	28, 59, 99

	PAGE
Fagundes expedition	49
Fairy Lake	52
Fairy lands	165, 166
Fall River	44, 158
Faroe Islands.....	8, 27, 38, 62, 131, 177
Feather Islands, The.....	61, 62
Fernald, M. L., cited.....	91, 132, 151
Fewkes, J. W., cited.....	49, 52, 117, 118, 124
Finding of Wineland the Good (The), cited.....	29, 56, 59, 60, 61, 64, 66, 68, 71, 75, 102, 103, 107, 129
Finland, referred to as Vinland.....	54
Finn, applied to three races.....	167
Fiord-cut shore	118
Fiord separating Wineland from "America of the Spaniards".....	63, 171
Fischer, J., cited.....	49, 172
Fishing devices, Indian.....	47
Fish mentioned in Saga.....	131
Fiske, John, cited...7, 27, 33, 41, 71, 74, 75, 94, 95, 139, 141, 148, 156, 157	
Flateybook.....	28, 56, 61, 64, 65, 67, 111, 116, 118, 162
Flateybook Wineland Saga, The.....	64, 65, 66, 68, 70, 71, 74, 116, 143, 162
Flom, Mr., cited.....	54
Flores, (Azores)	11, 20, 25
Forest Land.....	16, 17, 26, 62
Fortunate Islands.....	14, 15, 16, 57, 162, 163, 165, 167
Fortunate Islands of St. Brandan.....	16, 17, 163, 166
Fountain of youth.....	15
Foxes, Arctic	101, 106
Fox grapes	164, 170
Freducci maps considered.....	19
Freydis, Eric's daughter.....	66, 70
Friederici, Dr., cited.....	156
Frisbók, mentioned	59
Frisland	38, 62, 173
Frobisher's voyages	17, 150
Frode, Ari	28, 58, 59, 142, 152, 161, 165
Frodís Water	151
Fuegians, stature of.....	145
Fundy, Bay of.....	6, 23, 51, 52, 62, 72, 92, 112, 117, 118, 119, 120, 124, 126, 130, 133, 154, 170
Funk Island	62, 102, 120, 153
Furdurstrandir (The Wonderstrands).....	80, 102, 104, 113, 116, 160
Gaddiano map	16
Gaelic runners	118
Gallia, cornu du.....	41, 111
Games, Indian	51
Gardar, Greenland	34, 39, 43, 73
Geoffrey of Monmouth, Arthurian conquest related by.....	12
Geographical formula	60

	PAGE
Gessner on depression of coast.....	115
Gilyaks, Saghalien	147
Glacial depression of American coast.....	3, 113, 114
Glacial era, land elevation since.....	113, 114, 115
Eskimo advanced northward since.....	140
Godthaab, Greenland	107, 155
Gold in Mexico.....	149
Gomez, expedition of.....	49, 92
Gosnold, cited	44, 145, 149
Graah, W. A., cited.....	43
Grain and grapes, wild.....	56, 57, 123, 130, 132, 133, 134, 135, 160, 161, 162, 163, 164, 165, 168, 169
Grajales, cited	155
Grand Manan Channel.....	69, 73, 74, 112, 117
Grand Manan, Norsemen at.....	51, 72, 74, 105, 113, 117, 119, 121, 122, 126, 130, 169, 170
Graves of Thorbrand and Thorvald.....	49, 70
Grape problem examined.....	90-94, 124, 130, 163, 164, 165, 168
Grapes, wild	56, 57, 123, 130, 132, 133, 134, 135, 160, 161, 162
Grazing, fine	121, 131, 132
Great Falls of the Potomac.....	48
Great Ireland	21, 26, 27, 29, 30, 59, 105, 165, 169
Great Sweden	27, 28
Greek craft's landfall.....	8
Greek myths of western islands.....	7, 9, 162
Greenland.....	8, 17, 52, 55, 58, 62, 69, 70, 81, 160, 161, 170
Christianity in	59, 161, 173
discovery of	142
Eskimo of	143, 150, 151
extinction of Norsemen in.....	39, 40
Norse colony in.....	30-35, 64, 82-86
population of	44
Grenfell, W. T., cited.....	107, 114
Grettir	32
Grocland	62
Guanches	15
Guast, du, River.....	49
Gudleif's voyage	29, 54, 160
Gudrid.....	28, 32, 35, 50, 59, 60, 66, 69, 72, 81, 105, 112
Gudrid's visit to Rome.....	87
Guiot de Provins.....	37
Gulf of Maine.....	114, 128, 131, 170
Gulf of Mexico.....	3
Gulf Stream	127
Gunnbiorn's islets'	33
Gwynedd, Owen	36

