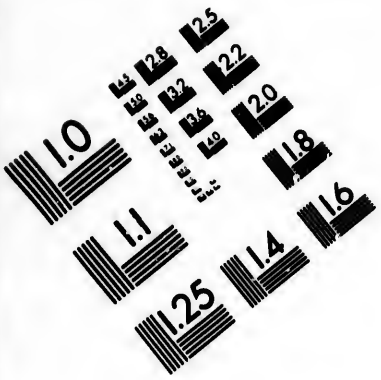

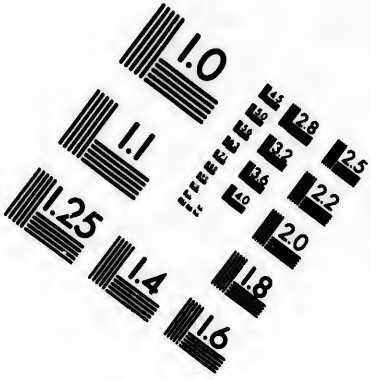

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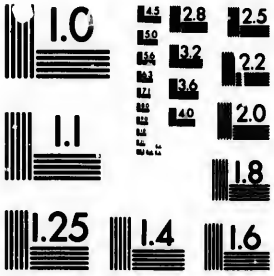

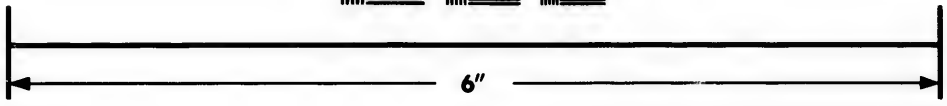

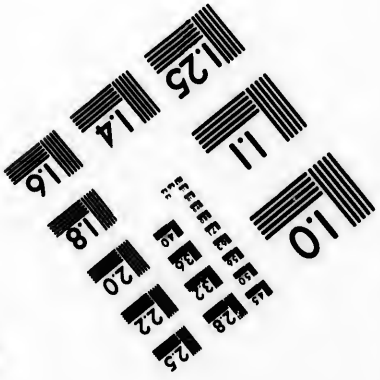

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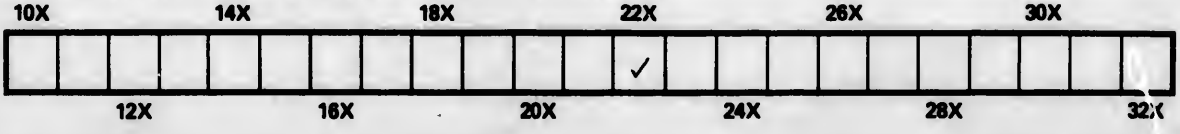

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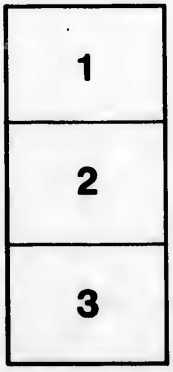

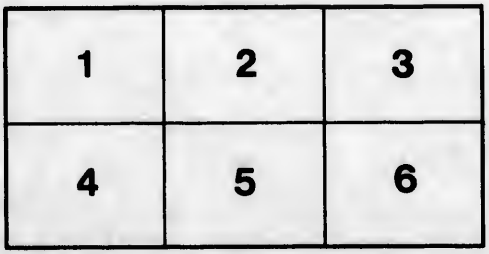

THE

VOYAGES OF THE CABOTS

LATEST PHASES OF THE CONTROVERSY

By SAMUEL EDWARD DAWSON, Lit. D. (Laval)

FROM THE TRANSACTIONS OF
THE ROYAL SOCIETY OF CANADA FOR 1897

ROY. SOC. CAN. N.S., VOL. III., SEC. II.

THE

VOYAGES OF THE CABOTS

LATEST PHASES OF THE CONTROVERSY

With the Compliments of the Author.

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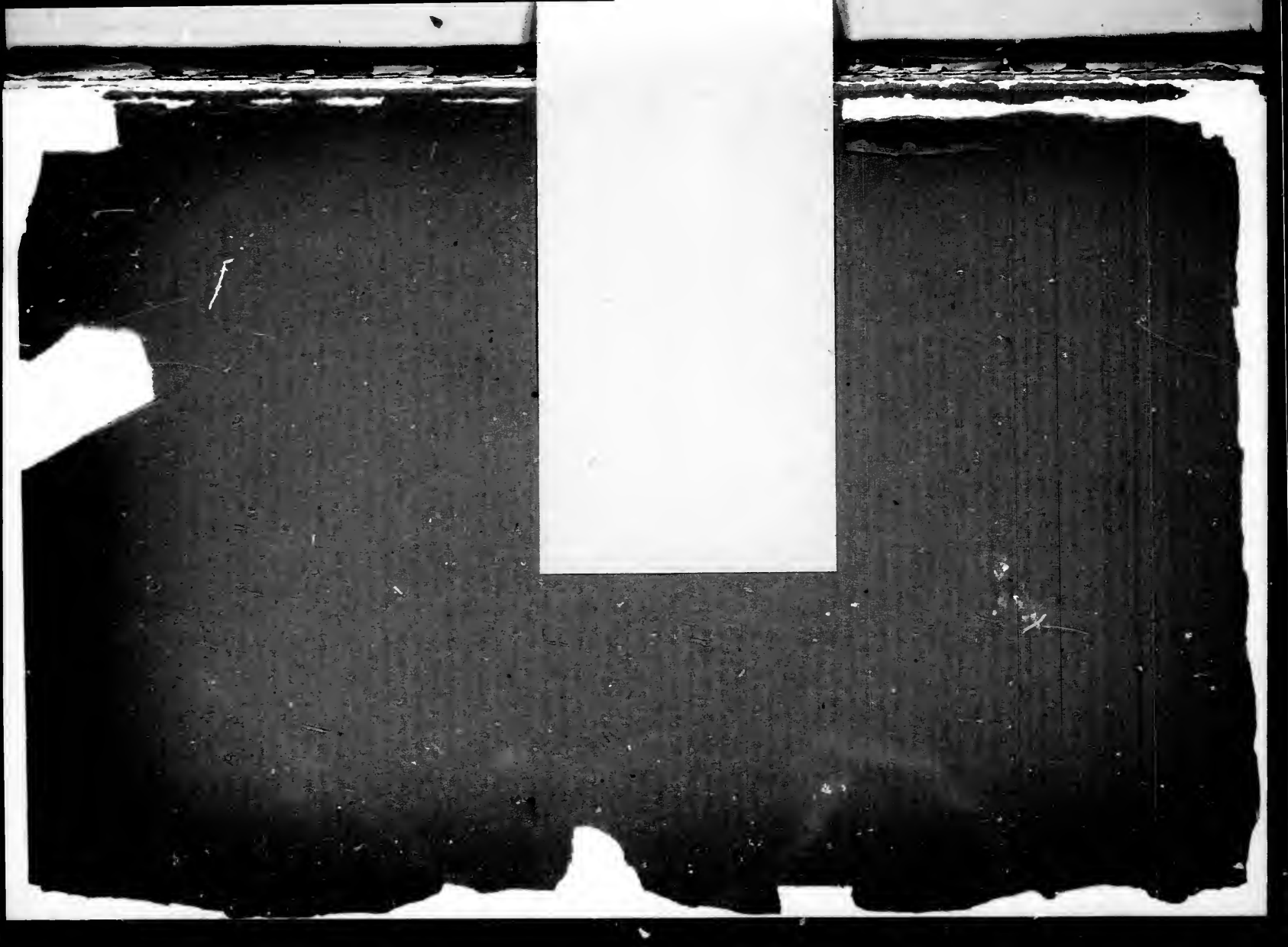

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VI.—*The Voyages of the Cabots.—Latest Phases of the Controversy.*

By SAMUEL EDWARD DAWSON, LIT.D. (Laval).

(Read June 23rd, 1897.)

1.—Preliminary.

The public commemoration of the four hundredth anniversary of the landing of John Cabot and of the planting of the English flag in the western world was an act of historical justice. The ceremonies which then occurred have, not only rescued a great name from the danger of utter oblivion, but have placed an event of momentous importance in its true historical perspective. The question was first publicly raised by the Rev. Dr. Harvey, of St. John's, Newfoundland, in a paper read before the Historical Society of Nova Scotia in 1893,[1] and the inception of the commemoration recently consummated will be found in the Proceedings of the Royal Society of Canada in 1894. A letter from Dr. Harvey is embodied in the report of the council, and the present writer contributed to the Transactions the results of a long and careful study of the whole subject. The progress of the movement may be followed in the Proceedings of 1896 (pp. xxiii.–xxxii.) and Transactions (sec. ii., p. 1), where a second paper may be found, and its completion is recorded in the Proceedings at the front of the present year's volume. It is reasonable to expect that now, after the celebration is over, public interest in the subject will begin to flag and, as the present writer, in his paper of 1894 (Trans. R.S.C.

vol. xii.), revived the discussion, it may not seem presumptuous if he attempts to summarize it to the present date. In doing so he would repeat that, like the landfall of Columbus, the landfall of Cabot can only be demonstrated to a very high degree of probability, for there has not been in either case any succeeding occupancy, as in the case of the Plymouth landing, to prove the landfall by that continuous oral testimony known as tradition; and here may be repeated, what will be seen from the report of the committee (Proceedings of 1896, p. xxx.), that there was never any intention to commit the corporate society to any expression of opinion as to the conflicting theories. The opinion of individual members of the committee was clearly stated; but the present writer, who drew up and moved the report, was careful to guard against any misconception on that point.

In studying the subject the reader should bear in mind that the landfall of the voyage of John Cabot in 1497 was first definitely located, in the year 1544, on the east coast of Cape Breton. That is not only the first locality specified (eighty years before the suggestion of any other), but it is the only one for which any positive evidence exists. Without anticipating the argument which must follow, the simple fact stands clearly out that the indication of the Cape Breton landfall rests upon the evidence of Sebastian Cabot reduced to graphic form in his lifetime. This had been forgotten and was rediscovered in 1843. In the meantime other theories had replaced it, and the present writer has done nothing beyond vindicating the first—the original—and the almost contemporary statement. In this present paper he has sought to place before the reader the means of forming for himself a reasoned opinion. For that purpose the two great maps round which the controversy has raged have been reproduced, and citations from the authorities referred to are made in the very words of their respective writers.

2.—The Question Opened in 1831.

Richard Biddle's work, published in 1831, marks an era in the history of the Cabot voyages. Up to that date there had, for a long time, existed in England, although not on the continent of Europe, a belief that the landfall of the voyage of 1497 was in Newfoundland. He shook that theory by his researches; in fact he was the first who applied modern critical methods to the subject, and the result among students was the general adoption of an opinion that the landfall was on Labrador north of the latitude of 53°—from 53° to 58°—on that part of the coast known as Northern Labrador. To that theory many scholars adhere to the present day. Other documentary evidence, however, unknown in Biddle's time came to light in succeeding years and largely influenced opinion, for it was of the nature of contemporary testimony. The result was a review

of the whole subject and the wide acceptance of the revived belief that the landfall was on Cape Breton island. These two schools alone occupied the field in the long controversy which arose; because, in fact, nothing was found to reinforce the opinion that the landfall was in Newfoundland, while no evidence of a positive nature had at any time been put forward to establish it. Very little, therefore, concerning Newfoundland appeared in the very extensive literature not only of books, but of reviews and magazines, in whose pages for the past forty years the controversy has been carried on.

3.—*Recent Revival of the Question.*

The discussion, revived in the Royal Society of Canada in 1894, was carried on in Newfoundland with singular acrimony. This was unexpected, because the question had previously been considered solely as a historical one. My own attention had been specially drawn to it in 1884, when, as local secretary to the British Association, I was called upon to prepare a "Handbook of the Dominion" for the meeting at Montreal. The secretary of the Geographical Section wrote me then a kind note to say that the landfall (Bonavista) indicated as that of the first voyage "was not in accord with the results of modern research," which placed it on the island of Cape Breton. My previous studies had been in other fields of Canadian history, but since that time, as opportunity offered, I went over the whole literature of the Cabot voyages and I was surprised to find that there was no positive historical evidence for the theory of a landfall at Bonavista and in my paper I thought it right to say so. It was not accurate, therefore, to inform a Newfoundland audience "that "the learned Dr. Dawson, as he himself declares, has only recently taken "up the study of the Cabot voyages."[2] What I did say was: "That for "many years, under the influence of current traditions and cursory read-"ing, I believed the landfall of John Cabot to have been in Newfound-"land; but a closer study of the original authorities led me to concur in "the view which places it at Cape Breton."[3] The impressions conveyed by these two sentences are not identical.

While, then, for more than sixty years, this question has been banal among scholars, I was not able to find in Dr. Justin Winsor's encyclopædic treasury of American historical research, or in Mr. Harrisse's numerous and exhaustive writings, any serious discussion of the Bonavista landfall; and I quickly discovered that the reason was because nothing in the original records suggested it. When Mr. Harrisse abandoned the Cape Breton theory of his first book,[4] and, in 1892,[5] adopted another, he passed over to Labrador as the only alternative.

When I wrote my first paper in 1894, Judge Prowse's "History of Newfoundland" had not been published, and, when it appeared, I searched

it in vain for positive evidence in support of Bonavista; for I thought that if there existed anything conclusive upon the point, the untiring research evident in that volume would have discovered it. I then wrote a second paper (Trans. R. S. C., 1896). A heated controversy succeeded in Newfoundland, but nothing new, save a comparatively recent map by Dupont (a cartographer of Dieppe in 1625), was elicited.

4.—Methods of the Discussion.

The discussion in Newfoundland (in which I took no part) assumed an adjectival form very unusual in the forum of historical inquiry. The use of such words as "senseless," "absurd," "preposterous," belongs to another age and to another arena. These adjectives prove nothing. Nor is it in the least degree conclusive to write of "the great Dr. Harvey" or "young Dr. Dawson." If, indeed, there were any one in Newfoundland old enough to remember having seen John Cabot land at Bonavista, such an argument might be satisfactory; but, as it is, considerations of that nature are irrelevant. The birthplaces of those who have written upon this subject have, moreover, no bearing on the question of the landfall of 1497. The question is broader than any colony — broader than the Dominion; for the attendance of many scholars from the United States showed that the people of that nation claim, and justly so, as much right, title and interest in the discovery of America as we do. It may be true, as Judge Prowse remarks, that he "prepared his history for his own "countrymen," [6] but, as I had ventured to point out, no argument can be founded upon that fact.

In like manner, Bishop Howley, writing in 1891, thus pleads his nationality: "As a Newfoundlander, reared in the tradition which has "been held from time immemorial, that Bonavista—happy sight—was "the landfall, I feel loath to give it up without a struggle." While such circumstances may not be the most favourable for impartial investigation, they may account for the warmth of the discussion and the magnitude of the adjectives employed. He adds, when discussing my papers: "I was not aware that he (Mr. Dawson) was born in Cape "Breton," [8] and Mr. Harrisse, catching the same idea, speaks of my papers as "patriotic." [9] Cape Breton is a good place to be born in, and no wonder John Cabot spoke so highly of it in its summer adornment and thought silk and brazil-wood might grow there. In a valuable paper on the ports and ocean routes of the North Atlantic, Capt. Smith, R.N.R., while discussing the projected line of fast ocean steamers, incidentally observes of Cape Breton that "some of the loveliest and most picturesque "places in any portion of the globe are to be found within its borders in "every direction." [10] As a matter of fact, however, I was not born there and the people who live there have not now, or at any previous time, manifested the slightest interest in this question.

In my second paper I said that I had two objects: One was to establish the landfall of 1497 and the other to dispel the fog that was gathering around our geographical history in the shape of a theory that Cabot had discovered and named Prince Edward Island. It is scarcely fair to make this out to mean that I admit that "I set out to prove" that Prince Edward's Island was not Cabot's St. John, and then to add that it was "a very unfavourable attitude for a dispassionate consideration of his-"torical evidence." [11] It is stating, in effect, that when I first undertook the inquiry I did so with a preconceived determination to prove a conclusion antecedently formed on other than historical grounds. I have made no such admission. My distinguished critic had, in writing his address, motives of a precisely similar kind, namely to establish a different landfall and to prove that Prince Edward Island *was* Cabot's St. John. There is no ground for assuming that, in the preliminary process of examining and weighing evidence, my mind was in any more unfavourable condition than that of any other writer who seeks to place the results of his studies before the world.

5.—Advocates of Cape Breton and Labrador.

In a criticism of Archbishop O'Brien's address Judge Prowse states that "the claim of Cape Breton is utterly untenable; opposed alike to "common sense and reason and all the contemporary records." [12] It is therefore only right to repeat that it was the first place ever mentioned as the landfall, and that a large number of very eminent men have held and advocated that very theory. It has, moreover, been the prevailing theory during the past forty years. I shall have space to mention only a few of those persons "willfully obstinate or lamentably ignorant of the "value of historical evidence," [13] who have held it. There was Mons. d'Avezac—foremost name in the Geographical Society of France—whose numerous writings on the geography and cartography of the Middle Ages are known and sought of all students. The study of his life was the North Atlantic and the discoveries of its early sailors and his influence pervades all the literature of the question. Then there was Dr. Charles Deane, of Boston, author of the treatise on the Cabot voyages in volume III. of Winsor's history and a life-long student of early American geography. He had made, at his own expense, twelve complete photographic copies of the Sebastian Cabot map of 1544 of the full size of the original and deposited them in twelve great libraries in the United States. Another "absurd" person is Elisée Réclus, author of the great work on geography republished by the Appletons,[14] and of many other important works—the greatest living French authority on geography. Among these persons "lamentably ignorant of historical evidence" was the late Dr. Justin Winsor, author of the "Narrative and Critical History of

America." (Alas! that I have to use the past tense in writing of the foremost scholar of the age in such questions as these.) Then we must count in Mr. Nicholls, the librarian of Bristol; Mr. J. Carson Brevoort, in his lifetime of the Astor library; Mr. J. F. Kidder, the Abbé Beaudoin and Mr. Edward Eggleston. I need go no further, for Dr. Winsor says that the Cape Breton theory "is commonly held now." [15] None of these were born in Cape Breton—and now I will add the name of one of our leading Canadian writers, Dr. J. G. Bourinot, who was born there.