	PAGE
Haconsson, John	65
Haggard, H. Rider, cited.....	10
Hagar, S., cited.....	7
Haki and Hækia, story of.....	90, 118, 123, 132
Hakluyt, cited	89, 155
Haliburton, R. C., cited.....	92, 153
Hall o' the Side.....	58
Hamilton Inlet	108, 141
Hampton, New Hampshire, cross-marked stone at.....	49
Harko's son	52
Harpoons, Eskimo.....	139, 151, 157
Harrisse, H., cited.....	116, 155
Harshberger, J. W., cited.....	133, 134
Hauk, Erlendsson	64, 67, 116, 143, 161
Hauksbook Saga	56, 64, 66
Haup, the name.....	138
Hawaii, peopling of.....	9
Hawes, C. H., cited.....	147
Heimskringla	27, 43, 100, 101, 147, 161
Helluland	29, 54, 56, 60, 63, 69, 72, 101, 106, 107, 112, 160, 162, 170
Henry Hudson (Bacon).....	131
Henry, Prince	9
Heriolf	83
Herioldsness.....	40, 69, 81
Hermannsson, H., bibliography by.....	63
Hertzberg, cited	51, 167
Higginson, T. W., cited.....	45, 101, 157
Hill-tout, C., cited.....	7
Hochelega	43, 57, 133
Holand, H. R., cited.....	53
Holm, G., cited.....	44, 144, 153
Holmes, W. H., cited.....	2, 51
Honduras, Mayas in.....	6, 13
Hönen inscription	63, 160
Hóp.	69, 74, 118, 128, 129, 130, 132, 134, 135, 136, 139, 141, 148, 149, 151, 155, 160, 162, 163, 169, 170
Hopedale	107
Hope Island	119
Hopeton inscription	44
Hornaday (The Extermination of the American Bison).....	148
Horsford, Cornelia, cited.....	49
Horsford, E. N., cited.....	8, 46, 47, 48, 55, 71, 136
Housatonic River	6
Howley, M. F., cited.....	53, 73, 108
Hudson, Henry, voyage of.....	71, 128
Hudson Bay	5, 53, 54, 114
Hudson River	6, 118, 134, 157
Huitramannaland	54, 168
Hull, Eleanor, cited.....	85

	PAGE
Humboldt, Alex. von, cited.....	7, 8, 18, 25, 74, 168
Hunafoi Bay	135
Hunting at Eastport.....	121
Huron Indians	133
Hutcheson, David	1, 45
Hutisark of Olaus Magnus.....	67
Iberian Peninsula	8, 10
Icaria	37
Iceland....	2, 8, 12, 13, 27, 28-35, 43, 50, 52, 55, 58, 61, 64, 66, 69, 70, 81, 85, 86, 93, 110, 111, 117, 131, 133, 135, 136, 141, 142, 143, 151, 159, 161, 162, 165, 166, 170, 171, 172
Icelandic and Greenland house-sites.....	48, 95
Icelandic Annals	54, 61, 160, 162
Icelandic-Celtic intermarriages	85, 86
Icelandic literature.....	2, 31, 46, 59, 62, 76-81, 82, 85, 86, 162, 172
Icelandic Secretaries (Hauk's).....	64
Icelandic voyages.....	54, 58, 61, 64, 66, 70, 73, 112, 117, 124, 128, 129
Icod, Canary Islands.....	15
Igallico inlet	34
Inca conquests	6, 156
Incantation by Thorbiorg and Gudrid.....	82
Indian Corn	57, 133, 134, 135, 148, 161
Indian River	47
Indian royalties	92, 128
Indians, American. (<i>See also</i> Skrellings).....	2, 146
Algonquian.....	5, 6, 7, 121, 128, 129, 140, 145, 157
Asiatic origin of.....	2, 3, 147
at Wineland	70, 71, 141
boats	151, 153
Beothuk.....	5, 6, 42, 109, 121, 144, 153, 154, 156
census of	4
Chickahominy	4
costumes.....	109, 125, 127, 128, 141, 149, 151, 155
distribution of	5
fisheries	47
games	51
giants	53
inscriptions by	45, 49, 50, 54, 121
Iroquois.....	3, 4, 5, 50, 53, 145, 147
languages of	3
Maguaquadevic	120
maize culture by.....	57, 134
Malicete	120, 121
Mattapony	4
Micmac	5, 120
Mound builders	149
Muskhogeian	3, 5
Nansemond	4

	PAGE
Nanticoke	47, 145
Nascopie	109, 153
Nez Perces	145
Ojibway	44, 50, 157
Omaha	153
origin of	2, 3, 147
Osage	145
Pamunkey	4
Passamaquoddy.....	50, 51, 87, 117-121, 124, 152, 170
Powhatan	4, 149
Shoshonean	3, 5, 6
Siouan	3, 5
Souriqui	5, 120
stature of	144, 145
Susquehanna	145, 148
Tinné	109
unity of	146
Wampanoag	45
weapons of	154, 156, 158
Welsh (alleged)	35
wild rice cultivated by.....	56, 72
Indian village site at Grand Manan.....	122
Ingram's journey	42
Innuít (American Eskimo).....	2, 3, 5, 6, 34, 39, 51, 109, 121, 130-156, 160, 167
Inscription concerning Antillia.....	19
Inscription, Cryptic	15, 16
Inscriptions, Norse, real or asserted.....	43-48, 50, 52, 60, 63, 160
Insulle a Novo Repte.....	19
Ipswich, "Norse" stone work at.....	49
Ireland	9, 12, 21, 23, 26-29, 159, 165
Irish ancestors of Snorri.....	85
Irish-Arab legends	14, 15
Irish Church	27, 30
Irish legends of discovery.....	10, 12, 13, 27, 57, 159, 165, 172
Irish names	12
Irish-Norse interchange of legends.....	8, 159, 162, 165
Irish settlement at Iceland.....	27
Iroquois Indians	3, 4, 5, 50, 53, 145, 147
Isidore of Seville.....	57, 163
Island-group of Antillia.....	19
Island of Man or Mam.....	21
Island of St. Brandan.....	17
Island of the Dragon.....	10, 18
Island of the Hand of Satan.....	19, 21
Island of the Seven Cities.....	22
Islandic MS. of Wineland Sagas.....	68
Isle of Birds.....	10
Isle of Joy.....	12

	PAGE
Isle of Sheep.....	10
Islendingabók.....	28, 59, 142, 161, 165
Italians in the Azores.....	II, 12, 20
Jack, J. E., cited.....	52
Jamestown, settlement	63
Jenks, A. E., cited.....	56, 135
Joncele Island	25
Jones Sound, Greenland.....	142
Jonsson, Arngrim	62
Jonsson, Gisli	62
Jonsson, Finnur	68
Kakortok church, Greenland.....	34
Kamchatka, migration to America from.....	3, 147
Karlsefni, Thorfinn. (<i>See</i> Thorfinn Karlsefni).	
Kayaks.....	130, 139, 150, 151, 153, 162
Keelness.....	46, 69, 72, 110, 111, 112, 160, 162
Kennan, George, cited.....	147
Kennebec River	6, 121, 128, 133
Kensington "rune-stone"	53, 54
Kilhwch and Olwen, story of.....	12
King Philip	5
Kirke, Mr., cited.....	152
Kjallarness (Kiallarness, Keelness).....	46, 69, 72, 110, 111, 112, 160, 162
Knutson, Paul, expedition of.....	39
Kohl, J. G., cited.....	16, 18, 40, 42
Konungabók	59
Koryak tribe in Kamchatka.....	147
Kretschmer, K., cited.....	16, 19
Kristni Saga	59, 64, 161
Labrador...3, 29, 53, 100, 106, 107, 108, 114, 116, 117, 133, 141, 150, 151, 170	
current.....	94, 110, 127
La Cosa, Juan de.....	19, 20
Lacrosse, game of.....	50, 167
Laing, S., cited.....	27, 100, 101, 147
Lake Superior canoes.....	152
Landfalls, accidental, instances of.....	8, 9, 28, 29, 163
Landing of Sea Tribes.....	7
Landnamabók.....	27, 28, 59, 64, 69, 81, 161, 162
Land-Rolf	61
Languages in North America.....	4, 7, 11, 25, 29
Laplanders	141, 167
Las Casas	20
Las Desertas	16
Law of Iceland.....	31
Laxdaela Saga	85
Legendary islands	12-30, 163, 166, 168
Legname, I. de.....	9, 16, 22, 25, 163, 164