But Judge Prowse states that "all intelligent minds" [16] concur in his view that Bonavista was the landfall. Those, therefore, who have advocated a landfall at Labrador must be classed as unintelligent. In this class we must then include Richard Biddle, the first student to apply critical methods to the subject; Baron Alexander von Humboldt, author of "Cosmos" and the "Examen Critique;" Dr. J. G. Kohl, the traveller and geographical scholar who traced the great series of American maps now at Washington; the late Henry Stevens—keenest of critics—whose wide range of knowledge was utilized by the British Museum authorities in collecting the American section of their great library; and Mr. Henry Harrisse, to whose invaluable writings we must constantly recur. Then there is Mr. John Boyd Thacher, of Albany, author of "The Continent of America, its discovery and its baptism," who favoured the society by attending its meeting at Halifax, and is to contribute a paper to the present volume. Among French Canadian authors of note are the Abbés Ferland and Laverdière, scholars worthy of a place in the front rank in such questions. Beyond all manner of doubt none of these gentlemen were born in Labrador. It is a serious thing to count them among persons destitute of intelligent minds. They are scholars, who probably have not seen Newfoundland; but it is wanting in precision for Judge Prowse to say even that all intelligent Newfoundlers are on his side." [17] Mr. J. P. Howley, the Director of the Geological Survey of Newfoundland, is a most intelligent and scientific Newfoundlander, yet he holds to Labrador; and the Rev. Dr. Harvey, whose works on the History and Physical Geography of Newfoundland are known and esteemed in England and the United States, adheres to Cape Breton. Bishop Howley has a landfall all to himself at Cape St. John, and has written to disprove the Bonavista theory. Saving Judge Prowse, these are the only writers in Newfoundland who have taken part in this discussion; and so, in the last analysis, Judge Prowse stands alone, among these four, for Cape Bonavista. In his own words: "Alone, like *Athanasius contra mundum*, "fighting for the creed of Christendom against the world." [18] The parallel is not exact, for Athanasius was fighting for the older faith.

There was, beyond doubt, a polemical advantage in conducting the controversy in Newfoundland as if the Cape Breton theory were new and advanced solely by the Rev. Dr. Harvey and myself. It permitted a

latitude of language which otherwise would have carried on its face its own refutation. In the mass of literature contributed to the press by Bishop Howley and by Judge Prowse, as well as in the long and carefully prepared lecture afterwards published by the former, there is no hint that they are attacking opinions long and widely held among scholars. This was scarcely fair to the people of Newfoundland who were entitled to a full presentation of the subject. Again, in the elaborate discussion of the question in his lecture, Bishop Howley makes allusions to Homer, Plato and Aristotle, to the Norsemen and Adam of Bremen and to many other authorities of an earlier age, as well as to many persons and matters incidentally connected with this inquiry; but no mention is made of Juan de La Cosa, the one sailor and cartographer who knew more about the question than anybody else save the two Cabots. No notice was taken of the existence of a map upon which the whole discussion was turning—a map which is the chief treasure of the Naval Museum of Madrid—which was published in facsimile as the contribution of Spanish scholarship to the Columbus celebration of 1492; for La Cosa was the companion of Columbus on his first and second voyages, pilot and master chart-maker, and owner of the admiral's flag-ship. This map is the first map containing any delineation of the new world. There are facsimiles of it in all the works of reference and all the writers on this question discuss it. It was, therefore, due to the intelligent audience of Newfoundlanders who listened to that long lecture to inform them of this cardinal point in the discussion, in order that they might be able to arrive at a reasoned opinion based on all the evidence.

Of the Newfoundlanders then who took part in this discussion two have written on behalf of a landfall on the island—one at Cape St. John, the other at Cape Bonavista and each has, in effect, confuted the other. Bishop Howley says: "I believe that I am the only person who has fixed "upon Cape St. John as the landfall. I may say that this is not, strictly "speaking, a new theory. It is included in the northern coast of New-"foundland. It is only a question of a very few miles between it and "Bonavista; an absolutely trifling distance when the whole breadth of "the Atlantic ocean is considered."[19] There is an element of inconsistency in the above sentence, for if he first launched the theory it must be new; besides, on examining the chart, it will appear that two of the widest bays on the coast intervene between the two points in question. Measuring from the lighthouses: From Cape St. John across Notre Dame bay to Cape Fogo is 60 miles; from Cape Fogo along the coast in a straight line to Cape Freels is 30 miles, and across Bonavista Bay, from Cape Freels to Cape Bonavista, is 39 miles. In all, the distance is 129 nautical or 149 English miles. This is too long to be considered as an "absolutely trifling distance" in any relation. Without, however, stopping to discuss this, it may well be asked, what has become of the

" immemorial tradition of Bonavista—happy sight," the glad cry of the storm-tossed mariners? What shall we say of Mason's map? of Dupont's map? and what of Keels, "where the first keel grated on the "shingle?" and of King's cove—"the royal port, where the royal standard was hoisted?"

6.—The Cape St. John Landfall.

It will be convenient to pause here and ascertain how, according to this new theory, John Cabot got to Greenland on his way to make a landfall at Cape St. John.

In the early part of his lecture the bishop treats of the Norse voyages to Greenland and Vinland. I pass over statements concerning these voyages, for they are not now in question, merely observing that if the Northmen of Greenland discovered America in A.D. 1000 it is no proof that a vessel from Bristol had to go to Greenland to do the same thing in 1497. "The Norsemen of Iceland," he continues, "never altogether lost "their connection with these western lands, and up to the time of Columbus and Cabot, Greenland was still inhabited, A.D. 1492" (p. 14). At that time John Cabot "was a man of influence in the commercial world of Bristol." "It can scarcely be doubted then that he made several voyages to "Iceland, and that he knew well the course to that island (p. 6). He was "well acquainted with the position of Greenland from his intercourse with "the Icelanders" (pp. 13–14). Concerning these statements I would only remark that, while Cabot could easily have heard from the Bristol merchants trading to Iceland much concerning that island, there is no record of his having visited it, and that, instead of being a man of influence, it is expressly stated by his countryman, Soncino who knew him, that he, "being a foreigner and poor, would not have been believed" if the crew (on the first voyage) had not been Englishmen, and testified that what he said was the truth. In this way, however, the lecturer proved that John Cabot was well acquainted with Greenland. Now, as John Cabot's destination was Zipango and Cathay and the latitudes of these places were laid down for him on Behaim's globe and Toscanelli's chart between the parallels of 35° and 50° directly west of Europe, it is evident that any knowledge of Greenland he might have possessed would have prevented him from going in that direction and would have deterred him from approaching its ice-laden waters in the month of May to search for a region of spices and brazil-wood.

The minute and protracted examination of all surviving records and notices of the Cabot voyages has, during the last few years, resulted in a general consensus of opinion that there are two groups of documents which should be carefully distinguished. For convenience sake let them be called groups A and B. Group A consists of contemporary documents,

and group B of reports of conversations at second-hand and notices by writers long after the event. Group A is concerned solely with the first voyage which has just been commemorated. Together with his brothers, Lewis and Sancius, Sebastian is once mentioned in the letters-patent, but there is no indication of any of the family save John Cabot having been on the voyage; nor is there in any other document of group A the least mention of any of them. On the other hand, in group B there is not the remotest trace of John Cabot ever having been concerned in a voyage to the west. The conversations and incidents related refer solely to Sebastian. John Cabot is absolutely non-existent in them, and the son is the sole hero. Inasmuch as it has been demonstrated that it was John who made the first voyage, it is now the generally received opinion that group B refers to the second voyage, and many think that Sebastian did not sail in the first expedition. In my first paper I endeavoured to explain this, as regards Sebastian, by showing that the circumstances related in group B refer to the second voyage and that they are in the main true; saving the suppression of his father's share in the adventure and the absence of mention of any voyage prior to the one he was speaking of. In my paper of 1894 I separated these documents and considered them under distinct headings. That was one of the essential points in my argument and under a separate heading I contrasted them by the strongest possible antitheses. I wrote: "The course of the first voyage was south "of Ireland; then for a while north and afterwards west, with the pole "star on the right hand. The course of the second, until land was seen, "was north, into northern seas, towards the north pole, in the direction "of Iceland, to the Cape of Labrador, at 58° north latitude." The references showed that I was quoting these phrases from the documents in each respective class. Bishop Howley charges me with confusion and inaccuracy because, he adds, "we know the general trend of the second "voyage was the same as the first." Now that is just what we do not know; because we have no means of knowing save from the records which I was quoting in their very language and, while group A makes no mention of ice and indicates a pleasant and temperate climate, group B is characterized by repeated mention of ice in all the shapes it is met with on the coast of Labrador to the present day. There is no confusion in my sentence above quoted. It is one member of a strong antithetical statement extending over a page and each item is a quotation from its respective group of documents. That this grouping is correct is manifest also by the fact that Peter Martyr and Gomara give Cabot's experience with ice and his coasting voyage south to 38° as characteristic of one and the same voyage and thus the possibility is excluded of that having been the voyage which was accomplished in 93 days.

It must be carefully noted that it was the voyage of 1497 and no other which was the subject of commemoration. The bishop truly re-

marks that none of the four letters which undoubtedly refer to the first voyage have any mention of latitude. That, in fact, is another distinguishing mark of class A. They speak of soil, climate and vegetable productions, but no latitude is specified. He then states that he had previously said "that the subsequent writers, Gomara and Peter Martyr and others, "when they mention latitude, were speaking expressly of the second voy-"age."[20] "If this be not the case," he remarks, "they were confound-"ing the two voyages." He does not assert that, but adds, "Whatever "may be thought of this it does not affect the present argument." Then taking the admitted fact that Cabot turned at first to the north, he adds to it "that there is no reason to suppose that he went north on the second "voyage" (which is clearly in the teeth of the writers above mentioned), and he concludes, "Hence, when these writers tell us that he went north "to a certain point, we are safe in applying the statement to the first "voyage, even though the writer himself may have been confounding "the two voyages." In other words, that the latitudes characteristic of the second voyage may safely be transferred to the first. In this way the whole of the documents are bunched up together.

With such a canon of criticism it is no wonder that the bishop complains of "bewildering confusion" having arisen. It must result when the statements cited are wrested away from the plain intent of the writers to fit into the requirements of an elaborate theory. Then when it is desired to get Cabot to Greenland, we are told his reason for going there was "that he wished to keep as long as possible on the well-known "and well-beaten track to Iceland before trusting himself to the vast un-"known regions of the west."[21] Therefore he sailed north until he reached latitude 60°, when he turned west, for "his object was (p. 17) to reach "Cape Farewell in Greenland." Wanting to go west, he went north because he knew the way! And again, "It (p. 15) cannot then be doubted "for a moment that Cabot knew of this land (Greenland), and that it "would be necessary for him to make the southern point of it Cape "Farewell, and doubling this point bear away towards the northwest. "This is what he tried to do"—and so he got to Greenland. Because he knew the way he coasted northward along the west of Ireland and Scotland (p. 15) to St. Kilda's, and then turned west to Cape Farewell. But he could not have known the way or he would not have gone west of Ireland. The course from Bristol for St. Kilda's was *inside* of Ireland and through the Irish channel and every mile he sailed to or beyond Cape Clear was a mile lost. The very fact that he went south of Ireland proves that his intended course was not north but west. The more he knew about Iceland and Greenland the less he would be disposed to associate them with Cathay and Zipango.

Keeping in mind that the question is of the first voyage and of John Cabot, we shall soon see where this canon of liberty of selection and

adaptation has led. Take a paragraph on p. 13: "Again we know from "a conversation reported by Ramusio that Cabot" (that was Sebastian) "was acquainted with the principle of great circle sailing, and claimed "that his course to the northwest would open India by a shorter route "than the westerly run of Columbus. Again: As we have already "remarked, he" (that was John Cabot) "had learned from the Arabian "merchants that the lands of Cathay and Zipango were to be found "towards the northwest."[22] Here the father and son are confounded together, and, moreover, Cathay might well be northwest (i.e., northeast) to the Arabian merchants near Mecca in lat. 21° 28′, and not to Bristol merchants in lat. 51° 30′, who were already 30° to the north of Mecca.

At p. 25 is another instance. We have seen that the statements as to latitude of Gomara and Peter Martyr were taken from the context in group B and applied to the first voyage, but here they are taken in again and applied to the second, where in truth they belong. Cabot is here thought to have entered Hudson's strait and passed up Fox channel as far as 66° or 67½°, within the Arctic circle. Then, in the same paragraph (p. 26), the information from Ramusio and Richard Eden is brought in, about the discontented sailors, belonging to a third voyage which some think occurred in 1517, but which, in the opinion of many students, never occurred at all. The main thesis of the lecture is to show that John Cabot, with the open ocean before him to the west, knowing of no obstacle, and seeking Cathay, known to be in latitude 35° to 50° on the east coast of Asia, sailed to Cape Farewell in Greenland, and having reached it (p. 21) early in June, "passed on in search of the northwest "passage."

But having got to Greenland, and starting off as explained above to the northwest, how did Cabot light upon Cape St. John? He was going northwest and he arrives far to the southwest. We find that having arrived at Cape Farewell "he made no delay" (p. 21). "He saw (p. 21) "that it was bleak and uninviting even then, early in June," and "he "made no landfall." That, however, was the first land seen after a voyage of 1,500 miles and, therefore, *was* his landfall in the plain and accepted meaning of the word.

Following the lecture we have traced Cabot's course to Cape Farewell, and now we learn that from that point "we have no reliable state- "ment as to the exact course steered by Cabot when he turned his prow "westward ho! His own log being lost, we must trust to the statements "of men such as Soncino and De Ayala, who, not being nautical men, "were not particular to a point or two."[23] Here one may reasonably ask, what "reliable statement" has the bishop been following which has brought Cabot to Cape Farewell, in Greenland, early in June and then deserted him? And, in truth, the lecturer is not satisfied in his own mind. The confidence which traced Cabot 390 miles north to St. Kilda's, and

1,135 miles west to Greenland ceases, for the course is sometimes said to be northwest and sometimes west. Measuring the distances on the chart it appears that a northwest course would take him up Davis strait into Cumberland sound; westward was Cape Chidley, 630 miles away; southwest was Labrador, the nearest points of which Indian Harbour and Indian Tickle were each respectively 545 and 550 miles distant; and, southwest by south, 715 miles away, was Cape St. John in Newfoundland, where he had to find his appointed landfall in making a westerly course. The problem was difficult, but the Arctic current comes in like a *Deus ex machina* and drops him down on the cape required. This is how it came about. At Greenland "he met, of course, the great Labra-"dor current" (p. 21)—"the distance from Greenland to Labrador is "about 800 miles. If we allow Cabot six days to make that distance, at "140 miles a day, more or less, and if we allow him to drift southwest-"wards, by force of the Labrador current, at the rate of 50 miles in 24 "hours, that would bring him southward about 300 miles before striking "land. In that case he would make the landfall on the Labrador coast "about latitude 55°, or in the neighbourhood of Byron bay. He may, "however, have been carried farther south and struck on the Newfound-"land coast." [24]

Several objections present themselves. The distances are erroneously given. Cape Chidley is only 630 miles west of Cape Farewell, and the coast of Labrador extends eastwards through ten degrees of longitude, or half the whole westerly course; therefore he could not have missed it, especially when sailing at the rate of 140 miles a day. Thus, from Cape Farewell, on a westerly course, he would have crossed the meridian of Cape St. John at a distance of only 345 miles west; and as Cape Farewell is in 60°, and Cape St. John is in 50° north latitude, he would have to drop 600 miles of latitude while making only 345 miles of west longitude—a very immoderate use of the Arctic current. And, moreover, the extreme rate of the Labrador current is not two miles, but one mile and a half an hour. I certainly will not dispute the lecturer's conclusion, and will cheerfully admit that *if* Cabot went to Greenland, and *if* the current had been one-third swifter, and *if* the distance to Labrador had been one-third longer and the distance to Newfoundland one-half shorter, the claims of Cape Breton would be "utterly out of court." I would, however, beg the student to observe that the Arctic current does not stop short at Cape St. John, and a vessel will drift as easily south *from* Cape St. John as south *to* it. I shall return to the current later on.

Having now got John Cabot to Cape St. John, it will be in order to consider the marks of identification which point it out as a landfall. We learn that "it is (p. 36) a high and prominent headland" "fixed on by the "Treaty of Utrecht, A.D. 1713, as the limit of the French treaty rights." This is inaccurate, and, moreover, has no bearing on the landfall of 1497.

If it be relevant it will prove the claim of Bonavista, for that was the spot fixed by the Treaty of Utrecht.[25] We are then informed that it is, as an island, a very early name on the maps, and that such transfers of names were "quite a customary thing" in those days. It is no doubt a fact that the name occurs 26 years before that of Bonavista, and, as Bishop Howley observes, there is no island at Bonavista lying "before "the land." There are two islands there, but they are small, and are inside the cape. He then quotes (p. 37) Cabot's map of 1544 to prove that there was "a large island" marking the landfall. He forgets, however, that he is quoting from the printed legends on the map he saw at Paris, and which he pronounces to be of "very recent date,"[26] and that, elsewhere, in another argument (on page 22), he had quoted from Clement Adams's copy of the map to show that it was "a small island." Without stopping to reconcile this contradiction, he goes on to point out that near Cape St. John is an island with the remarkable name of "New World island," and another called Fogo island—an old name on the maps. These islands are, it must be observed however, on the opposite side of Notre Dame bay and adjacent to the opposite headland, forty miles from Cape St. John. Either island might answer, for neither of them is very large or very small. There is no lack of islands, for the bays on the east coast of Newfoundland are clustered with islands. Finally, there is a "tradition" here also, for we learn that "it is stated in the chronicle "that he (Verazzano) came to the land formerly [i.e., in 1497] discovered "by Cabot, which is in latitude 50°"—"the exact latitude of Cape St. "John." This shows, we are told, "that at that early period the tradi- "tion was in favour of Cape St. John as the site of the landfall" (p. 38). This statement occurs again on page 36, with particulars which enable the reference to be identified. He says of Verazzano, that he coasted "north until he came to the land, which in times past [viz., 1497] was dis- "covered by the Britons [viz., Cabot], which is in latitude 50° north." The passage is thus seen to be a quotation from Verazzano's report to the King of France, Francis I., excepting the explanatory words which the bishop has inclosed in brackets. The reader would naturally infer that the Britons are the English under Cabot—a manifest error, for Hakluyt, whose translation is used, meant Bretons, not English, and throughout his work (as Eden also does) he spells the word *Briton* (sometimes Britayne), as, for one instance out of many, in Drake's voyage to the Isle of Ramea he speaks of the "Britons of Saint Malo and the Baskes of Saint "John de Luz." Verazzano was sailing on the coast to create a claim for France, and he was pointing out to the king that the land in question had been discovered by Bretons, subjects of France. The French always disputed the English claim on the strength of this very voyage. In Hakluyt Cape Breton is always spelled Cape Briton. The bishop has inadvertently disproved his own case.

In illustration of the preceding remarks I insert here (fig. 1) a reconstruction of Toscanelli's chart, made from materials existing in his letters to Columbus, and in other authorities, just preceding the discovery of America. It is found in Nordenskiold, Winsor, Kretschmer, Markham and other works of authority. The same information is on Martin Behaim's globe of 1492. What is there on this map, embodying as it does the belief of that period, to suggest a northwest passage? Why passage? The way was over an open ocean, there was nothing to pass round. That was the information patent to all sailors at the time.

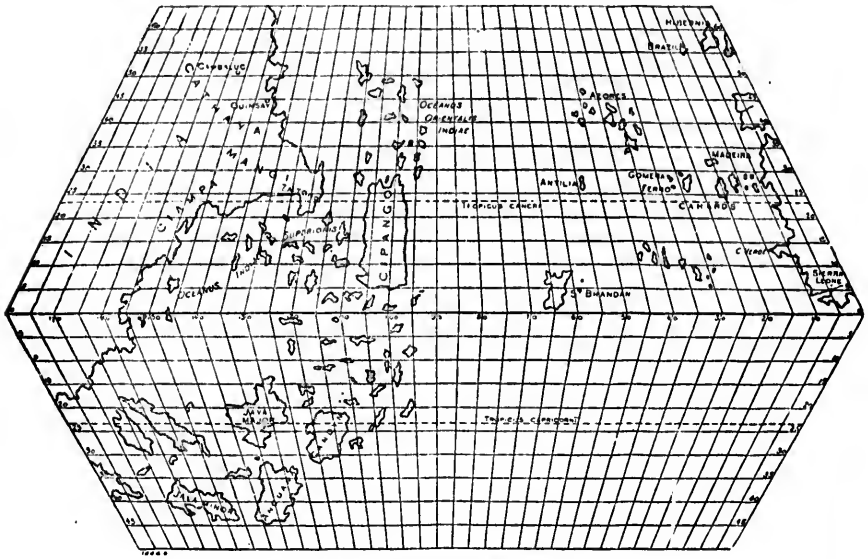


FIG. 1.—TOSCANELLI'S MAP.

7.—*Labrador.*

The theory of a landfall at Labrador has not gained ground of late years. Sir Clements Markham, in his recent paper, declares that "Labrador must be rejected as out of the question." Judge Prowse is equally decided. He says: "The great cod fishery does not begin until "July, and its bleak and rugged shores could never be described as "wooded, or beautiful and pleasant."[27] Not one of those who argue for Labrador has ever spoken of its attractiveness and fertility. Archbishop O'Brien, in his presidential address, "inexorably excludes Labrador, Cape St. John and Bonavista" by a very ingenious and original argument, drawn from Soncino's reference to the "country of the Tanais."

It will not do, however, to allow the case for Cape Breton to rest upon that argument, for it is founded upon a misunderstanding of the conditions of the problem. The disputants in this controversy are not nearly so ignorant of ancient and mediæval cartography as the archbishop supposes, and while essaying to bar the main entrance of the fortress, he is letting his opponents in by the postern. To avoid confusion I have referred to Appendix E the consideration of this point, and would merely observe that if the archbishop's hypothesis were sound it would inexorably exclude not Labrador and Newfoundland, but Cape Breton and Newfoundland, and the theory he has laboured to construct would be destroyed by striking away its fundamental proposition.

Although Bishop Howley advocates a landfall at Cape St. John, he has a kindly feeling for both Bonavista and Labrador. It is only Cape Breton—the first recorded landfall—which he cannot abide. Thus he writes: "As a matter of fact there are immense forests on Labrador, "where timber is found much larger than anything of the kind in New- "foundland or Cape Breton." If this really be intended to apply to the *coast* of Labrador, one can only wonder and pass on. It is no doubt the fact that at the heads of such deep inlets as Sandwich bay and Hamilton inlet, in sheltered places, large firs may be found, and recent explorations have revealed in the valleys of the interior the spruce and poplar of the sub-arctic forest; but at 58° is the northern limit of the growth of trees, and throughout the peninsula north of 54° reindeer moss replaces the scanty and dwarfed tree growth on all open situations where there may be soil over the rock. In both my previous papers I have given the testimony of sailors, from the time of Jacques Cartier to the present day, as to what the coast of Labrador really is, and must from the very nature of things ever be; and I would especially ask the reader to consider the evidence in Appendix A to my paper of 1896 (R. S. C., Vol. II., New Series). The coast in question is the Atlantic coast from 53° north to Cape Chidley, against which the Arctic current pours the whole ice-discharge of the Polar ocean. Here is a description, from the Sailing Directions of the British Admiralty, from Cape St. Lewis, at 52°, southward: "The coast is composed of bare granite hills * * * that navigation "is difficult is due to the frequent fogs, the heavy easterly swell rolled in "from the Atlantic, and the icebergs which are almost always drifting "along with the current from the northward." [2] Farther on we read: "The climate on this coast is extremely severe, the mean temperature of "the year being below freezing point;" and at page 16: "Field ice remains "in the vicinity of Greedy harbour until about the middle of July, soon "after which the fishing fleet are enabled to sail northward." [2] Greedy island is at 53° 40′. Of the coast northwards we read again (p. 381): "Icebergs may be encountered all the year round, but are most numer- "ous from June till August, when occasionally they are found in im-

"mense numbers, consisting often of huge cubes, and not, as a rule, pre-
"senting the picturesque shapes they assume when seen farther south at
"a later date." That is about the time when Mr. Harrisse pictures the little "Matthew" sailing leisurely along to Cape Chidley and back, the crew hunting on shore and replenishing their stock of provisions.[31] The picture is idyllic, but here is the reality copied from a letter by the correspondent in Newfoundland of a large Toronto daily newspaper. It is dated September 9th, 1896: "This season the ice blockade, owing to
"inshore winds, remained on the coast (i.e., the Labrador coast) all the
"month of July, preventing hundreds of crafts from reaching their
"destination and hundreds of others from pursuing their operations, be-
"cause the ice chilled the water and kept the fish out in the deeper
"leads, so that it was not till the first week in August that any quan-
"tities of fish really began to be taken."[32] From the table in Appendix G to my second paper, it will be seen that at latitude 54° the fish, in favourable seasons, strike the coast on July 15, and from 56° to 53° the date is from July 28th to August 15th The weight of the argument against Labrador is that, on the first voyage, no mention whatever is made of ice, and, on the second, all the narratives record it as a new phenomenon; for the sailors of those days, accustomed to the eastern Atlantic, had experienced nothing like it before, because the west coast of Europe is kept clear of ice by the Gulf stream. I have referred to Appendix A some farther notes upon the coast of Labrador, and I trust that students of this subject will read them and keep well in mind that the Labrador landfall is supposed by those who support it to have been somewhere between Sandwich bay and Cape Chidley, that is from 53° 30′ to 60° north latitude. I invite attention to the fact that the statements here and in Appendix A are quotations, and that those who deny them are contradicting not me, but sailors who are familiar with the coast, and who wrote without reference to this controversy. They wrote from actual knowledge and not with subjective views of what ought to be there to make a suitable landfall.

While it seemed to me that I had demonstrated the impossibility of such a landfall as John Cabot describes having occurred on June 24th on any part of the Labrador coast, Mr. Harrisse urges, both in his last book, "John Cabot," and in his "Forum" article, that "the date of the land-
"fall must be set back into May, or, at least, two or three weeks before
"June 24th, to allow Cabot the necessary time to get back to Bristol." He thinks that the crew "rested awhile and devoted some time to refit
"or repair their diminutive craft, as well as to take in wood and water
"and renew the stock of victuals, which could only be done by hunting
"and salting game on the mainland."[33]

In my paper of 1896 I fell into an error, which Mr. Harrisse has very properly pointed out. At p. 55 of his "John Cabot," in connection

with Soncino's account of the quantity of fish found by Cabot, he says "the spot noted for its amazing quantity is the vicinity of Cape Chudleigh, "which the above details and other reasons seem to indicate as the place "visited by John Cabot in 1497." I too hastily assumed that the visit was the landfall, but Mr. Harrisse indicated his meaning more indefinitely at p. 110, where he says, "the critic must place the landfall on some point "of the north coast of Labrador, probably between Sandwich bay and "Cape Chudleigh." I did not observe until after my paper was printed that there was in the volume a map showing a landfall at Sandwich bay, and a coasting voyage north to Cape Chidley and a return south along the coast to Newfoundland. I would, however, remark that anywhere from Sandwich bay north, June 24 or July 3 is too early for fish. Greedy harbour is close to Sandwich bay—a little south of it—and there, as pointed out in the Labrador Pilot, quoted *ante* p. 153, "Field ice remains "until about the middle of July, soon after which the fishing fleet are "enabled to sail north," so that if John Cabot could have got there "two "or three weeks before June 24th," which is Mr. Harrisse's last theory, or even on June 24 or July 3, there would have been no fish, for according to the table given in Appendix G of my paper of 1894, the fish do not strike in at that latitude until about July 15. To suppose the little "Matthew" was plying up and down that coast for game at that season of the year is more difficult than to suppose that by some happy chance she got through the ice at some one point, even near Cape Chidley, and got quickly away again.

It has been pointed out that, in the year 1497, the calendar had not been reformed, and that June 24th was really much later. The exact retardation of the calendar in that year was nine days, and translated into new style it would be July 3rd, but the conditions are very little altered and the objections remain insuperable still. They are not based on a narrow margin of a few days, for an exceptional season might then be supposed to cover the case. The date of the clearing of the ice from the coast north of latitude 53° is much later, as the table of the arrival of the cod will show, and the extracts given here and in Appendix A will substantiate.

After the very full details in my previous papers, and especially in Appendices A and G of the paper of 1896, it is unnecessary to dwell upon the subject longer. And now I would ask the candid reader whether it is probable that John Cabot, having made his landfall on the coast of Atlantic Labrador, and coasted it to Hudson's strait, would have dared to take there the next year a large expedition to settle that country, and with assorted stocks of caps, cloths, laces and miscellaneous goods for the inhabitants[33]? A land where there are now no settlers but the Moravian Brethren and the Esquimaux round their missions! I need not inquire why, when the second expedition steered north and went to Labrador,

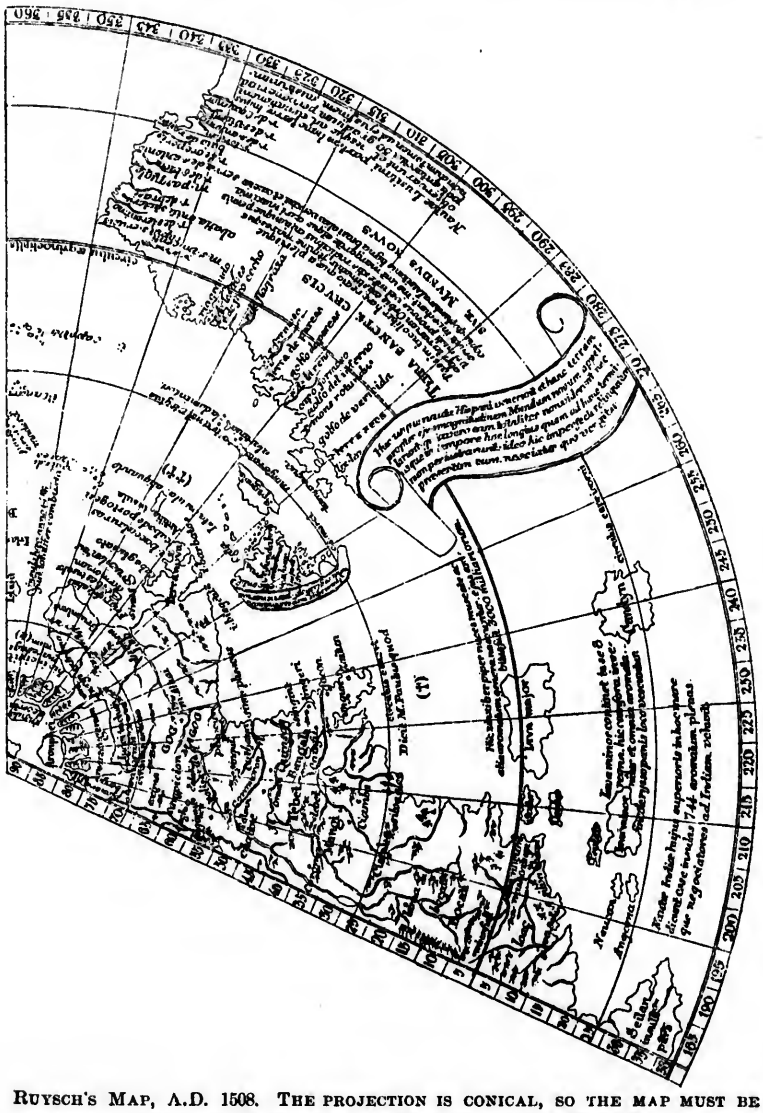
the Cabot family, after its return, fell into the background, and the letters patent were cancelled by the issue of new letters in the year 1501 to others. Yet of this formidable coast John Cabot is supposed to have reported that "it had an excellent climate where silk and dye-woods "grow." I can understand that in Cape Breton in the warm, sunny days of summer (Appendix D) a man might think anything possible in so pleasant a country, but if John Cabot *did* see Northern Labrador and said that about it, Sebastian did not inherit the full power of the paternal mendacity.

8.—The Point of Westward Departure.

It is evident from Soncino's second letter that John Cabot made some northing after he passed the southern point of Ireland, and there is no mention in the papers of group A of how far he went north. Archbishop O'Brien thinks he made only a slight deflection to the north, but does not dwell upon the point, for he recognizes that the course could only be west. Sir Clements Markham supposes he was driven north by stress of weather. It is possible that he went north far enough to get his true course in sailing westerly upon a globe, as is usually done to the present day.[34] Markham says, with great reason, "His course is clearly "pointed out by the object of his voyage, which was, like that of Colum- "bus, to reach the territory of the Grand Khan. The course of Colum- "bus was west, and that of John Cabot must also have been west."[35] This was also manifestly the opinion of both the Spanish ambassadors. Puebla wrote that "a person like Columbus had come to England to "persuade the king to enter into an undertaking like that of the Indies," and later, when Cabot told them where he had been and the direction he had sailed, they both reported that the land he had found was already in the possession of Spain. The Italian correspondents reported that it was in the territory of the Grand Khan. The latitude of that country was known to Toscanelli and Behaim from the reports of Marco Polo and other travellers. A reference to the map of Toscanelli, *ante* p. 152, will show that Cambaluc, the capital city of the Grand Khan, is in lat. 50°. It is Marco Polo's name for Pekin (which is really in lat. 40°), and Quinsay is laid down in lat. 45°. Columbus sailed south to Gomera to get upon the parallel of Zipango and Mangi, which he gave out he had found, and Cabot, by sailing west from the English channel, would strike the territory near the northern capital of the Grand Khan. These considerations all point to a westerly course. It was not Iceland Cabot promised to King Henry VII. The Bristol merchants knew more about Iceland than Cabot did. It was the land of silks, spices and brazil-wood he promised and thought he too had found.

Obscure though this point may be, we are not left without a guide. The latitude of 53°, which I assumed to be the point of departure, is

supported by evidence nearly contemporary and by a man who made the voyage at that time. In the Ptolemy of 1508 is a supplementary map by John Ruysch. I give here a cut of the western half of this map, for it is a map of the world on a conical projection. It is the first engraved



RUYSCH'S MAP, A.D. 1508. THE PROJECTION IS CONICAL, SO THE MAP MUST BE TURNED TO BRING THE APEX TO THE NORTH—(FROM LELEWEL).

map containing a delineation of any part of the new world. The editor of this edition of Ptolemy was Marcus Beneventanus, who published a commentary with it. Mr. Harrisse, without whom one cannot do anything in this inquiry, gives the following translation of the part referring to this map[30]:

"Johannes Ruysch, who, in my opinion, is the most competent geo-
"grapher, and the one who has best depicted the world, and upon whom
"we rely in this little work, *says he has navigated from the southern part*
"*of England to 53° north latitude, and that he has sailed in the latter*
"*parallel as far as the eastern coasts.*"

Referring to this, Bishop Howley (p. 20) thinks that 53° is a typographical error, but, as Ruysch, like Cabot, said nothing about going to Greenland, there is no reason to assume the existence of an error. We cannot correct his own statement and send him on so circuitous a route to suit a theory of where he ought to have gone. There was in the crew of the "Matthew" a Burgundian, and Harrisse, Deane, Winsor and many others believe that Ruysch was the man. These were my reasons for fixing on 53° N. as the point where Cabot turned west. As before explained, it is not mathematical proof, but it amounts to a very high degree of probability, and, moreover, nothing of so positive a nature can be shown for any other theory.

9.— Variation of the Compass.

Capt. Fox, U.S.N., in his careful study of the "Landfall of Columbus," invites "the student to take notice that, notwithstanding the
"observations in regard to the westerly variation, on the 13th, 17th and
"30th of September the admiral did not alter his courses to make true
"west, but that he held firmly to west by compass." To this I would add the remarks of another scientific navigator and a life-long sailor on these northern seas — Samuel Champlain. He wrote: "The early
"navigators who sailed to parts of New France on the west, thought
"they would not be more astray in going thither than when going to
"the Azores, or other places near France, where the variation is almost
"insensible in navigation, and where the pilots have no other compass
"than those of France set to northeast, and representing the true meri-
"dian there. And so, when sailing continually towards the west and
"wishing to keep on a certain latitude, they would shape their course
"straight towards the west by their compass, thinking they were sailing
"on the parallel they wished to go upon, but continuing on in a straight
"line and not in a circle, like all parallel lines on the globe. After a
"long distance, when in the sight of land, they sometimes found them-
"selves three, four or five degrees more southerly than necessary, and
"thus they were deceived in their latitude and reckoning."[31] These two sailors will answer those who hold either that variation makes no matter,

or that it is about the same now as it was in 1492. The discussion concerning the landfall of Columbus was carried on chiefly by sailors, who knew what an essential condition the variation of the compass is in all nautical questions. It is amazing that any one should consider it to be merely of "academic interest" and "not germane" to the question.

Strange though it may appear, I find myself compelled to explain that by "variation" I mean "declination," and that the two words are synonymous. "Variation" is the nautical word, and is exclusively used on the charts and in the books published by the British Admiralty—it is, therefore, sufficient for my use, and I do not presume to improve upon it. "Dip," as called by mariners, or sometimes by others "inclination," is a very different phenomenon, and we have in this discussion nothing to do with it. It was solely "variation" with which Sebastian Cabot concerned himself, and which he affected to have discovered. That is clearly evident in Legend No. 17 on his map, and is elementary in the literature of the question. The sluggishness of the needle in high latitudes had, as I pointed out in my first paper, been noticed and was recorded on Ruysch's map, but the minds of all the great sailors were intent solely upon discovering a series of magnetic meridians, distinguishable by the variation of the needle, and available as a sure indication of longitude. It was not until 1543 that the phenomenon of "dip" first attracted attention, and in 1547, Affaytato dedicated to Pope Paul III. a little treatise on the newly observed property or "descent" of the needle to the pole. The discovery was afterwards claimed, in 1576, by Robert Norman, who first introduced the "dipping needle," all of which goes to show the erroneousness of statements to the effect that Cabot claimed only to have discovered the dip of the needle, and that by "declination" he meant, or anybody else meant, "dip." That such a statement was ever made is not the least among the eccentricities of this discussion.