	PAGE
Leif Ericsson	56, 63, 67, 68, 69, 71, 116, 122, 123
discoverer of America.....	175
first mention of.....	161
landfall of	48
Nansen on	159-168
sent to Greenland.....	59, 60
the Lucky	60, 61
voyage historic	I, 9
voyages of.....	87-96, 159
Wineland discovered by.....	83, 87-96, 161, 170
Leif's-booths.....	48, 69, 70, 94
Leif's crossing from Greenland to Europe.....	87
Leif's lowest point as defined by Wine Grapes.....	93, 64, 170
Leland, C. G., cited.....	50
Lescarbot, cited	42, 56, 57, 71, 92, 123, 130, 133, 134, 150
Lewes, Delaware	47
Lewisburg, Pa.....	148
Limerick	17, 21, 30, 172
Little Falls of the Potomac.....	131
Littoral tribes	7
Living Island	15
Lloyd's notes, cited.....	5, 36
Longfellow, H. W., cited.....	44
Long Island, New York.....	29
Long Island, Nova Scotia.....	124
Longer Saga of King Olaf the Saint.....	60
Louisbourg	115
Lubec, Maine	118, 124
Lucas, F. W., cited.....	37, 38, 39, 40, 42
Lyme grass	132
Lyschander, Danish poet, cited.....	55
Lysufirth	70
Mabou River	111
MacDougall, Alan	109
McGee, W J, cited.....	I, 5, 137
McIntosh, Mr., cited.....	51, 52, 115
Madeira	9, 16, 21, 22, 25, 163, 164, 169
Madeira, referred to in connection with legend of Diodorus.....	21
Madoc, voyages of.....	14, 35, 36
Madonna, image of.....	15, 16
Maelduin, voyage of.....	13, 14, 159
Magdalen Islands	22, 117
Magna Graecia	28
Magnusson, Arne, supplies title to saga.....	05
Magnusson, Morris and, cited.....	99
Maguaquadevic	120
Magrurin expedition	11, 106
Maine.....	6, 50, 72, 114, 116, 117, 123, 127, 145, 164
Maize.....	57, 133, 134, 135, 148, 161

	PAGE
Major, R. H., cited.....	33, 37, 38, 40, 155
Mallebarre	129
Malicete Indians	120, 121
Mallery, G., cited.....	44
Malo, St.	14
Man de Satanaxio, La.....	19, 25
Man (or Mam) Island.....	21, 25, 26
Manitoba	135
Map of Beccaria (1435)—considered.....	19
Benincasa (1482)—considered.....	19
Bertran—considered	19
Bianco (1436)—considered.....	19
Catalan (1375)—considered	16
Coastal elevation—considered.....	114
da Napoli, Zuan, considered.....	11, 16, 18
derelicts (Horsford)—considered	8, 71
Fourteenth Century—considered.....	11
Gaddiano (Atlante Mediceo 1351)—considered.....	16
Juan de la Cosa—considered.....	19
medieval times—considered	11, 14, 19
Mercator (1595)—considered.....	22, 41, 111
Ortelius—considered	41, 172
Pareto (1455)—considered	19
Pizigani Brothers (1367)—considered.....	16, 18, 21, 24
Pomponius Mela—considered.....	16
Prunes (1553)—considered	22
relating to the New World (Nordenskjold)—considered.....	20
Rosselli—considered	19
Ruysch—considered	33
Sebastian Cabot—considered	155
Sigurdr Stefánsson—considered	29, 38, 62
Stefánsson (1590)	29, 38, 62, 110, 111, 135
Weimar (mismarked 1424)—considered.....	19
Wytfliet (1597)—considered	111
Zuan da Napoli—considered.....	11
March, Mary, Beothuk prisoner.....	144
Margarie River	111
Maria, the sloop.....	107
Maritime Provinces	117, 121, 133
Markham, Sir Clements.....	14, 106
Markland...29, 39, 54, 60, 61, 63, 69, 72, 108, 109, 141, 160, 162, 166, 167,	170, 171, 172, 174
Markland (the name)—d'Legname or Madeira.....	16, 17, 26
Marsson, Ari	8, 29, 165
Maryland.....	29, 111, 112, 113, 131, 133, 135
Massachusetts	47, 170
Massachusetts Bay	132
Mather, Cotton, cited.....	46, 137
Mattapony Indians	4
Mausur wood	47, 61, 95