It must be evident to those who have given this question long and serious study, with the view solely of arriving as nearly to the truth as the evidence will permit, that the range of magnetic variation on the Atlantic in 1492–1500 must be an important factor in any conclusion as to the course of these voyages. In my first paper I endeavoured to form a reasoned opinion about it, and, as the subject is highly technical, I followed the guidance of the accomplished officers of the U. S. Geodetic Survey, whose calculations I found ready to my hand. As might have been expected, Sir Clements Markham and Mr. Harrisse recognized at once the relevancy of the principle of my remarks. The former did not think that the variation assumed would carry Cabot clear of Cape Race, and the latter essayed to demonstrate, by mathematical formulæ, the fallacy[83] not only of my reasoning, but, strange to say, of the facts. In calculating the course, Sir Clements started out west at a point farther north, Blacksod bay in lat. 54°; but Mr. Harrisse adopted a different

method. He took the following sentence from my paper of 1894 as his text: "If Columbus, on a direct western course, dropped 240 miles from "Gomera with a variation of one point west, it is altogether probable "that John Cabot, with a variation of a point and a half, would have "dropped about 360 miles to the south on his western course across the "Atlantic." To that Mr. Harrisse replies: "Yes, it is probable that then "Cabot would have dropped about 360 miles, provided his course had "been precisely of the same length as the course of Columbus."

The objection is exceedingly well put, and does not require any mathematical support. The course of Columbus from Gomera to Watling's island is usually estimated at 3,150 miles, and Mr. Harrisse has put that figure in his formulæ, but in doing so he vitiated the whole calculation *ab initio;* for it is not the total length of the course which is the prime factor here, but the length of the course which was subject to the disturbing element—to wit, the westerly magnetic variation acting upon and modifying both.

Perhaps I failed in clearness in not saying expressly that my argument was not *a pari* but *a fortiori;* still, on looking again over the paper, that idea seems to pervade it. At p. 59 I contrasted those very differences of condition which my critics urge. In the one case the steady trade wind astern—the smooth seas and the fair weather; and, in the other, the variable winds and heavy seas of what I called "the most storm-"tossed region in the world of ocean." I spoke of fogs, and made express mention of the Arctic current, and estimated its average rate correctly, according to the Admiralty Sailing Directions, at one mile an hour, showing that I had taken these conditions of difference into account and that the increment of variation was one only of several influences tending to draw Cabot to the south. The sentence being quoted from the portion of my paper devoted solely to the consideration of variation, hardly expresses the full scope of the argument. It was not intended to be, and could not be, an argument in the least degree amenable to mathematical treatment, and when six hypotheses and two erroneous quantities are put by my critic into mathematical costume and treated by mathematical methods, it is no wonder that the results do not tally with the facts. I am glad, however, to have the opportunity of going over the subject again.

Although the observations of Columbus in 1492 give a firm datum, the argument, in the main, rests upon the uniformity of the laws of nature, by which we are led to assume that in whatever way the magnetic pole and curves of variation are shifting now they were shifting then, in that slow change which is still going on from year to year. It has been said that the subject is obscure, and that we do not know these laws in their full extent. That is quite true, and yet we are constantly acting in recognition of them so far as our knowledge extends. It is fair,

then, to assume that, wherever the magnetic pole of that period may have been situated, the magnetic curves bore, in a general way over large areas, relations to each other similar to those existing at the present time. The variation now, at the admiral's point of observation in 1492, is 20° W., and the variation at Cape Race is 30° W., and it may therefore be fairly argued *a priori* that the relations between the quantities would be the same at that date. We are not, however, shut up to an argument *a priori* alone. We have actual observations extending back for 250 years, and it was on these chiefly that I based my opinion that the average variation in Cabot's time over that part of the Atlantic traversed by him was one point and a half, and some details of these observations were given in my first paper. I then pointed out (at p. 69) that Reinel's chart of A.D. 1505 showed plainly upon it, by its double scale, a variation on the Newfoundland coast of nearly two points. If, in my first paper, I had given Mr. Charles Schott's map of the North Atlantic, drawn to accompany Capt. Fox's paper, this discussion might have been avoided. I give it herewith, and, for the sake of clearness, to avoid wandering over the whole field of terrestrial magnetism, I have eliminated all magnetic lines, saving the line of no magnetic variation of A.D. 1492 to A.D. 1500, the period now in question.

Mr. Schott did not put forth this map as absolutely, but as approximately correct, so far as data existed and the laws of terrestrial magnetism were ascertained. For the purposes of a general argument like mine, an appeal to the uniformity of nature in connection with the relative positions of the magnetic curves of the present day would perhaps have been sufficient; but I am glad here to bring under the attention of the reader the results reached by a scientific officer of high repute in this very difficult field, particularly as it enables me to show with more precision the place where Cabot crossed into westerly variation.

And now, if we examine this map, we will see the course of Columbus from Palos to Gomera. There he got upon the parallel indicated by Toscanelli as that of Zipango and Southern Cathay. From Gomera he started on his western course as marked out by a due west line dotted on the map. That course, near the meridian of longitude 30° W., crosses a curved line extending northeastwards across the ocean. This is the line of no variation (agonic line), and when Columbus crossed it his needles "wested." Farther on, about longitude 40°, he noticed a "westing" of a full point, and there the straight course on the map stops. The erroneous datum which vitiates Mr. Harrisse's mathematical formulæ is, that he counts the whole course as 3,150 miles from Gomera; whereas the length should be counted, for the purpose of this argument, from the point where the disturbing influence first began to act.

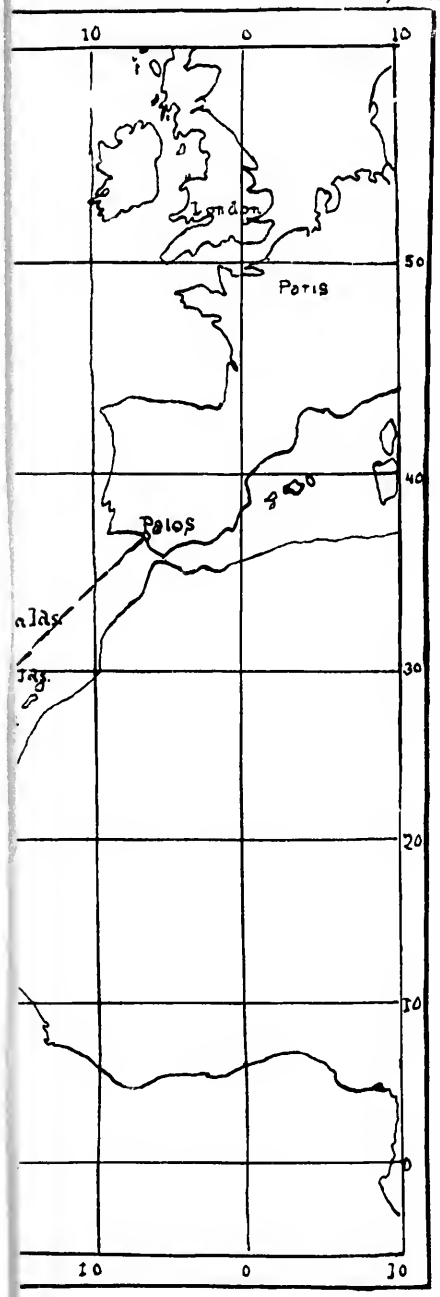
From the map it will be seen that the agonic line extends to the northeast, as also do all the magnetic curves upon the present charts;

and if this curve be produced, as are the curves of the charts of the present day it will touch the west coast of Ireland. My answer, therefore, to Mr. Harrisse is that, in measuring the length of the line of divergence south of a due west course, we must commence in the case of Cabot near the coast of Ireland, and in the case of Columbus at a considerable distance west of Gomera; and it must be observed also that it was not until he reached longitude 40° that the admiral noticed a variation of a full point.

Resuming the argument from the uniformity of nature, I would invite attention to the charts of the present day, by which it will appear that a course west from the coast of Ireland cuts the lines of magnetic variation in quick succession, while, farther south, they widen out, so that, in the south, a vessel in the last of its course is sailing on the circumference of a curve and towards a lesser variation, while, at the north, she is sailing constantly towards an increasing variation. This must have been relatively the case also 400 years ago, though to a lesser absolute degree. The amount of variation was less, but the relative variation would have been proportionate.

Returning now to Mr. Harrisse's mathematical demonstration, it will appear that from his sum total of 3,150 miles[39] must be deducted at least 672 miles, leaving a distance of 2,478 miles; but, by the admiral's course, as worked out by Capt. Fox, the distance was only 3,105 miles,[40] so that at the outside only 2,433 miles were sailed subject to westerly variation. In the case of Cabot, however, sailing on a parallel twenty-three degrees farther north, the line of westerly variation would be crossed close to the coast of Ireland. His whole course on the Atlantic would be subject to this disturbing influence. The distance from that coast, at latitude 53° to Cape Race is not 1,600 but 1,740 miles, as carefully measured on an Admiralty chart, and the admiral's course, subject to westerly variation, was 684 miles longer. Cabot, on a northern parallel, would, of necessity, cross the magnetic meridians in quicker succession, and the proportionate degree of variation would be probably correct, as stated in my first paper. Mr. Harrisse is quite right in stating that the conditions of the two courses were different, but he is not correct, however, in thinking that my "belief that the landfall actually was at "Cape Breton rests mainly on this supposition." It rests upon cumulative evidence, of which this is but one point. Moreover, it is not right to assume that the compass of Columbus showed any easterly compensation, for the custom was to correct the compass before sailing to the true north of each country, as explained by Champlain in Appendix A of my first paper.

While adhering to the general conclusions of my first paper, and without going over Mr. Harrisse's calculations, which the measurement on the map demonstrates to be wrong, I would repeat that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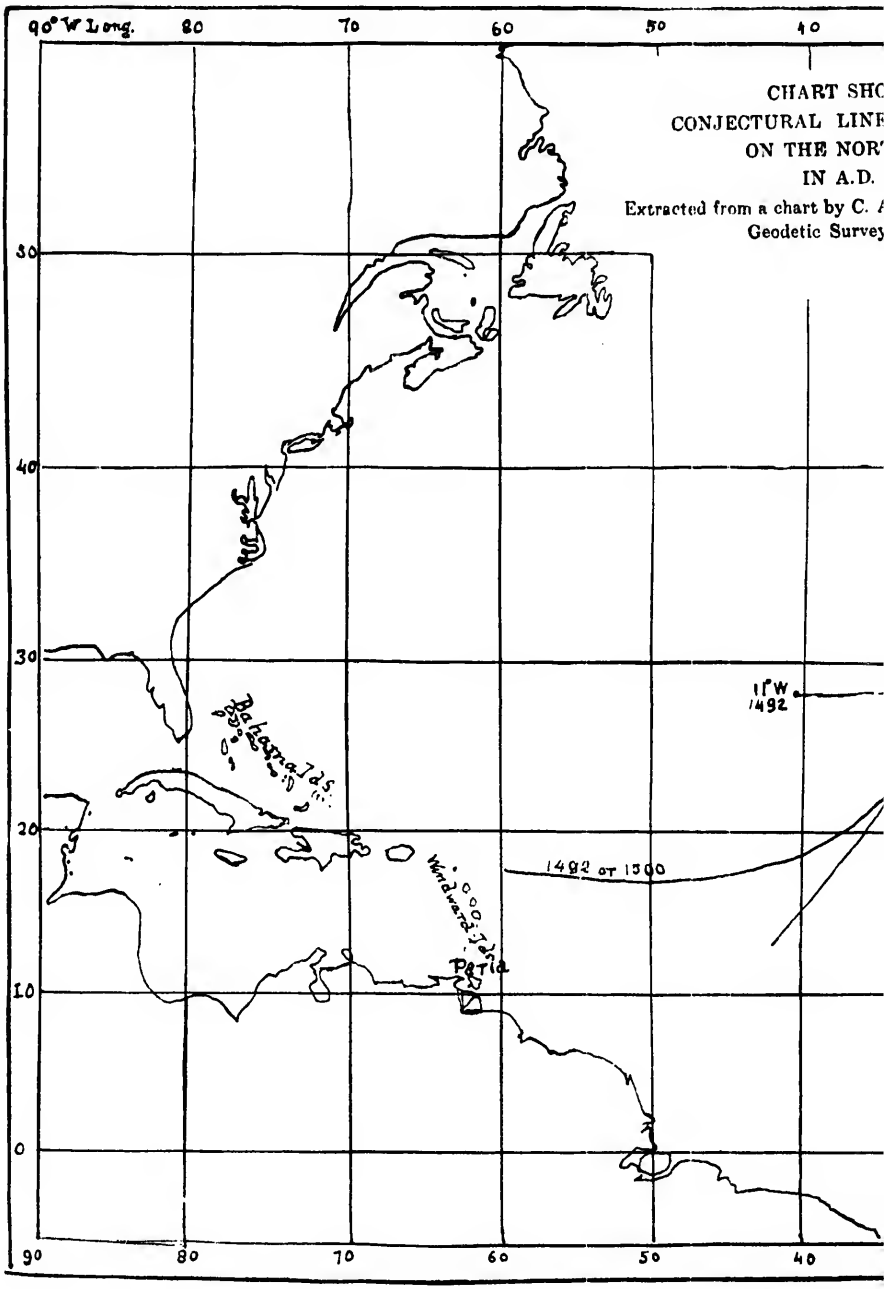


Fig. 3—to face page 1

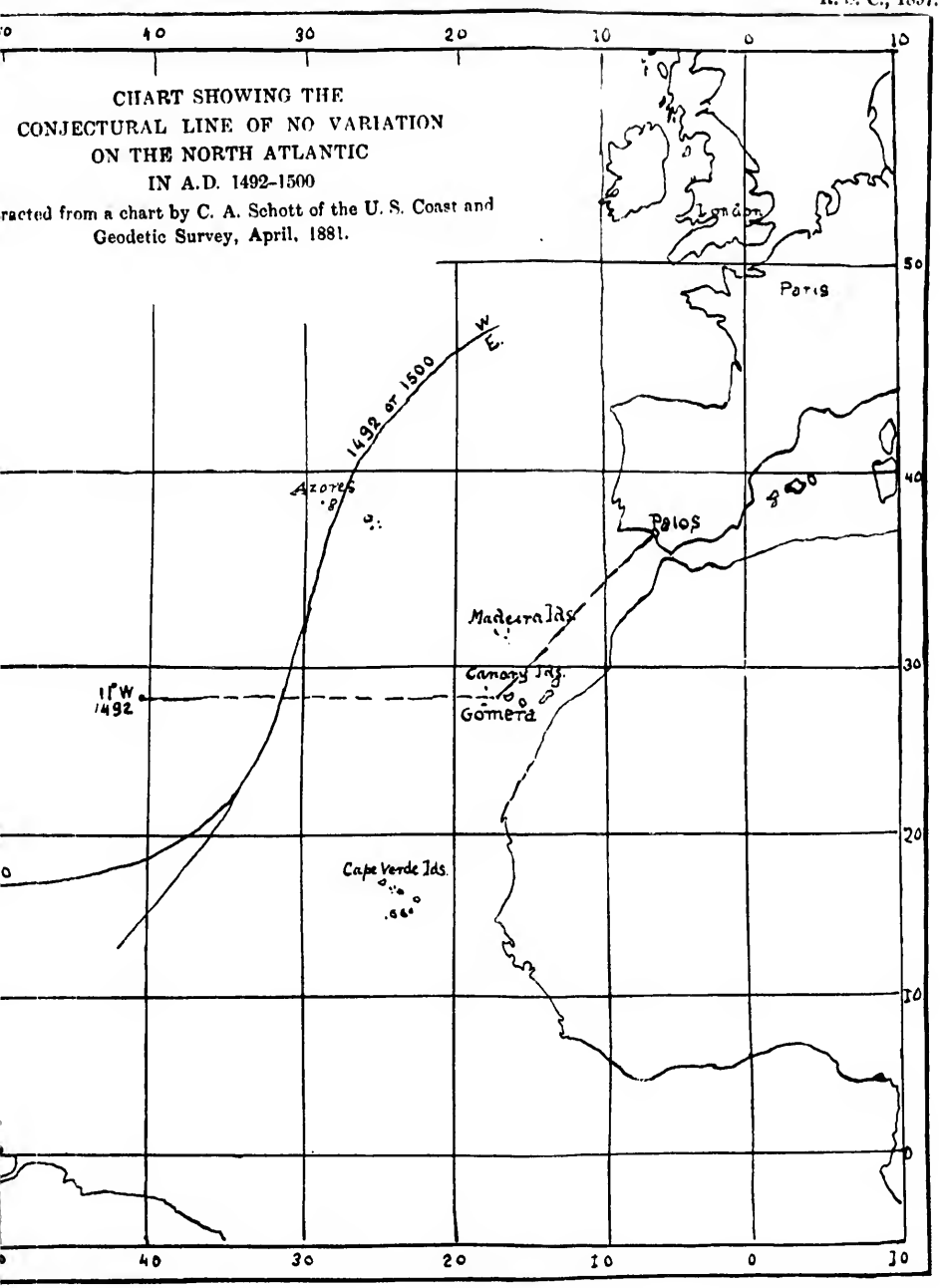


Fig. 3—to face page 163.

mathematical methods are out of place in inquiries such as this in which no solid mathematical datum is available. Mr. Harrisse has proved by his formulæ that to sail from latitude 53° on the coast of Ireland, and to miss Cape Race, would require an angular deviation of twenty-nine degrees. On the other hand, I have taken an Admiralty chart (as any one may do for himself) and drawn upon it a straight course between the two points, and I find by measurement that an angle of deviation from a true west line of only twelve and three-quarter degrees would have enabled Cabot to clear Cape Race. One point and a half is nearly seventeen degrees, so that my first calculation allowed plenty of room. The voyage of Columbus is not here in dispute, but that he did actually drop south from Gomera to Watling's island is ascertainable by the latitudes on the map, and the amount of westerly variation experienced is proved by his own recorded observations. It necessarily differed at different points, but the average quantity was probably one point as stated; and now that, in order to explain my meaning, I have drawn a course on the map, I hope that no one will waste his time to point out the absurdity of any one supposing that Cabot sailed on a straight line to graze Cape Race. We may all be sure that his real course was a devious one. We may also be sure that in sailing west he did his best to follow his compass, and if by head winds he was forced to make long stretches to the north or south, that he always returned to his compass course—more essential to him, if there could be degrees in necessity, than to Columbus, because he passed through a wide extent of fog-infested ocean. All the natural forces still dominant upon the ocean—the currents and the magnetic variation then existed and were tending to make his course swerve southwards. These other physical causes will be considered elsewhere.

10.—The World Map of Juan de La Cosa.

On reference to my preceding papers it will clearly appear that the central point of my argument is La Cosa's map. Who he was, and what the map is, has been told in the previous papers at wearisome length. Mr. Prowse, junior,[41] with a true appreciation of its importance, attacked the date of the map. Bishop Howley, in his long argument, scarcely mentions it, and Judge Prowse calls it "a rude sketch," "the most archaic "production that can be imagined, without a single name on it which is "not conjured out of the old Spanish pilot's inventive brain,"[42] forgetting that, at page 13 of his "History," he had called La Cosa "a distinguished "Biscayan navigator and geographer." Archbishop O'Brien speaks of the map as the "offspring of Cosa's imagination," and selecting a part of it, turns it up at right angles and sets it as he thinks that part should have been drawn. Those who know the map best admit that it "is not

"drawn to scale, nor in strict conformity with modern maps as to figure." It is an imperfect map, because the materials are imperfect, for it is the very earliest existing map upon which any part of the new world is shown, and it was made only eight years after the discovery of the West Indies by Columbus, and three years after the first voyage of Cabot. There is no east coast of Asia on the map; for the coast we now know as America is taken as the east coast of Asia, as will appear on inspection of the map attached to this paper. Winsor remarks that the drafts of John Cabot "were doubtless used by Juan de La Cosa in delineating the "Asiatic coast in the map of A.D. 1500, now preserved in the Archives "of the Marine of Madrid." [43] Those who use it for measurements, as a modern map, must fall into error, for modern maps are based on scientific surveys; and those who see only an extract from it must fail to understand it, because they do not see the extract in relation to the rest of the map. It is a map of the whole world, drawn on a plane, before Mercator's projection was invented, and, therefore, from the very necessity of the projection the east and west lines at the north must be enormously exaggerated. Any one will see that who will peel an orange and lay out one hemisphere of the skin on a plane surface. It was the glory of Mercator sixty years later to have invented a method of compensation by which true distances and courses on the sea may be ascertained, although it is still by enormously exaggerating the land areas at the north.

La Cosa got his information where he could, from all existing maps, and from the charts of the Portuguese who, only three years before (in 1497), had doubled the Cape of Good Hope and sailed their ships in eastern seas. The original is in colours, and the continental areas are, after the manner of that age, filled with kings and queens and towered cities. It is full of legendary and biblical lore—the three Kings of the East, the Queen of Sheba, the Great Khan of Tartary, Gog and Magog, are there, together with men whose heads are set flat down on their shoulders, and many other traditional monsters. To reproduce these in colour would cost too much, and would not assist in this controversy. Defective as the map is, it is distinctly superior to the maps made for many years after. It is fairly drawn, for France, Spain, Italy, the Levant and the Black sea and Sea of Azof; the Mediterranean and Atlantic coasts of Africa are fairly well done, but Denmark, the Baltic sea and the Scandinavian countries are very imperfect and far out of correct proportion. In the east, Hindostan is scarcely indicated; while Ceylon is enormously exaggerated and distorted; Zanzibar and Madagascar are far out of position in the eastern ocean, and the former island is immensely too large. These islands had at that time been visited by the Portuguese, while only the Cabots had reached the northern part of America. A glance at the map will show how impossible it would be to apply measurements to the distorted delineations of the northern countries of Europe,

known though they had been for hundreds of years, or to the countries of southern Asia just opened up by the Portuguese. If the total length of England and Scotland be compared on La Cosa's map with that of France or Spain on a north and south line, they will be found to be the same, but a glance at a modern map will show that while France and Spain each extend through seven degrees of latitude, Great Britain extends through ten. And, again, we know the length of Cuba to be 720 miles, and the distance from Gibraltar point in Spain to the Bay of Biscay to be 510 miles, but they are the same length on La Cosa's map. If La Cosa knew Cuba, he knew Spain better. Even our own plane maps will mislead unless the principles of their construction are carefully considered. New York, on a Mercator chart, is exactly half way between Cape Race and Havana, but the real distances differ by more than two hundred miles. In a previous part of this paper the distance from Cape Farewell to Cape St. John was given at 715 miles, but measured on a modern chart with a scale it is very nearly the same as from Cape Race to New York, 1,025 miles; or from New York to Havana, 1,230 miles. In like manner the west coast of Newfoundland is 316 miles long, but on the chart Cape Breton and Nova Scotia together appear by the scale to be the same length, though the true distance is 376 miles. In modern maps the northern regions are unduly expanded in definite proportions well known to students, but before Mercator's method came into use, the longitudes were expanded out of proportion to the latitudes. Moreover it must be observed that the basis upon which Archbishop O'Brien's theory rests is arbitrary in all its extent. He states that the Spaniards knew well, not only the latitude, but the length and breadth of Cuba. The fact, however, is that the Spaniards at that time did not know any one of these things. Upon the very map itself is the proof; for the latitude of Cuba is from six to eight degrees too far north. He has not observed that Cuba and Hispaniola are drawn entirely north of the Tropic of Cancer, whereas they are entirely south of it. Not only on La Cosa's map, but on all the maps down to 1520, Cuba is drawn north of the tropic. It is so drawn on the Canerio map (1502), the Ruysch (1508), the Ptolemy (1511), the Peter Martyr (1511), the Ptolemy (1513), the Reisch (1515), the Schoner (1520), and on many of later date. The reason is not far to seek, but it lies in those studies which the archbishop considers to be not germane to the subject. On any modern map the tropic just grazes Havana, the northernmost point of the whole group of the larger Antilles. Then the Spaniards did not know the length of Cuba, for it is shown on La Cosa's map as no longer than Hispaniola, whereas Cuba is nearly twice as long as Hayti. That they did not know the breadth of Cuba is evident by inspection and comparison with a modern map, for the island is out of shape and proportion. Moreover, the uncertainty existing then about the dimensions of Cuba is

evident from the fact that Columbus to the day of his death, five years later than the date of this map, insisted that Cuba was a part of the mainland.

And yet, after all, there is a method as to latitude on this map. The Equator and the Tropic of Cancer are given, and between them are 23° 28′ of latitude; so if we take Cavo de Ynglaterra to be Cape Race, we

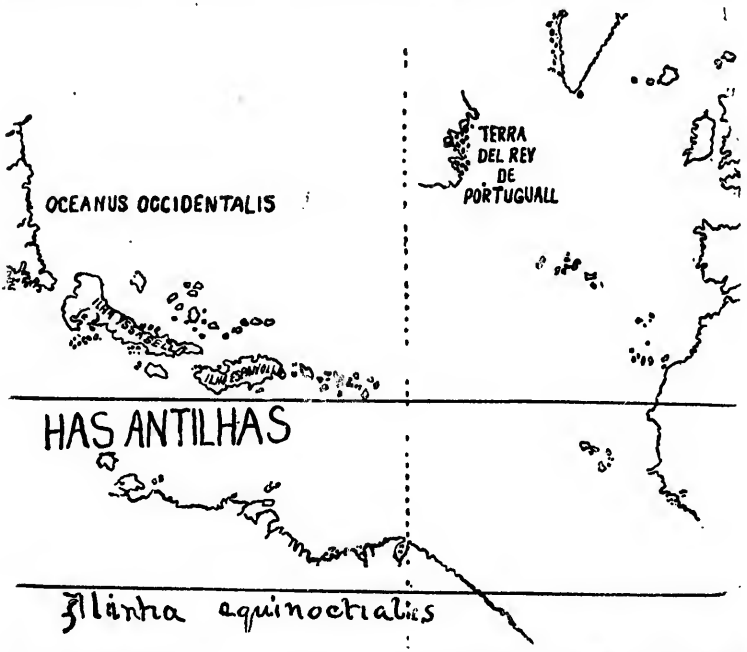


FIG. 4.—THE CANTINO MAP, 1501-2, SHOWING THE GREATER ANTILLES NORTH OF THE TROPIC AND THE ELONGATION OF NEWFOUNDLAND TO THE EAST.

shall find it to be in 54° 30′, about the same distance too high as Cuba is too high. A similar result will appear if we measure from the rhumb-line running due west parallel to the tropic from the windrose in the Strait of Gibraltar, so that the whole of the North American side of the map, from the Antilles to Cape Race, is thrown up in latitude, and, proportionately to the West Indies, Cavo de Ynglaterra is very nearly in its proper latitude—not exactly but nearly, within one or two degrees—near enough to identify it; for if there be one thing in this discussion which seems irrational to a student of cartography, it is to take these early charts and measure them as if they were the result of a scientific admiralty survey.

So much for latitudes; but it is far different as to longitudes, and for two very sufficient reasons: First, because there was absolutely no

method known of computing longitude; and, second, because of the immense difficulty of representing a globe on a plane surface. We read our Mercator maps and are not misled, because we are accustomed to them, and most people know they are true only as to the sea courses, but show enormous distortions of the continental masses at the north, for a degree of longitude at the pole, where it vanishes to nothing, appears as wide as it is at the Equator. In reading these old maps we must take into account not only the projection and the magnetic variation, but also the impossibility of ascertaining longitude.

Returning, however, to La Cosa's map, I would remark that if countries so well known as England and Scotland, the Scandinavian

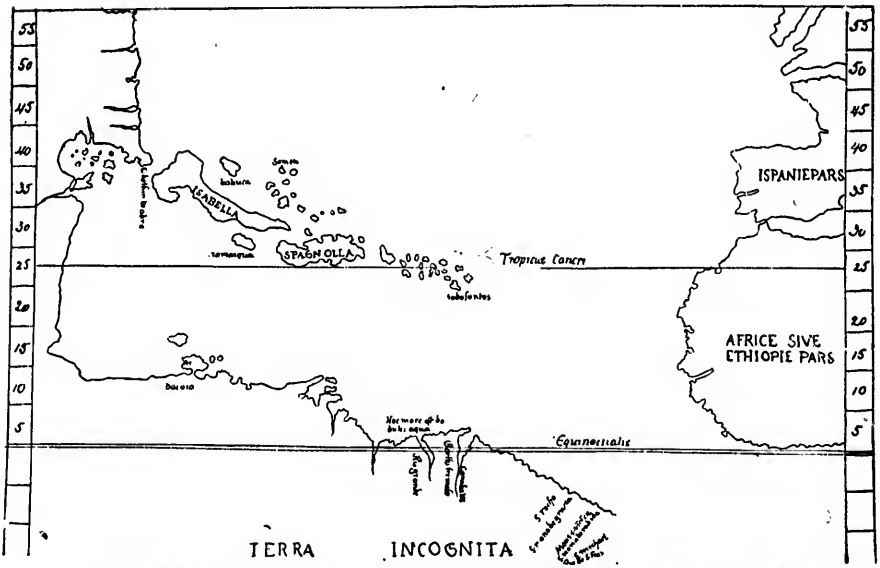


FIG. 5.—THE (SO-CALLED) ADMIRAL'S MAP IN THE STRASBURG PTOLEMY (WALDSEEMULLER'S) OF 1513, SHOWING THE LATITUDES OF THE ANTILLES NORTH OF THE TROPIC.

peninsula and Denmark will not admit of measurement by a scale, how unreasonable it is to apply the strict rules of a modern map to the coasts of America drawn eastwards by errors of 25° in longitude, for it will be seen that the Cavo de Ynglaterra is drawn eastwards almost to the Azores. The same elongation is shown on the coast of South America, which is cut by a meridional line drawn east of the Azores. Yet La Cosa was chief pilot with Hojeda, in the expedition of 1499, which discovered an extensive part of the coast of South America; and, fresh from sailing along the coast, immediately after his return to Spain, he drew this map,

so that the South American portion was drawn from his own personal knowledge. No one was better equipped for such a task, for John Fiske, quoting Las Casas, says he was the best pilot of his day, and that his reputation as a cartographer was also high, and his maps were much admired.[44] This exaggeration of the east and west coast lines appears on all plane charts of that period. What data susceptible of even approximately scientific comparison could have been ascertained in these early coasting voyages with the rough instruments then in use? If, therefore, any one takes these early maps and measures along the coasts and finds the distances correspond to the recent accurate scientific surveys of the admiralty charts, he will have overproved his case, and the more exact the coincidences appear the more likely it will be that they are imaginative. The geography of these coasts, as of all others, very slowly attained its present accuracy. These early maps must be taken chiefly for their general direction, because the compass was the mainstay of the old sailors, and La Cosa's map can no more be held to conform to measurements than can the Cantino, the Canerio, the Ruysch, the Sylvanus, or any other of the earlier maps of America. I cannot express my meaning better than by using the words of Mr. John Fiske. He says: "The dis-"covery of America was not such a simple and instantaneous affair as is "often tacitly assumed."[45] And again: "In geographical discussion the "tendency to overlook the fact that Columbus and his immediate succes-"sors did not sail with the latest edition of Black's General Atlas in their "cabins is almost inveterate; it keeps revealing itself in all sorts of queer "statements, and probably there is no cure for it except in familiarity "with the long series of perplexed and struggling maps made in the six-"teenth century. Properly regarded, the discovery of America was not "a single event but a very gradual process."[46] Sq Bunbury, in his History of Ancient Geography, likewise observes: "Not only is geography in its "very nature a progressive science, but the slightest attention to its "history in mediæval or modern times will show that the steps of its "progress are often vacillating and uncertain." A more extended survey of the maps of the period would have prevented any one from taking the flags on La Cosa's map so seriously as to suppose that they were intended to represent real flags, planted at regular intervals by Cabot along the coast, and that a search by officers of the Geological Survey could ever result in discovering along the shore holes drilled in the rocks, or piles of stones, reared to support the flagstaffs.

The coast line I have taken as the south coast of Newfoundland is repeated in Ruysch's[47] map of the world, published with the Ptolemy of 1508, and there also it is portrayed as the east coast of Asia, because the River Polisacus is shown. An extract from this map is given (p. 157) showing the western half. The extract from the Cantino map (fig. 4) shows Cortereal's discoveries on the east coast of Newfoundland. On

the east coast of Greenland is a legend, which cannot be shown on the small sketch, stating that it (Cape Farewell) is taken to be the extremity of Asia. That was the opinion current at that time.

It is admitted by all authorities that the outline of the northeast coast of America is based on John Cabot's map. That Ayala sent a map of John Cabot's first voyage to the King of Spain is on record, and he sent it before the return of the second expedition. Some have thought that the results of the second voyage also appear, but, while that may be true, it is an assumption which has not the support of a document on record. The insertion of names shows that La Cosa had before him an authentic chart of that portion only of the coast he has placed names upon. The extension of the nameless coast north and south may, as some high authorities have supposed, have been borrowed from previous maps of Asia, or from a general report of the second voyage of Cabot. If he had had a chart of the second voyage he would have copied the names. In any case the second voyage did not reach farther south than 35° to 38°, according to the existing records, and beyond that the coast line must be conjectural. When it is asserted that La Cosa had procured a map of the second voyage more correct than the first, it is assuming something for which not the least shadow of proof can be adduced.

The cardinal point of the controversy is the Cavo de Ynglaterra. If it be Cape Race, then, of necessity, the named coast line is the south coast of Newfoundland, and the last name of the series, Cavo Descubierto, is a point by compass west from Cape Race. Cabot's discoveries are laid down as west from Bristol, and Columbus's discoveries are west from Gomera—west from the point of departure of each; while their true direction is south of west by very nearly the angle of the course by their compasses. It is significant that the Cavo de Ynglaterra is laid down on the same parallel as Bristol—exactly west of it, and it is too far north of its true latitude by the same distance that Cuba and the West India islands are too far north of theirs. This need not interfere with its identification as Cape Race, because in Reinel's map of 1505, C. Raso is 50° 30′ by the perpendicular scale, and in the great mappemonde of Henry II., A.D. 1546, showing Cartier's discoveries, it was also placed at 50° 30′, though its real latitude is 46° 39′, or about four degrees farther south. That the longitude is far out need not be wondered at, for the sailors of those days had no means of ascertaining longitude save by dead reckoning. Nordenskiold informs us that "longitude could only be got in excep-"tional circumstances,"[48] and Humboldt says: "The direction is more "important than the estimation of distances, for, as before stated, in the "voyages of those days they exaggerated the distances."[49] This map of La Cosa's must not be taken separately from the series of maps of the period, and the disproportion of the longitude upon it is not more than on the other early maps.

It is just here where the archbishop's argument is the weakest. He has not taken into consideration the whole series of maps nor the fact that even the Mediterranean sea—the centre of the ancient and mediæval world, not only on La Cosa's but on all maps, was twenty degrees astray in longitude. Commenting on this, Kohl says :[30] "It is well known that "the great father of geography, Ptolemy of Alexandria, committed the "extraordinary error of assigning to the Mediterranean sea a length of "not less than sixty-two degrees of longitude, which was upwards of "twenty degrees too much. This amazing mistake affected all our maps "of the Mediterranean, more or less, until the beginning of the last "century. . . . In this instance the contest between truth and error "lasted more than 1,500 years, until, at length, the French geographer, "Delille, gave to the sea its true limit."

But while all these maps present difficulties of their own, they must be taken as they are or rejected in their entirety, and here would seem to be the fatal error of Archbishop O'Brien's method. He cuts the Gordian knot heroically. To use his own words : "We say at once that Cosa, "having received a copy of Cabot's chart, joined it to his own, making it "run east and west instead of north and south. . . . . He did not "tamper with its scale or reduce its proportion." That is, La Cosa took Cabot's supposed chart of the second voyage and simply stuck it on to his own, only turning it round the wrong way! This is surely the quintessence of hypothetical geography.