	PAGE
Maya people	6, 156
Mayan ruins	7
Mayda (Asmayda)	17, 25
Meade, Bishop, cited.....	42
Medieval maps—considered	II, 14, 19
Mediterranean Sea	9
Memoires Societé Royale, etc.....	28, 39, 50, 55, 61, 68, 70, 71, 75, 92, 107, 109, 112, 120, 130, 143, 152, 168, 172
Menane (Manan)	119
Merman, Eskimo	130
Mernoc, search for.....	14
Merrimack River	47
Mexico	4, 6, 7, 133, 149, 156
Valley of	7, 141
Micmac Indians	5, 6, 42, 52, 120, 121, 133, 145, 146, 156
Midiokul, Greenland	66
Miller, Mr., cited.....	45
Minnesota, "rune stone" in.....	53
Miramichi	52
Missile on pole.....	157, 158
Mississippi Valley, Great Ireland in.....	29
Mongoloid tribes	7
Monhegan Island inscription.....	50
Monsters of the sea	10, 15, 18, 21, 24
Montauk, meaning of.....	138
Montaup, meaning of.....	138
Montorious, Brazil Isle	22
Mont's de, colonists.....	49, 122
Moon of Weird.....	151
Mooney, James, cited.....	I, 138, 157
Moorish Conquest	22
Morgan, L. H., cited.....	5
Morris and Magnusson, cited.....	99
Moulton's History of New York.....	94
Mound-builders.....	5, 148, 149
Mound near Indian River, Del.....	47
Mount Desert Island.....	128
Mount Hope	138
Bay.....	44, 45, 131, 136, 137, 138, 139
Munro, W. H., cited.....	131, 138
Muskhogeian family	3, 5
Mythical islands	12-30, 166, 168
Nain, Labrador	107
Nansemund	4
Nansen, Fr., cited.....	8, 9, 21, 22, 33, 50, 55, 60, 89, 96, 105, 109, 116, 119, 141, 150, 158, 159, 160, 162, 167, 168, 170, 171
Nansen's recognition of Norse discoveries in America.....	159, 160
Nanticoke Indians	47, 145
Nantucket Island	128, 131

	PAGE
Napoli, Zuan da.....	11, 16
Narragansett Bay.....	5, 45, 128, 131, 132, 136, 138, 145, 154
Nascopie Indians	109, 153
Nauset, Cape Cod.....	127, 128, 129, 132, 149, 151
"Neck" as used along the Chesapeake.....	110
Nelson, E. W., cited.....	144
New Brunswick	6, 51, 52, 72, 120, 123, 140
New Hampshire	128
New Jersey.....	29, 112, 113, 149, 169
"New Lands"	61, 62
New Madrid	115
New Mexico	22
Newport "tower," origin of.....	44
New York, depression of land at.....	4, 137
Nez Perces Indians.....	145
Niagara, geological observations at.....	114
Nicholas of Lynne.....	34
Nicholas of Thingeyri	61, 167
Nordenskjold, A. E., cited.....	19, 20, 21, 22
Normans.....	9, 20, 127, 166, 174
Norse Conquests in Wine countries.....	90
Norse-Irish legends	8, 159, 162, 169, 172
Norse ships	100, 101, 108, 112, 159
Norse voyages....	1, 43, 54, 75, 87-96, 112, 117, 124, 128, 129, 139, 142, 159, 161
Norsemen....	2, 10, 27, 30, 50, 51, 52, 54, 59, 98, 99, 100, 109, 117, 118, 120, 122, 131, 138, 141, 142, 147, 151, 154
North America, peopling of	3, 4, 8, 26, 174
North Head, Grand Manan.....	122
Norton Sound	144
Norumbega, city of.....	42, 46-48
Nova Francia	56, 71, 130, 133, 134
Nova Scotia.....	6, 37, 41, 52, 63, 72, 94, 112, 113, 116, 117, 123, 170
Nova Scotian wine berries.....	92
Nutt, Alfred, cited	12, 13
Ocean City, Md.....	137
Ocean currents	9
Ojibway Indians	157
Ojibway interpretation of Dighton Rock inscription.....	44
Ojibway myths	50
Olaf sends Leif to Greenland.....	88
Olaf Tryggvason	30, 31, 56, 59
Olaus Magnus	18, 67
Olson, Dr. J. E., cited.....	1, 66, 68, 75, 102, 143
Omaha Indian boats.....	153
Ordericus Vitalis	54
Orkney Islands	13, 27, 165
Ortelius map considered.....	41, 172
Osage Indians	145
Osgood on Maritime Provinces.....	117

	PAGE
Owen, Gwynedd	36
Owens, Gutyn	37
Oxney (Ox Island).....	32
Packard, A. S., cited.....	53, 100, 102, 106, 109, 114, 140
Pamunkey Indians	4
Passamaquoddy (Indians and Bay).....	50, 51, 87, 117-121, 124, 152, 170
Patterson, George, cited.....	144, 153
Payne, E. J., cited.....	21
Pemaquid, old ruins at.....	50
Pennsylvania, bison in	148
Penobscot River	6, 121, 123, 128
People of the Polar North (Rasmussen).....	153
Peopling of North America.....	2, 3, 4, 8, 26, 172
Periplus (Nordenskjold)	20
Peru, sculptures in	7
Petit Dieppe	20
Phantom City	10
Phenician voyages	8, 9, 10
Philip, King	5
Pico Island	16, 164
Pictographs.....	7, 45, 46, 137, 150
Pizigani map	16, 18, 21, 24
Place names (transferred from Iceland).....	79
Plants of Wineland, The (Fernald).....	91, 132
Plutarch's account of ancient voyages.....	117
Polynesian languages in America.....	7
voyages	9
Pomponius Mela	16
Ponce de Leon.....	15
Pool of Youth.....	15
Poole, H. S., cited.....	115
Porcupine Bank	23
Porter's journal cited.....	51
Porto Santo	16, 164, 166, 169
Portsmouth Bay, Aquidneck.....	45
Portsmouth, New Hampshire.....	129
Portuguese discoveries	11, 20
Powell, D., cited.....	36
Powhatan Indians	4, 149
Pre-Columbian voyages	7, 17
Primaria Island	16
Prince Edward's Island.....	22, 156
Provins, Guiot de.....	37
Prunes's map, considered.....	22
Putnam, Professor, cited.....	50
Rafn, C. C., cited.....	28, 29, 44, 60, 73, 74, 132, 133, 136
Raleigh's Colony	35