It is not possible in serious inquiries to detach a part of the coast line of a map and radically alter its direction without striking at the very foundation of all geographical studies. What these pilots did know was their compass course, and to suppose that a man of the experience of Juan de La Cosa could mistake a course of north and south for a course of east and west is practically to pronounce as incompetent and ignorant one of the three foremost seamen of his age. This would be a very daring thing to do in any case; but here is a man whom Humboldt calls "that great sailor," "that skilful pilot;" whom Peter Martyr lauds for "his great ability in constructing marine charts;" whom Las Casas asserts to be the "best pilot who could be found for the seas of the "Western Indies;" and he is charged, four hundred years after the event, with a blunder, undiscovered until now, too gross to be made in an elementary class in geography, and this in a map which was made for the King of Spain, and supposed to have been hung up in the office of Fonseca, the Spanish minister of marine. All these old charts had wind-roses to show directions and lines of compass-bearing run across them. This map of La Cosa is oriented by the great wind-rose south of the east and west coast line, by the equinoctial line and the Tropic of Cancer, and by the meridional line through the Azores. If we are permitted to take it to pieces and wheel up a portion of its coast line at an angle of 90 degrees,

all documents may be redrawn to suit the theories of any writer. Such heroic treatment is, in effect, making the documents to suit the theory, not the theory to suit the documents. If we are not to take documents, such as maps, in a series, and use one to throw light on the other —use them to show the gradual development of the contour lines of a coast and the gradual evolution of the correct cartography of lands gradually discovered—then there can be no such thing as scientific geo-

FIG. 6.—CANTINO MAP, 1501-2.

FIG. 7.—CANERIO MAP, 1502.

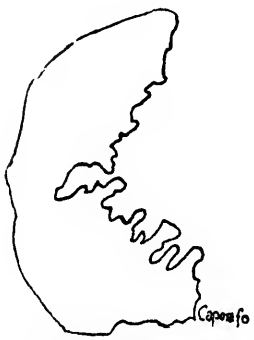


FIG. 8.—KING MAP, 1502.

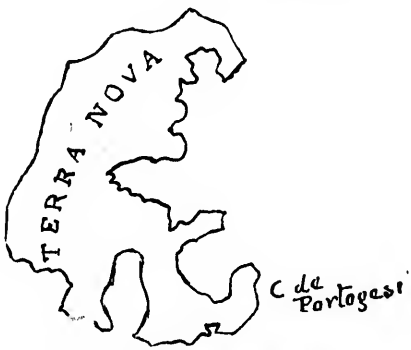


FIG. 9.—RUYSCH MAP, 1508.

graphy, and theorizing will take the place of patient investigation of truth. Such a line of procedure is opposed to the entire course of modern methods of investigation, and is without a precedent in the history of cartographical research. In reasoning, the true course is from the premises to the conclusion; but this is from the conclusion to the premises and the whole character of the map is changed and its unity is broken. If the Cavo de Ynglaterra be Cape Chidley, the whole of Hudson's bay and strait is opened up one hundred and ten years before Henry

Hudson, and the map would stand alone—the first map to show America, and containing features of enormous importance to be straightway forgotten for over a hundred years. It will stand out distinct from the whole series of maps, nor, even then, will its contour be brought into harmony with modern maps, for the coast of Atlantic Labrador runs to the northwest and not due north.

Returning, however to the line of my argument, and to show that Cavo de Ynglaterra is really no other than Cape Race, I give on the preceding page the outlines of the corresponding headlands on the maps next succeeding in date until the cape is permanently named.

It will be seen at once that from the very first this cape—the most striking feature on the northeast coast—was recognized as the key-point of the geography of the western continent. There is no headland to compare with it in its commanding position. It is the nearest point to England, and might well be called Cape of England, or Cape of Portugal, according to the nationality of the namer. In the Cantino map, 1501-2, there are no names on the coast, but the headland is there. The same may be said of the Canerio map. In the King chart, 1502, it is named C. Raso. In Ruysch's map, 1508, it is called C. de Portogesi. After that, upon every map, the name is Cape Raso—there was never any change.

Sir Clements Markham, in his paper before the Royal Geographical Society, identifies it as Cape Race; Kohl had done so previously; Judge Prowse points out that the name still survives on the coast. He says: "In 1500 we have unmistakable evidence, from Spanish sources, of English "discoveries in the map of Juan de La Cosa. Cape Race, or possibly "Cape English, in St. Mary's bay, is represented by Cavo de Ynglaterra "(English cape)."[51] The judge was not then entangled in controversy, but he now drops all notice of the map, excepting to say that La Cosa was an old pilot who invented all the names, and that none of the names he gave exist on the coast. Cape English is a precipitous bluff, forming the eastern headland of St. Mary's bay, on the south coast of Newfoundland, thirty miles west of Cape Race.[52] Humboldt took the Cavo de Ynglaterra to be some cape near Belle Isle, and supposed that the coast with flags was the Canadian Labrador inside the strait, and the long shore of the north side of the Gulf and River St. Lawrence. He never thought of altering its direction, for that, he says, is the one thing to be observed in studying these old maps.

I can only join with Kohl in wonder at a theory which opens up the Gulf of St. Lawrence and still leaves it to be discovered by Cartier thirty-five years later; which suppresses the whole south side formed by the peninsula of Gaspé and the provinces of Nova Scotia and New Brunswick, and puts the north shore of the estuary of the St. Lawrence *vis-à-vis* to Cuba across an open ocean. The opinion will not, I think, be shared by

many who know the gulf. They will recognize at once that all the Maritime provinces of the Dominion are effaced by it, and the whole Gulf of St. Lawrence (inclosed from the ocean and entered by three straits, Belle Isle, Cabot and Canso) is thrown open, ceases to be a gulf, and its northern shore, for it will have no southern one, lies open to the coast of South America over a stretch of unbroken ocean.

The theory of the presidential address is indeed original. It not only opens up Hudson's bay, but it sweeps away all the eastern part of the Dominion, for it draws a straight north line from Cape Henry, in Virginia, to Cape Chidley. Let any one draw such a line. It will be seen to pass through Quebec and cut away Newfoundland, Nova Scotia, New Brunswick, Eastern Quebec and all the New England States, and expose a north and south line to the Atlantic ocean. Humboldt's line is at right angles to this. This theory supposes a periplus of the gulf; but no gulf is left to make a periplus in, for wheeling up the coast line does not make a gulf there. The gulf began first to exist on the map of Viegas, in 1534, as is evident by the whole series of maps shown in my former papers. The hypothesis fails also to comply with the requirements of the liturgical method, for Cabot could not have discovered the Cavo Descubierto on June 24, and the Cavo de S. Jorge on April 23. He did not leave Bristol until May. Again, the Cavo de S. Luzia is put down as Cape Freels on the east coast of Newfoundland, and S. Luzia as Cape St. Michael on Northern Labrador, while there is only one St. Luey, and her day is December 13. Then, St. Nicholas cannot be any other than the benign Bishop of Myra—the ever-ready helper of all sailors and merchants. The fort of St. Nicholas, on the Lido, guarded then, as now, the approach to Venice from the sea, and the Abbey and Church of St. Nicholas figure largely in Venetian history. Besides, he was the patron saint of seaports, and had been for a thousand years before 1446, when St. Nicholas of Tolentino was canonized. Then, at Bristol, a church of much resort was dedicated to him. The original foundation was in the time of Canute, and the parish still exists. The festival of this St. Nicholas was on December 6, as it is still. I do not know anything about the festivals of the ordination of St. Gregory, or of St. John of Nicomedia, but the dates of the festivals of St. Luey, St. Nicholas and St. George are sufficient to show how insecure a theory founded upon the calendar may be. It seems, moreover, improbable that sailors would name a coast after festivals not in the Breviary, and known only to those specially instructed in such subjects.

The archbishop's "final proof" is in the very remarkable etymologies of the names on La Cosa's map. The descriptions supposed to have accompanied the hypothetical map of Cabot's second voyage, which La Cosa is supposed to have grafted upon his work, were packed into single words compounded from the resources of several languages. I shall not go

over the words themselves, but would merely remark that the procedure is based on another hypothesis. The archbishop says that "Cosa was a "classic scholar imbued with the epigrammatic spirit of the age. He was "learned in the classicism of the Renaissance, and condensed a description "into a compound word, adapting Spanish or Latin terms." Everything known of La Cosa points the other way. No record of his birth or baptism can be found, and although it is generally thought that he was born at Santoña, it is not proved. It is proved, however, that he belonged to a family of sailors, and that the greater part of his youth was spent at sea. He had been sailing and trading to Flanders when Columbus chartered his vessel, and himself with it, to go on his first voyage. No indication of his classical studies exists, but his consummate skill as a seaman is the theme of many Spanish authors, and his capacity as a geographer is evidenced by the fact that he was master chart-maker to Columbus, who became jealous of La Cosa's reputation. It will be necessary to cite some authority for La Cosa's classical attainments before discussing his etymologies. History shows that he was an accomplished navigator and a skilful cartographer, while this hypothesis assumes that he was an accomplished epigrammatist and a classical scholar, but so ignorant a sailor and cartographer as to mistake north and south for east and west.

11.—The Bonavista Landfall.

At the time of the meeting of the Royal Society at Halifax, I had received a report, in an English newspaper, of the paper read by Sir Clements Markham before the Royal Geographical Society. It was a very full report, but since that time the Journal of the society for June has been published, containing an authentic copy of the paper. Judge Prowse informs us that "Sir Clements Markham has seen the error of his ways, "and, in his recently carefully prepared address, goes out of his way to "refute the absurd Cape Breton theory."[53] And, again, he says Sir Clements Markham "made a complete recantation of his erroneous "views," adding that "I [Judge Prowse] took infinite pains to bring "him round to the Newfoundland side." It is remarkable that an "absurd theory" which, the judge adds, "no sensible man would be-"lieve,"[54] should have been advocated for so many years by a man of Sir Clements Markham's attainments, and that it should have required "in-"finite pains" to remove it. Again, the judge informs us that he has, in the Marquess of Dufferin, another illustrious convert. Whatever Lord Dufferin may have written in the unpublished letter referred to, is not open to discussion. He wrote in Scribner's Magazine, depending upon Judge Prowse's "History" for the existence of an "immemorial tradi-"tion." In his address at the inauguration of the Cabot tower in Bristol, Lord Dufferin spoke of "the Cape of Bonavista, or whatever point on the

" coast of Newfoundland, Labrador or Cape Breton, the learned may de-
" termine to be his landfall;"[55] a sentence, in its non-committal pregnancy, worthy of a diplomatist of his lordship's great experience. He was evidently not anxious to be the subject of "infinite pains" from anybody.

A careful perusal of Sir Clements Markham's paper does not, however, confirm the "recantation" represented by Judge Prowse. The paper is easily accessible, and I may spare the space of long extracts by a brief summary of those conclusions which bear on this special question. Sir Clements gives his opinion that Cabot set out to go west; that, owing to bad weather, he at first made northing, being driven probably as far out of his projected course as Blacksod bay in lat. 54°; that the magnetic variation existing then would probably bring him on a westerly course to Bonavista, which, if Soncino's evidence alone be taken, was his landfall; that there is nothing impossible about a landfall at Cape Breton; that the drift may have taken him there, although it was unlikely at that time of the year; that a chart by John Cabot of his first voyage was sent to the king of Spain; that it was incorporated in La Cosa's map; that Cavo de Ynglaterra is Cape Race; that the coast with names, to the west, is the south coast of Newfoundland; that Cavo Descubierto is Cape Breton. He sums up his opinion that if the map of 1544 is rejected, the landfall will be at Bonavista.

Everything Sir Clements Markham says must be taken in the most serious manner. Two conditions must be noted in this very restrained recantation, viz., the testimony of Soncino must be taken alone, and the map attributed to Sebastian Cabot must be rejected. He does not categorically decide to adopt this course, and thus leaves the field open to those who take into account the whole evidence and accept the map of 1544 either in whole or in part. So far, then, the judge's illustrious converts leave the question open to an unlimited liberty of philosophising, and I return untrammelled to the subject of Bonavista.

Judge Prowse, who, as has been shown, is the only witness, "contra
" mundum," for Bonavista, puts his argument thus: "My argument is
" founded on the name Bonavista—it is distinctly Italian. In Spanish it
" would be Buena Vista, in Portuguese Boavista."[56] He does not add that in Italian it would be Buonavista, and that it is actually Boavista on the first map where the name is found. The fact is that Bonavista is an unchanged Portuguese word. The nasal sound, though omitted in spelling, is sounded in the pronunciation. It is the name of the easternmost island of the Cape de Verde group, belonging to Portugal, and another of the same group is called Fogo. So, in Newfoundland, one headland of the same bay is Bonavista and the other Fogo—names given by the Portuguese after their own home islands. All this argument about Boavista is the result of not considering that in Portuguese the nasal sound is not

written—thus, Joao, Joha, is Joam or Johan; capitao is capitano, and Lisboa is Lisbon. In like manner, the name of the poet Camöens is written Camões, and Don Sebastian is Dom Sebastiao.

In my second paper (p. 6) I said that the name "Bonavista does not "appear on any map until Gaspar Viegas's, in 1534; that, is for thirty-"seven years after Cabot's discovery." For this Judge Prowse takes me to task. He says, "The Majollo map (A. D. 1527) contains Bonavista;"[57] and again, "Dr. S. E. Dawson is quite astray in his statement that Bona-"vista does not appear on any earlier map than 1534. It appears on pro-"bably the most important of the earlier charts, the Majollo map."[58] I would refer Judge Prowse to his own "History" (at page 31), where, in the chronological summary at the head of Chapter III., is the entry, under date A. D. 1534, "Gaspar Viegas's map shows Bonavista *for the first* "*time on our coast.*"

Bishop Howley is equally precise. He says, in the Magazine of American History: "We have as early as 1527, on Majollo's map, the beautiful "name *Buonavista*, which is found on all the earliest maps, and survives "to-day in Newfoundland as the bay, the cape and the settlement of Bona-"vista;"[59] and again, in his printed lecture (p. 35), he says the name is "on all the earlier maps." I am sure the bishop thinks so, for in his paper on Jacques Cartier's voyages[60] he gives a tracing (see fig. 10) of the Majollo map (p. 176), on which C. Bonavista appears. In my paper, at page 76 of the same volume, I gave a tracing of the same map. My tracing was from Kretschmer, and the name Bonavista is not on it because it is not in Kretschmer. Other facsimile copies of this map may be found in Winsor, "Narrative and Critical History," vol. iv., p. 38, and in Harrisse, "Discovery of America," p. 216. Bonavista is not found on any of them. A close inspection of fig. 11 will show the words "ben posta," and it will be found also thus on Kretschmer's, Winsor's and Harrisse's facsimiles, but C. Bonavista will not be found. We may now be informed that "ben posta" means Bonavista, and that it is "absurd," "ridiculous," "senseless" or anything else of a similar objectionable nature to think differently. I did not recognize it, inasmuch as "ben posta" made sufficient sense; and evidently Judge Prowse did not, or he would not have made such a statement in his "History." It is always better to put the names as they are written, and explain why they should be altered. Nor can the name Bonavista be ascribed to Cortereal,

FIG. 10.
From vol. xii., Trans. R. S. C., Sec. II., p. 176.

for, as a simple matter of fact, Bonavista is not on any map supposed to show Cortereal's voyages, and, if we take the whole series of maps known to exist, one by one, the result is as follows. Bonavista is not on La Cosa's map (1500); nor on Cantino's (1501) (there are no northern names on that map); nor on the King map (1502); nor on Salvat de Pilestrina's (1503-4)—this is evidently based on the Cortereal voyages and has names on the east coast of Newfoundland; nor on Reinel's (1505); nor on Ruysch's (1508); nor on the portulan of Vesconte (1511); nor on the anonymous map of 1520 at Munich; nor on Nuno Garcia's map

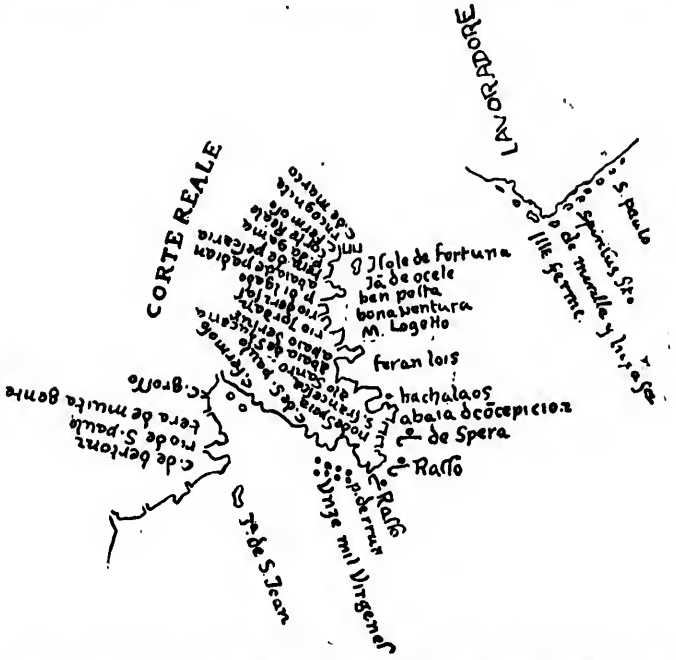


FIG. 11.—THE MAIOLLO MAP OF 1527, FROM HARRISSE. (See Dis. Am., p. 217.)

of 1526; nor on the celebrated Weimar map of 1527; nor on the great map of Alonzo de Santa Cruz in 1542. I have omitted a few which have no names at all upon them, and therefore do not count on either side. Then in order of date comes the map of Vesconte de Maiollo of A. D. 1527, and upon this map is the name *ben posta*. Bonavista is not on the great map of Diego Ribero (1529); nor on Verazzano's (1529); nor on the globe of Finæus. Then comes Viegas (1534), where the name is found for the first time, just as Judge Prowse says in his "History," and it is found as *Boavista*.

While on the subject of this map, I would remark that Bishop Howley uses it to support another argument in his lecture. At p. 21 he quotes Soncino thus: "At 400 leagues he (Cabot) found *terra firma*;" and adds: "Now, on the map of Majollo (1527), Cape Farewell, in Green-"land, is quite distinctly given, as is named, *Terra Firma*." It is given in the bishop's sketch (fig. 10), although not in the atlas of Kretschmer, but I find in Winsor's and Harrisse's facsimiles, not *Terra Firma* (for the land is named Lavoradore), but *Ille Firme*,[61] referring to the islands on the coast. That argument, therefore, falls to the ground.

The claim of Bonavista rests almost solely upon a map attributed to John Mason, governor of Newfoundland, first published in Vaughan's "Golden Fleece," in 1625. Under the name Bonavista is printed *a Caboto primum reperta*, and this is taken as proof that Bonavista was the land-fall. The first serious attempt at a colony had been made in 1610, and Vaughan's "Golden Fleece" was published as a description of the island to induce settlement. Any special authority resulting from Mason's name is, however, removed by a note at p. 106 of Judge Prowse's "History." He says: "A close examination of this map shows that it was not con-"structed by Mason, all its features being traceable in much older maps; "the only contribution of Mason's being the great lake or sea (Fortune "bay), which he probably saw from some hill in Placentia bay on one of "his exploring expeditions. The map probably belongs to the Anglo-"Dutch group, and is mainly of French origin." It is difficult to see what importance a map published 128 years after the event in dispute can have as evidence of an "immemorial tradition." It is proof merely of the existence of an opinion in 1625. The same remark applies to the only new contribution to the evidence for Bonavista that this discussion has elicited—the Dupont map. Judge Prowse calls him "the celebrated "explorer and geographer,"[62] and adds that his map was "published in "1625," but was "prepared much earlier." Later, however, he says that it is *dated* in 1625, and is in the Dépôt de Cartes of the Ministry of Marine, and that while the names on the map are in black ink, Bonne Viste is in red, and opposite are the words *prima invena*, also in red ink. There is a fair presumption that one refers to the other. Dupont was a cartographer of Dieppe, A. D. 1625-163? Harrisse mentions his name once in a foot-note at p. 216 of h' *Sébastien Cabot*, and it is found in Lelewel and in the list of a ollection of maps exhibited at Paris. He was not an explorer, bu. as of a school of cartographers at Dieppe. The map is in manuscript, and was never published, and it is a map of the Atlantic ocean, on parchment, in two pieces. It is inscribed "*par Jean Du Pont de Diepe*, 1625," and dedicated "*à Monsieur le Prési-dent de Lozon*, 1625." No mention of Cabot is upon the map, but the words *prima inven(t)a* are presumed to refer to his discovery of Bonavista. An extract from this map is given (fig. 12), and it will be seen to

be inferior to the published maps of the same period, *e.g.*, Mason's and Champlain's; but is interesting from never having appeared before in this discussion. The names are very difficult to read. *Prima invena* is in the centre of the island, and is much obscured by the lines of compass bearings.

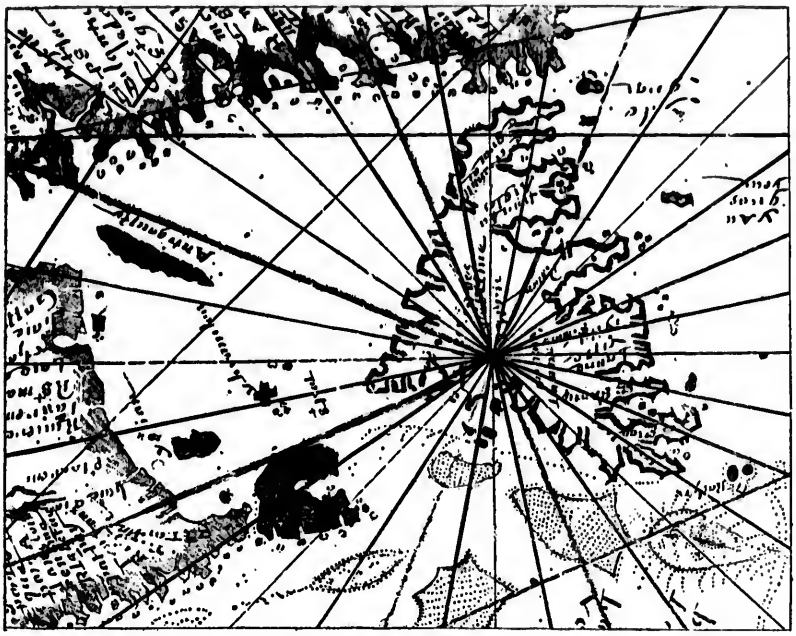


*FIG. 12.—DU PONT'S MAP, A. D. 1625.

There are two other identifications—one is that there is a place near Bonavista called Keels; this is supposed to mean that the "first keel" grated "on the shingle there." The theory seems far-fetched. It is far more probable that the settlers called it after Keel, in Mayo, in Ire-

*The drawing of this map is very rough. This is a reduction from a photograph. Many of the names are illegible. They are upside down on the Newfoundland and New Brunswick coasts. Turning the map and reading from the south, on the east coast of Newfoundland, in order, are C. de Ras, C. St. Ian, C. St. Francis, Bonne Viste, *Ylle St Marc*, R. St. Ian, *Port aux Aigles*, *Cremailliere*, C. Grat. In the centre of the island, running at right angles to the south coast, is *prima inven(t)a*, and behind that are three names, referring probably to the south coast. The first is illegible, the second is La Baleine, and the last Les Vierges. No doubt the islands of the Eleven Thousand Virgins were intended. They are on the south coast in the old maps. The names in italics are new names not found on early maps. For further remarks on this map see *infra*, App. F., where also Mason's map will be found.

land—a similar coast; and, lastly, there is also a place near called King's Cove, and it is thought the name signifies that there the royal standard was set up.[63] There is no evidence to support this view.

I come now to the grand argument—the ancient immemorial tradition—of what? Certainly it ought to be of the landfall of John Cabot and an English crew in 1497. This tradition could not have existed in Newfoundland, where for a long time there was no permanent settlement, for the fishing fleet came in spring and went back in the fall. It might have been that a few men would occasionally be left to cut wood and build wharfs and boats, but there are no definite traces of that having occurred. The stages and huts would, of course, remain from year to year. Judge Prowse finds the earliest narrative about the island to be Parkhurst's, in 1578. It is found in Hakluyt, and the passage is quoted in the judge's "History."[64] We learn from it that at that time there were fishing in the harbours 100 sail of Spaniards, 50 sail of Portuguese, 150 sail of French and Bretons, besides 20 to 30 Spanish whalers, "but of "English only 50 sail." There is no mention of settlers, and indeed if there had been any possession by settlement, the letters-patent of Queen Elizabeth would have been unmeaning; for they applied to lands only "if "they shall not be before planted or inhabited." Gilbert, in 1583, set up the royal standard, and took possession for the crown of England, and, in the contemporary report, it is expressly said that he "was the first of "our nation that carried people to erect an habitation and government in "these northern countries of America."[65] But 1583 was eighty-six years after Cabot's voyage, and there were no people then on the island to have carried a continuous tradition. In fact, it would seem, after all, that there is not at the present moment a tradition; for it has been shown by Bishop Howley (p. 151, *ante*) that the tradition was for Cape St. John—a tradition existing in Verazzano's mind; for, beyond all question, there was no one on the coast when Verazzano made his voyage; therefore he must have carried the tradition there, and, inasmuch as his voyage was the foundation of the French claims by discovery, it is improbable he would have commenced by establishing those of England. Nevertheless, the bishop maintains that this "shows that at that early period the tradition "was in favour of St. John as the landfall."

Bishop Howley thinks there really was a tradition attached to Bonavista, not, however, a tradition of a landfall of English sailors, such as we are looking for, but of Cortereal and the Portuguese; and this was the way it happened. "He [Cortereal] had doubtless made himself well informed "of the whereabouts of Cabot's new lands. It is not at all improbable "that he may have got possession of Cabot's papers, map, log and globe, "so mysteriously lost. We have reason to believe that he made almost "directly the headland of Newfoundland, which was situated in 48½ "degrees north latitude, and which, being a most prominent and impor-

"tant point, must undoubtedly have been seen and well located by Cabot. "To this important headland Cortereal gave the name of Bonavista. It "was most probably his landfall."[66]

At last, then, we have run this tradition to earth. It was a Portuguese tradition of a Portuguese landfall, and the English tradition was for Cape St. John, and existed in the mind of a French captain! But Bonavista must have a tradition, after all that has been said about it, and this is it.

"Cabot first made land at Cape St. John, yet he afterwards fixed on "the point now called Bonavista as the signal point for voyagers from "Europe, and to take a departure from on going eastwards. I am sure "John Cabot took special and particular bearings of this point. I believe "it to be the point of which Soncino is speaking when he says Cabot "made certain signal marks."[67]

That is letting down Bonavista as easily as possible. There is a tradition of landfall, but it is Portuguese, and the English tradition is not of landfall but of land-departure. I would merely observe that no trace has survived of any such special solicitude for Bonavista, and that theories based upon a chain of such phrases as "doubtless," "not at all improb-"able," "may have," "we have reason to believe," "most undoubtedly," "most probably," "I am sure," and "I believe," cannot help us much in this very difficult inquiry.

Finally I come to La Cosa's map. It is generally admitted to be a map of the south coast of Newfoundland. But Bonavista is not upon the south coast of Newfoundland, but upon the east coast, and it is evident, therefore, that Bonavista is excluded from the first voyage. The first flag on the coast and the first name is at Cape Race. Bonavista is not near Cape Race. It is two degrees and three minutes of latitude to the north, equal to 123 geographical or 138½ statute miles in a straight line. If, then, Bonavista was the landfall, Cabot never gave it a name—never claimed it—but sailed many more than 138 miles along the sinuosities of the east coast, and did not name one headland, but waited until he turned Cape Race, and then started up and studded the south coast with names, and La Cosa commenced at the same point and marked it out on his map with flags. This is seen at once by the very statement to be improbable up to the boundary of impossibility.

12.—Sebastian Cabot.

Before passing on to the remaining points of this inquiry, it is necessary to consider again, for a while, the character of Sebastian Cabot. My own view is stated at length in my first paper. In effect it was that he was boastful and vainglorious; that he suppressed his father's agency in the voyages of 1497 and 1498, and that he was not so much a great sailor

as a great nautical theorizer. I suggested that many of the falsehoods attributed to him might be due to the fact that they came through second-hand reports; that he might have been always talking of the second voyage, in which I believed he really took part, and that his suppression of the facts of the first voyage might be due to the suspicious jealousy of the Spanish authorities. I expressly said (p. 85) that it is hard to believe that Sebastian Cabot was a mere "pretender to nautical knowledge, "because Ferdinand and Charles V. were good judges of men, and they "trusted him to the last." In former years Biddle and Nichols and others had almost succeeded in effacing the memory of the father, and in effecting an apotheosis of his son. Now that the pendulum has swung to the other extreme, it is right to return for a moment and review my estimate of his character in the light of these recent papers.

I think Mr. Harrisse is quite justified in saying that "Sebastian "Cabot was a man capable of disguising the truth, whenever it was to "his interest to do so."[68] In that respect I think he was, for the period, in no way singular. I shall not venture to cite instances, for fear of stirring up new controversies, but when we are told that "he was, in an age "of mendacity and intrigue, the greatest liar of the age;"[69] that "his "proved infamous character keeps him out of court;"[70] that he was "an "unmitigated charlatan, a liar and traitor,"[71] I think that the case against him has been overstated. Other writers have taken up the same theme, and I cannot help thinking that they are expecting from men of the Renaissance period a standard of candour which was not in vogue at that time. There were similar weak points even in the character of the great admiral, brought out by Dr. Justin Winsor in his "Life." He was not free from self-assertion and boastfulness, nor from jealousy of the merit of others, nor from a tendency to arrogate for himself credit justly due to his companions, and he was not always careful in such matters to adhere closely to the truth. In Sebastian Cabot I think I see the defects of the great admiral magnified, and, then, I still think there is much force in the view expressed in the paper of 1894. The first voyage was more a voyage of reconnaissance than an expedition. It was in one small vessel, which returned quickly when it touched land; but the second was in reality an important enterprise and a survey of an extended coast, and I cannot help thinking he sailed on the second expedition and coasted from Labrador to Carolina. As I pointed out before, every allusion to Sebastian Cabot's voyage and every report of it on record contain notices of ice and northern latitudes. I shall not go over the ground again, for it is fully covered in the papers already in the "Transactions." I am not in the least disposed to palliate Sebastian's unfilial conduct, and I think that, for a strictly accurate man, he was born in too many places. I would, however, receive his testimony *pro tanto*, and I would allow it to confirm and even to explain statements

based upon other foundations. This is done continually in courts of justice; and to pronounce Sebastian Cabot a liar and dismiss him from the controversy is going further than is usual in historical inquiries. In fact, the matter seems almost to have got to the point that no evidence will be admitted to corroborate anything Sebastian Cabot ever said, or rather was ever reported to have said, for we have nothing direct from his own pen.

Then again, it seems to me to be going to an extreme to pronounce Sebastian to be no sailor and no geographer. It proves too much; for, if Sebastian Cabot was an impostor, Ferdinand of Aragon, Charles V., Edward VI., and all the other exceedingly capable men around them were fools. Now we know that these men were statesmen of no common order—accustomed to deal with and make use of men—versed in every wile of statecraft. Ferdinand was a master in the art of dissimulation, wary and unrelenting. If, indeed, Cabot had been the only maritime authority at the court, one might imagine that he could deceive landsmen—but he was not. The court of Spain had many able sailors, competent to expose a nautical impostor, who, moreover, was a stranger—an English Italian among a jealous people as the Spaniards were.

I do not think that we are justified in supposing he was a great sea captain, for he failed as a commander. A man, even now, might be a distinguished secretary of the admiralty, an authority on naval affairs and an accomplished geographer, yet not competent to take an active executive command. I believe Sebastian Cabot to have been versed in all the nautical science of his time, but not necessarily capable to command a fleet. I should not wonder if there were many men now in Her Majesty's service doing good, useful nautical work, who are in a similar position. I called Sebastian Cabot a theorist—a scientific theorist, with a fixed idea about the North Pole—but not, therefore, of necessity the absolute impostor that some of my critics conceive him to have been, and, in confirmation, I find in Mr. Harrisse's *John Cabot* (p. 229) the following quotation from Oviedo, which precisely expresses the view I have advanced. "Cabot is competent and skilful in his occupation of "cosmography, and for constructing plane as well as spherical maps of "the entire world. But there is a great difference between leading and "governing men, and handling an astrolabe or a quadrant." My belief has been that the failure of the expedition to the Moluccas, of which we have so full a record, is the explanation of the failure of the second voyage to America, of the particulars of which so little has survived. It seems to me that there are, in the study of history, moral difficulties and intellectual difficulties, as insurmountable as any physical obstacle can be, and here is one. An emergency arose in fitting out a military expedition, and Sebastian Cabot was picked out in all England to make a map of the theatre of operations; he went to Spain with Lord Willoughby, the gen-

eral in command; King Ferdinand wrote to Lord Willoughby to send Cabot to him, and the same day he wrote to Cabot. A few weeks later he wrote twice again, on the same day, letters concerning Cabot. He took him into his service in 1512, and made him a naval captain with a salary of 50,000 maravedis. In 1514 he was called to court to consult with the king about an intended expedition; the next year his salary was raised, and, together with several distinguished sailors, he was made royal pilot; that year he was called to Badajoz on a commission with eminent cosmographers to report on the line of demarcation, and in 1518 he was created pilot major of Spain. His duties were to examine and certify all pilots, to compile and keep up the standard official map, and to receive and embody on it the reports of all returning sailors. He had to certify all maps, and he was the supervisor of the professor of cosmography at the ministry of the Indies at Seville. In 1524 he was again put on a commission with distinguished cosmographers to settle the line of demarcation. He then went to South America, and his office was kept open for him. He incurred lawsuits and was punished by fine and banishment for some high-handed acts on the expedition, but was soon recalled and reinstated in his former office. In 1533 he made a large map of the world for the council of the Indies, and when he left Spain he was on a commission to examine Medina's "Art of Navigation." He had power to suspend pilots, and he appointed a friend as acting officer when he went to England, and the Emperor Charles V. repeatedly tried to get him back to Spain, and kept his office open for him until 1552.

In England, where he went in 1547, an old man of 72, he was trusted by Edward VI., and his salary increased. He became governor of the Company of Merchant Adventurers and had charge of the nautical affairs of the realm. He had all his life, as Mr. Harrisse states, a high reputation in Italy and England. He was retained in high office in Spain, and he was placed in high office in England, a country not very tolerant of foreigners.

Here, then, is a monstrous improbability; that a man without any advantages of birth, wealth, or influential connections, a foreigner among two jealous nations, should have been all his lifetime at the head of the nautical affairs of the greatest naval powers in Europe; no geographer, and yet incessantly making maps for public departments; no cosmographer, and yet called on as an expert in important suits and selected as a commissioner to determine the line of demarcation; no sailor, and the examiner and certificator of all the pilots of Spain; no man of science, and the censor of the chair of cosmography for the council of the Indies, the Admiralty of Spain. This man served some of the most capable princes who ever sat upon a throne, and it remained after 350 years for us to find him out. Surely this is a stupendous improbability; surely the view of his character, presented in my paper of 1894, must be nearer the

truth. If we study that age in its own literature—in Machiavelli's works, in the life of Benvenuto Cellini, in the histories of Spain and Italy—we will obtain the measure of Cabot's character—insincere, shifty, vainglorious, jealous of the reputation of others, greedy of reputation for himself; but not a fool, not an impostor, not a charlatan, not a liar more than the courtiers he lived among.

While there is no palliation for the evident endeavour of the son to suppress and, even when in England, to minimize the achievements of his father, it must be remembered that it was common in those days for sailors to pass from the service of one prince into that of another, and necessarily some negotiations must have preceded every such transfer. Humboldt remarks that "Vespucius, Cabot and Magellan passed alternately from the service of one prince into that of another. Their loyalty consisted in embracing with ardour the interests of the country where they were resident, and their consciences were troubled the less by the memory of benefits received in proportion to the length of the list of their grievances against the ungrateful government whose services they meditated abandoning."[72] Cabot was not a native born Spaniard or Englishman, but Magellan was a Portuguese who betrayed to Spain the belief that the Moluccas were within the Spanish lines of demarcation, and commanded an expedition to occupy for Spain rich islands in the east which his own countrymen had discovered. To the names above mentioned may be added many others. In Mr. Harrisse's list of pilots it will be seen that Ribero, Pedro Reinel, and Estevan Gomez were Portuguese who passed into the service of Spain between 1517 and 1524, and the pilots of Magellan's expedition were also Portuguese.[73] These are only a few names hastily selected. The list might be much enlarged. Dr. Justin Winsor, in explanation of some of Sebastian Cabot's evidence in the case of the heirs of Columbus, says: "Too much should not be made of these variances, however, since Sebastian Cabot at both these dates was a paid officer of Spain, and could hardly be expected to damage the interests of his Spanish masters or his own."[74]

While there are points in Sebastian Cabot's life worthy of reprobation, he is not alone the object of these censures. One cannot fail to be struck with the arbitrary way in which the moral character and the abilities of the men who are subjects of this controversy are dealt with. Biddle blackened Worthington's character and Nichols assisted, while in reality the maps he was charged with selling to Phillip II. were safe in England many years later, in 1582.[75] Bishop Howley "has a strong suspicion that John Cabot's maps were purloined and sent off to Spain by Dr. Puebla," and again he suspects that "Cortereal may have got possession of Cabot's papers, map, globe, and log so mysteriously lost."[76] The same papers Puebla stole for Spain were stolen again for Portugal, and, after all, John Cabot himself freely gave a map to Spain. All the

maps of Columbus have disappeared, and yet nobody has been charged with stealing them; but Cabot's maps are stolen twice over, and by men of different nations! Too much has been said about these "mysterious" losses. Where are Cartier's maps, or the many maps of Alonzo de Santa Cruz? Where is the great Padron Real? Two maps at Weimar alone represent its features, and all official copies but these are lost. No document is so soon thrown away as an old map, for none are more useless. We do not miss them excepting in some controversy such as this. It is no wonder that Cabot's papers are lost by this time. We had nearly lost the discoverer himself out of our history, and we do not now know when either of the Cabots died or where they are buried. Bishop Howley charges Cortereal with palming off a false map,[77] when that great sailor was dead in some unknown region across the Atlantic. Who drew that map is not known, but it is certain that it was not Cortereal. If Soncino and Pasqualigo do not report in the direction of some favoured theory of the present day they are "not nautical men, and not particular to a point "or two." If John Ruysch, in 1508, says he sailed no farther than 53° north it must be a misprint, for he should have gone to 58°. If La Cosa's map is inconvenient, the "distinguished Biscayan navigator and pilot" is transformed into "an old Spanish pilot who made a rude sketch and "studded it with names out of his own head," and, last of all, we take the map of the man who made maps which were hung up in the study of Juan de Fonseca, the Spanish minister of marine at that period—and, as if he knew nothing about maps, we take a piece out of it—a map made for the King of Spain—and wheel it up to an angle of 90 degrees, as if he, the celebrated Biscayan pilot, the greatest native Spanish sailor of the time, did not know west from north.