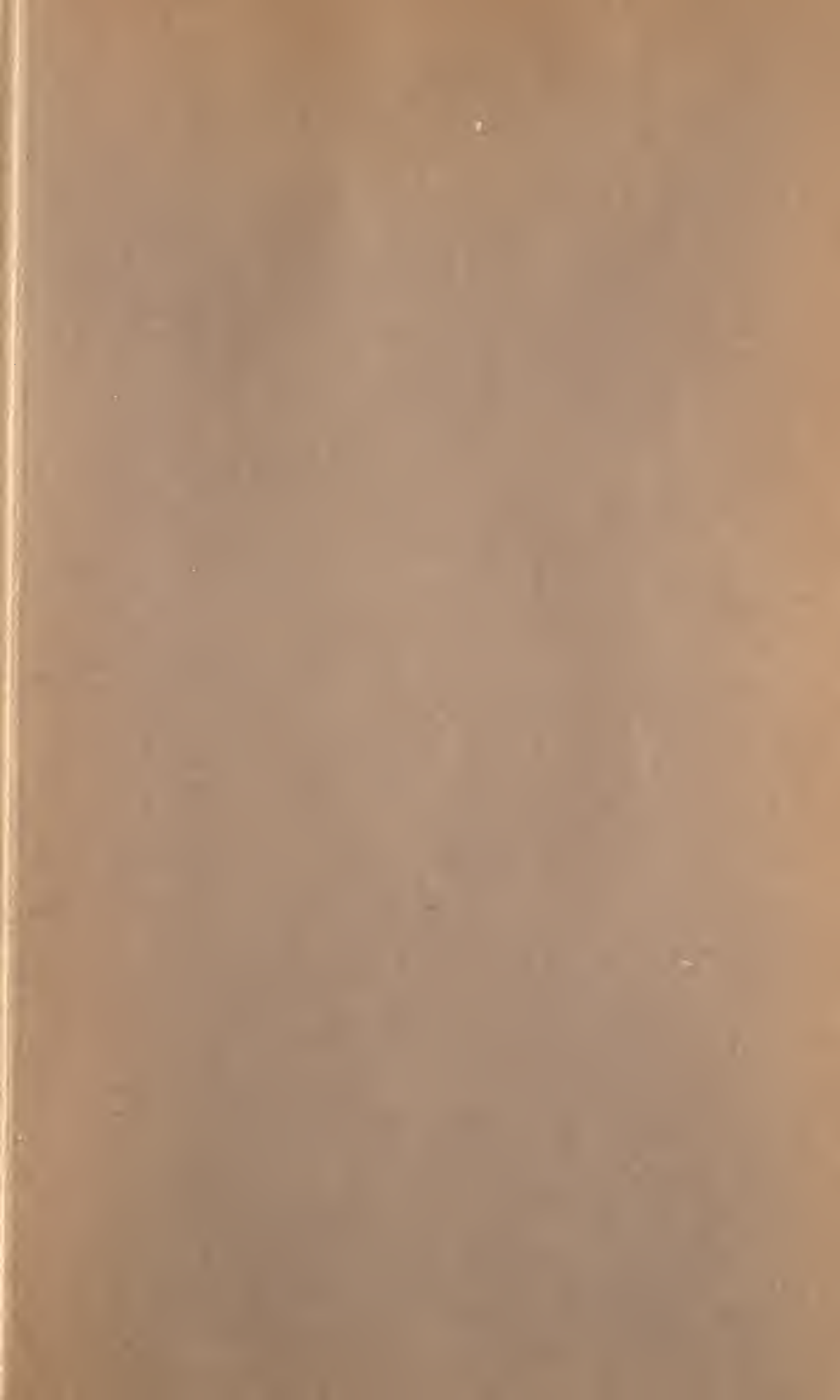
	PAGE
Rasmussen, V., cited.....	153
Rau, C., cited.....	45
Red Indian Lake.....	109
Reeves, A. M., cited....29, 56, 59, 60, 61, 64, 66, 68, 71, 75, 102, 103, 107, 129	129
Rehoboth Bay	47
Relics of Norse Visits, alleged.....43, 44, 45, 46, 48, 50, 51, 52	52
Resland of Edrisi.....	38
Reylla Island	19
Rhode Island	5, 45, 131, 133
Rhys, Dr. John, cited.....	12
Rice, wild	48, 56-58, 127, 135, 136, 138
Richmond County, Nova Scotia.....	112
Ringerike rune-stone	60, 160
Rink, H. J., cited.....33, 39, 43, 44, 91, 95, 109, 120, 140	140
Roanoke massacre	149
Robinson, Captain	144
Roc, The	15
Rockall, peak of	23
Roo, P. de, cited.....	14
Rosselli (Pedro, Petrus), map, considered.....	19
Rouen	74
Routes of crossing Atlantic.....	8, 9
Runic inscriptions (certain or apochryphal).....43, 44, 45, 46, 48, 50, 53	53
Rune stone	48, 50, 53
Ruysch map considered.....	33
Sable Island	156
Saga, Bear Island to Straumey.....101, 102	101, 102
experiences on and near Straumey.....102, 103	102, 103
expedition to Gulf of St. Lawrence.....104, 105	104, 105
expedition to Hóp	124-126
of Eric the Red....56, 64, 65, 68, 74, 110, 111, 119, 129, 143, 161, 162, 166	166
of Eric the Red analyzed.....78-81	78-81
Flateybook Wineland.....64, 65, 66, 68, 70, 71, 74, 116, 143, 162	162
of the Heath-slayings	31, 166
of Olaf Tryggvason	66, 74, 143
of Thorfinn Karlsefni....56, 64, 65, 66, 68, 74, 110, 111, 119, 129,	143, 157, 161, 162, 166
of Thorgisl	82
Thorhall the Hunter	103
Thorhall's verses and departure.....103	103
withdrawal from Wineland, and Markland episode.....105	105
Sagas.....2, 21, 56, 59, 64, 65, 66, 67, 68, 76, 77, 78, 79, 80, 81, 82, 85, 129	129
(general review)	76-78
Saghalien people	3, 147
Saint Andrews	52
Saint Anna	19
Saint Brandan	13-16, 159
Saint Croix, New Brunswick.....	122, 132

	PAGE
Saint George, New Brunswick.....	120
Saint John, New Brunswick.....	52
Saint John Island.....	109, 155, 156
Saint John River, New Brunswick.....	6, 118, 121
Saint Johns, Newfoundland.....	114
Saint Lawrence Basin.....	6, 92, 154
Saint Lawrence, Gulf of.....	5, 22, 23, 29, 37, 52, 57, 62, 63, 69, 109, 110, 111, 162, 170
Saint Lawrence River.....	6, 23, 121
Saint Malo.....	14, 15
Saint Mary's Bay.....	124
Saint Michael's Island.....	10
Saint Patrick.....	27
Saintsbury, George, mentioned.....	91
Sakonnet River or Strait.....	45, 136, 137
Salvagio (Saluaga) Island.....	19, 21
Santorem, Atlas of.....	19
Sargasso Sea.....	11
Satanaxio (Satanta), Island.....	19, 25, 26
Saxons.....	9
Schoolcraft, H. R., cited.....	44, 141, 157
Sculpture, Chinese and Cambodian.....	7
Sea-fishing.....	124
Sea of Darkness.....	18, 174
Sea-shores.....	4, 69, 80, 102, 113-116, 135, 137, 159, 160, 163, 164, 168
Seal Cove.....	119
Seals.....	125, 126, 162
Selim of Barbary.....	42
Settlements.....	5, 50, 58, 138, 169
Shaler, Nathaniel S., cited.....	5, 9, 114, 148
Shell-heaps.....	50
Shipbuilding, ancient.....	9
Ships of the Norsemen.....	100, 101, 108, 112, 159
Shoals.....	117, 136, 137
Shoshonean family.....	3, 5, 6
Sinclair, Earl.....	38
Siouan family.....	3, 5
Skeleton in armor.....	44
Skene, W. F., cited.....	12
Skin boats, Indian and Eskimo.....	139, 150-157
Skrellings or Skrælings.....	28, 54, 59, 87, 109, 127, 139, 141, 142, 143, 144, 145, 149, 151, 152, 154, 155, 157, 158, 161, 166
Slafter, Rev. Mr., cited.....	113
Slaves in Iceland.....	32
Sleds, Eskimo.....	139, 151
Slings, use of.....	139, 154-157
Smith, J. T., cited.....	54
Snæfellsness.....	110

	PAGE
Thorbrand Snorrason	49, 63, 155, 158
Thorfinn, Earl of the Orkneys.....	28, 29
Thorfinn Karlsefni	35, 48, 50, 54, 60, 97, 150, 151, 167, 169
discoveries by	63, 116, 170, 173, 174, 175
expedition to Hóp.....	124-139
genealogy of	85
marries Gudrid	70
Saga of	26, 56, 66, 124
voyage to Wineland interpreted.....	106-124
Thorgunna of Frodis-Water.....	88
Thorgunna of the Hebrides.....	88
Thorhall the Hunter.....	102, 103, 104, 110, 111, 122, 123, 124
Thori the Eastman.....	67, 69
Thorkell Gellison	28, 30, 58, 152, 165
Thorkel of Heriulfssness	82
Thorlac Runolfsson	59
Thorstein Ericsson	52, 69, 72, 83, 84, 170
Thorstein the Swarthy.....	83, 84
Thorvald Ericsson	28, 35, 49, 69, 70, 72, 129
Thor-worship	102, 122
Tidal measurements along American coast.....	116, 117, 118, 124, 137
Tierra del Fuego.....	156
Tinné Indians	109
Titicaca, Lake	156
Tiverton inscription	45
Todd's Point	118
Tools common to Scandinavia and N. E. America.....	51
Torfæus	74, 173
Toscanelli	9, 20
Tower of Norumbega.....	46
Trail, Catherine Parr, cited.....	135
Trumbull, J. H., cited.....	138
Turner on Eskimo stature.....	144
Tusket Islands	119, 126
Upernavik	143
Umiaks	153
Uniped	28, 105, 129, 130, 131, 162
Ungava	143
Uplift of coast.....	114
Usumacinta Valley	6
Utopia Lake	52
Vaca, Cabeza de.....	41
Vencidor, The	107
Venezuela	154
Verrazano.....	49, 57, 128, 132, 136, 138, 145
Vespucius	165, 174

	PAGE
Vifil	32, 67
Vigfusson, G., cited.....	28, 29, 30, 34, 58, 66, 75, 82
Viking ships	100
Vikings	98-100
Vinland (Wineland)	1, 4, 26, 29, 30, 35, 43, 46, 52, 53-70, 72, 74, 83, 87, 89, 101-104, 110-112, 123, 131, 132, 133, 142, 147, 159-173
Vinland hit Goða.....	166
Vinlandia	63
Virginia	4, 29, 47, 58, 74, 113, 132, 149
Vivaldi brothers, voyages of.....	11
Vlandoren	25
Volcanoes	15
Voyage of Bran.....	12
Voyage of Maelduin.....	12
Voyage of St. Brandan.....	13, 14, 15
Voyages of the Northmen.....	1, 43, 54, 58, 61, 64, 66, 70, 73, 75, 87-96, 112, 117, 124, 128, 129, 139, 142, 159, 161, 169, 173
Wallace, A. R.....	114
Wallace, D.	143
Wallace, James, cited.....	8, 177
Wallace, W. S.....	108
Walrus tusks, tribute in.....	39
Wampanoags of Rhode Island.....	45
Washington City	4, 48, 93
Watertown, Mass.	47
Weare, G. E., cited.....	155
Weimar Map	19
Weirs	47
Welsh Indians (alleged).....	35
Welsh navigation	37
West Indies	21
Westall	10
Whalers	2
Whales	121
Whitbourne, Richard	108, 109, 153
White Men's Land.....	27, 30, 165
Whitesark	67
Wicomico Indians, The	145, 146
"Wild rice" in America.....	48, 56-58, 127, 135, 136, 138
"Wild sea" border of Wineland.....	63
"Wild wheat"	94, 95
Wineland or Vinland....	1, 4, 26, 29, 30, 35, 43, 46, 52-70, 72, 74, 83, 87, 89, 101-104, 110-112, 123, 131, 132, 133, 142, 147, 159-173
Wineland Voyages	67, 131, 159, 160, 162, 167, 169
Wine-making without appliances.....	93
Winsor, Justin, cited.....	7, 109
Wonderstrands, the	69, 80, 102, 104, 112, 116
Wynken de Worde.....	13

	PAGE
Yahgans	156
Yarmouth, marked rocks at.....	52
Yukon Eskimo	144
Zea mays (Indian corn).....	95, 133
Zeno narrative	8, 17, 37, 150, 168
Zichmi of Frisland	38
Zimmer, Dr., cited.....	12
Zodiac signs in Mayan cities.....	7
Zuan da Napoli map.....	11, 16, 18



72375

-016