13.—Censorship over Spanish Maps.

It must not be supposed that an inquiry under this heading is of academic interest alone. It has a real and very important bearing upon the question; first, as it may reveal the circumstances of Cabot's official life in Spain; then, as affecting the publication of the map of 1544, and, consequently, the degree of importance to be given to the testimony of the map regarding the landfall at Cape Breton. "Sebastian Cabot," says Mr. Harrisse, "certainly enjoyed a high reputation at least in Italy and Eng-"land. The Mantuan gentleman said that he had not his equal in Spain "as a man versed in navigation. Guido Gianetti de Fano told Livio "Sanuto that Cabot was held in the highest esteem in England."[78] It will not do, then, to accept Judge Prowse's dictum "that his proved in-"famous character keeps him out of court." We are bound to judge him by the standard of his day, and to measure him with the measure of his contemporaries. We do not put Lord Bacon "out of court" because of

his ingratitude and treachery to his friend and benefactor, the Earl of Essex; or because he degraded the high office of a judge by pandering to tyranny and accepting bribes from suitors before his court; and, with all his faults, Sebastian Cabot was morally the better of the two. We must remember that Cabot was a man without a country—a foreigner in England as in Spain, and the holder of an official position in both countries, which imposed upon him definite official duties.

One fact stares us in the face at the outset, that, while maps were freely engraved and printed in all parts of Italy, Germany and France, none were printed in Spain—in the very country whose colonial extension required them the most. Kohl says, and Winsor adds his testimony, that not even an edition of "Ptolemy" was printed there.[79] The little map in the first edition of Peter Martyr quickly disappeared and was not reprinted. In 1549 there was a little map in Medina's *Arte di Navegar*, and a little one in Gomara in 1554. These are all and they were useless, being insignificant in size and detail. In a list of 200 printed maps given by Ortelius[80] in his great atlas in A.D. 1570, not one was printed in Spain, and among eighty makers of maps not one was a resident there. "This," says Winsor, "shows how effectually the council of the Indies had con-"cealed the cartographical records of their office."[81] The extreme rarity of the Peter Martyr map is attributed by Nordenskiold to the "suppres-"sion of the small drawing by the suspicious Spanish authorities,"[82] and Brevoort, commenting on the same fact, refers to the "jealous sensitive-"ness of Spain regarding her marine charts"[83] as the cause. Nordenskiold mentions the three maps above cited, and adds "that, with the excep-"tion of some copies of mediæval maps which I suppose to exist in "Spanish editions of classical authors, this seems to be about the whole "contribution during the earliest period of printed cartographical litera-"ture from the countries from which the new world and the southeast "passage to India were discovered, and from which hundreds of the most "important voyages of discovery started during that period."[84]

"The kings of Spain," says Kohl, "from the very commencement of "the discovery of America, observed great caution and reserve, and gave "strict orders about the safe keeping of the maps which their captains "and conquerors brought home from the new world. All the originals of "these maps were deposited in the archives of Seville, and copies of them "were issued only to such Spanish sea captains and generals as could be "trusted. No map of Columbus, none of Cortes, of Magellan, or any of "the other innumerable explorers, was allowed to be engraved and pub-"lished; and the consequence of this system has been that nearly all "these interesting documents are lost to us forever."[85]

"There is," says Dr. Winsor, "abundant evidence of the non-com-"municative policy of Spain."[86] In this point, at least, I have the support of almost every writer of note, and the "liberal spirit which ani-

" mated the government," [87] insisted upon by Mr. Harrisse, is inconsistent with the records of history and with the genius and traditions of the Spanish nation. In my first paper I cited many authorities for my belief, and the testimony is almost unanimous; but while I feel that I am unfortunate in having to differ from Mr. Harrisse on this point, I venture to think that on closer examination it will be found that the difference between us is more apparent than real.

In 1503 there was established at Seville, in Spain, an immense state institution called the *Casa de la Contratacion de las Indias*, charged with the administration of all matters relating to the new world, including licensing of pilots, making of maps, and supervision of all nautical matters. It was a department much resembling the English Board of Trade. In 1508, an official, or model, map was ordered to be compiled and kept there, to which all maps were to conform, and a commission was appointed to prepare and supervise it. All pilots were compelled, under penalties, to use copies of this official chart, and the grand pilot and certain others were appointed to prepare copies which they sold. Kohl remarks that they were kept in manuscript because the Spanish officials were desirous of preventing their discoveries from being known. The maps were stamped to witness their authentic character, and were kept locked up under two locks; the grand pilot had one key, and the other was in charge of another member of the commission. Mr. Harrisse informs us [88] that the cartographers of Spain, *although* for thirty years under the immediate care of Sebastian Cabot, possessed no adequate geographical knowledge of the northeast coast of America. These Sevillian maps, he adds,[89] uniformly located the discoveries of the English far to the north of Labrador, and even, in some cases, in Greenland, from 56° to 60° north—that is, from the position of Nain northwards to Cape Chidley.

There was, therefore, in Spain an absolute intolerance of charts not copied by the official cartographers from the official map, and if any other person made a map it could not be used without first being submitted to the authorities of the Casa de Contratacion and approved by them. This was in effect a censorship, and Sebastian Cabot was for a long time the chief censor, and it was his duty to compel all Spanish maps to conform to the standard official map. If, then, the Spanish maps possess the general uniformity above stated, it is only what might be expected under the conditions then existing. One of the notes of that uniformity was the running of the English discoveries north of 56°. It is of little avail in this controversy to say that Spain was not jealous of other nations, because the essential point of the argument is practically admitted. Spain would only permit the contours of the model map to be issued to the world, and those contours were drawn in accordance with the public policy of the Spanish nation. "The official map (Padron " Real) was apparently," says Mr. Harrisse (Dis. Am., 263), " the object

" of great solicitude on the part of the government, particularly when it " was found to have bearing on political questions of great importance."

Bearing this in mind, we will find it difficult to accept Mr. Harrisse's denial that Spain " ever laid claim to the northeast coast of America." My answer is that the Papal Bull of partition points to another conclusion. Briefly, for I need not dwell long upon the point, Portugal as well as Spain had made discoveries, and the Pope drew a line of demarcation to define the limits of the two powers, or, as we should now say, of the two spheres of influence. The line was afterwards shifted, by the treaty of Tordesillas, between the two nations solely concerned. It eventually happened that Nova Scotia, Newfoundland and Brazil fell to Portugal, and the rest of both continents to Spain, and Spain was directly interested in preventing all interlopers and in supporting Portugal. At the time of Cabot's discovery, however, Spain did make a claim, which will be found clearly stated in the warnings and letters of Puebla and Ayala in 1497 and 1498. Ayala had been one of the commissioners to draw the line of demarcation in the treaty of Tordesillas.[90] He had been talking with the discoverer in person, and, with Cabot's map before him, he wrote to Ferdinand that the land found belonged to Spain. The Baccalaos was soon after conceded to Portugal, and for that reason the earliest maps are Portuguese, and show the voyages of Cortereal and his successors.

All this is so clear that it seems to amount to a paradox to dispute it. The Cantino map (see p. 165, *ante*) has preserved for us a graphic delineation of the line of demarcation as it was supposed to exist in A. D. 1501–2. The policy of Spain is shown by the maps which are based upon the official map. On these maps the line of demarcation is laid down from north to south—from Brazil to Newfoundland—and it cuts the coast of North America a little east of Cape Breton. Such maps are the two at Weimar. That of 1527, whether it be by Fernan Columbus or by Nuño Garcia de Toreno, is considered to be an official copy; but the map of 1529 certainly is, as it purports to be, by Diego Ribero, and it shows the Spanish flag to the west and the Portuguese to the east of the dividing meridian. Ribero was cosmographer to the king, and such a map as he has handed down to us all Cabot's official maps, made in Spain, of necessity must have been. Ribero placed, on the Acadian coast, close to Cape Breton, the words, *Tiera de Estevā Gomez*, and claimed it as having been discovered for Spain by Gomez in 1525. Mr. Harrisse, in commenting on a map by Diego Guthierez in 1550, is astonished at finding that it knows nothing of the Gulf of St. Lawrence and of Cartier's discoveries, which six years previously had appeared in the Cabot map of 1544, for Guthierez was a colleague of Cabot, and was appointed as his *locum tenens* by Cabot when he went to England. This circumstance, however, only brings out in stronger relief the fact that Spain did at that time lay a claim to the whole territory of North America up to the line of demarcation, and that the official map was witness to it.

The duty of Cabot, as chief pilot of Spain and one of the chief officials of the Casa de Contratacion, was to see that all maps under his control conformed to that standard.

Again, Spain *did* take steps to assert her claims on the northeast coast, though every attempt was abortive, for her strength was drawn away to the south. Navarrete tells us that King Ferdinand sent for Juan Dornelos in 1500,[91] to plan an expedition to follow Cabot. In 1501 Alonzo de Hojeda was ordered to go on an expedition to the place[92] where the English had made discoveries. Again, in 1511,[92] Juan de Agramonte was commissioned to take royal ships to seek out the secrets of the new land. His instructions demonstrate the respective claims of the two nations to be as represented above. He was ordered to take with him Spanish sailors, but to procure pilots from Bretagne, showing that the place sought was where the Bretons by that time were accustomed to resort. He was ordered to make a settlement there, but to avoid infringing on the territory of Portugal. That shows it was near the line of demarcation, and the line of demarcation on the Spanish official charts cut the coast of Newfoundland just east of Cape Breton. No record remains of the results, but the Spanish claims are manifested by their instructions. Just about that time Cabot arrived in Spain, in the suite of Lord Willoughby, and Ferdinand secured his services at once because of his knowledge of Baccalaos—about which England cared nothing.

It would be tedious, and it is scarcely necessary, to prove that Spain was jealous of any third nation interfering in America. It is in all the books, but I will cite one of the most learned and most accurate of our own members. In the Transactions of 1890, the appendix C to a paper by Abbé Verreau shows the measures taken by Charles V. to prevent the settlement of Roberval in Canada; and, in the Transactions of 1891, the continuation opens with these words: "The Spanish ambassador at the "court of Portugal, probably in obedience to the instructions of his "master, besought King John to join the emperor in a united expedition "against Cartier and his three vessels, to massacre the whole party, and "deter the French for a long time, if not forever, of thinking of colonies "beyond the Atlantic." We learn, moreover, from Mr. Harrisse[93] that, as late as 1541, Ares de Sea was sent to America to find out what Jacques Cartier was doing. It seems to me patent on the page of history that this jealousy existed. It was the Monroe doctrine of that day, but not so vague, and it had a written foundation in the papal bull, which, beyond doubt, was public law among Catholic nations at that time.

This was the reason, then, that none of the Spanish maps would admit the discoveries made by the English, and which, in truth, the English undervalued and neglected; and this would justify Cabot, as a Spanish official, in suppressing on official maps any private information traversing the public policy of his sovereign. Similar suppressions have

been made in later times for similar reasons, and the histories of boundary commissions afford many instances. The same political exigencies would compel Sebastian Cabot to withhold his name from a private map like that of 1544, and they would prevent him, while in Spain, from giving that map the colour of a Spanish official sanction, even though the laws in the other parts of the empire of Charles V. did not forbid the publication of non-official maps.

It is not fair to charge Cabot with falsehood for that. These were not days of geographical societies or of travelling scientific associations, and Cabot's duty was to his own master, the king of Spain. All that time King Ferdinand and his successor, the Emperor Charles, had in their possession La Cosa's manuscript map admitting that the northeast coast of America had been discovered by the English. Cabot was as much, and no more, a liar than his royal masters, who would have dealt in the summary methods then in vogue with any official airing private opinions, geographical or otherwise, contrary to the official views of the public interest.

Mr. Harrisse, in order to prove that none of the Spanish maps recognized English discovery south of Labrador, cites the map sent in 1527 by Robert Thorne, an English merchant residing in Seville, to the ambassador of King Henry VIII. There are facsimiles of this map in Kretschmer, Winsor, Nordenskiold, and in Brown's History of Cape Breton. It has been reproduced (Fig. 13) on the following page, and it demonstrates *my* thesis; not that of Mr. Harrisse. On the northern extremity of the east coast there is, as he says, the inscription, "Nova terra laboratorum dicta," but there is also the inscription, "Terra hec ab Anglis primum fuit inventa." This latter is not on *its* seaboard from 50° to 65° N., but it extends along *the* seaboard from about 40°, as shown by the scale on the margin, and a line of latitude drawn across to Europe would cut the north of Spain. Thorne sent the map secretly, and begged that it should not be shown, for it would get him into trouble, as it was forbidden to make any but official maps.

My answer, then, to Mr. Harrisse is that Cabot, in obedience to the policy of the country whose paid official he was, deliberately suppressed much of the knowledge he possessed of the northeast coast, and that it was his duty to do so or to resign his office, and I would add, moreover, that La Cosa's map proves that his master (Ferdinand) knew of the English discoveries, and Robert Thorne's map proves that there were pilots in Seville who also knew that these discoveries extended as far south at least as 40°, and Robert Thorne's letter proves that the map was known not to be in accord with the official map (for he could have bought a copy of that), and, therefore, he desired that it might be kept secret. It was not from motives of economy that an English merchant of Robert

Thorne's standing sent a rough draft like this to the representative of his sovereign if a copy of the Spanish official map would have suited the purpose.

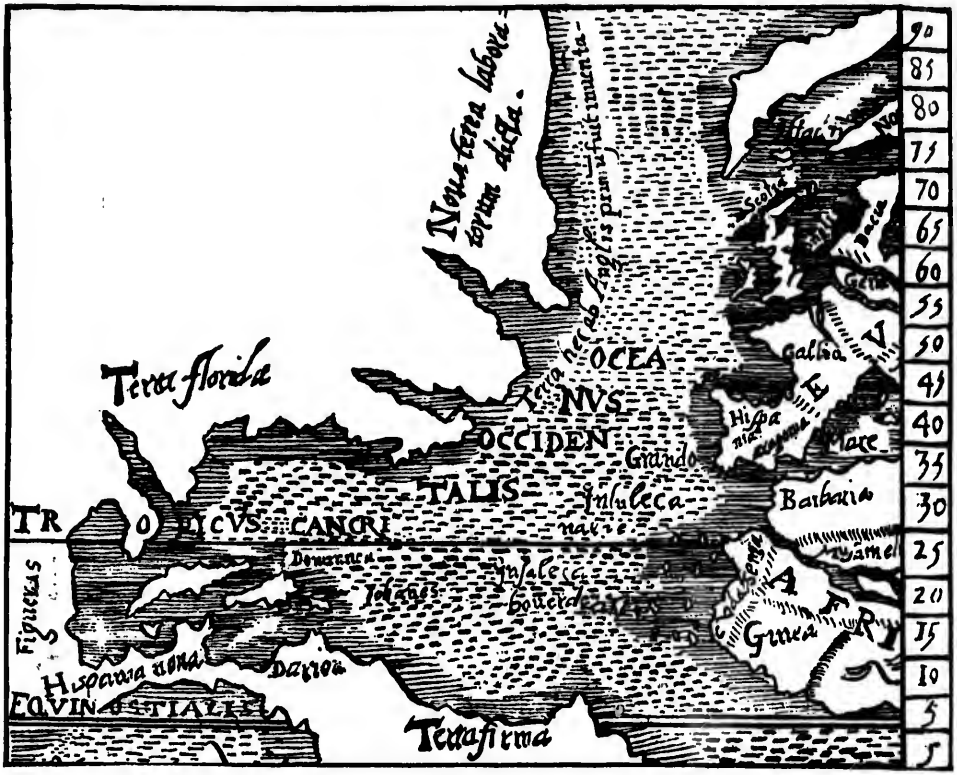


FIG. 13.—ROBERT THORNE'S MAP, A.D. 1527.

14.—The Map of 1544.

As this map is discussed with a detail amounting to tediousness in the first paper of this series (R. S. C., Vol. XII., 1894), I may be excused from repeating what is there stated. Mr. Harrisse says of it:[94] "The "cartographical data, however, which served as a basis for these tabular "explanations" (the legends on it) "were certainly furnished by Sebas- "tian Cabot, or published with his assent, particularly as regards the "configuration of the northeast coast of the American continent and the "alleged landfall at Cape Breton." The legends, he says, were written about 1544 by "one Dr. Grajales," the type in a pamphlet which he has

discovered containing the same legends is the same type as was used in the legends pasted on the map, and, as these legends were extant and quoted in 1549, it is proved that they are contemporaneous with the map.[95]

Bishop Howley avoids the difficult problem presented by this map. He says that he has seen and examined the map in Paris; but he passes over this document, so supremely important, with the remark that it would require a lecture to itself. He says there is no date on the map itself. The date is, in fact, in one of the legends, which refer to numbers which are engraved on the map. The bishop says the printing is "evidently of a very recent date" (p. 28, note), forgetting that these legends are also extant from another copy dated A.D. 1549, and are to be found in the works of Chytræus. He quotes Harrisse as referring the authorship of the legends to Grajales, but does not add that Harrisse attributes to them the same date as the map, viz., A.D. 1544, nevertheless he relies on them (p. 29) to establish the date of the landfall, and (on p. 37) he quotes the Spanish version, "una ysla grande," from one of these very legends, which he says are "evidently of very "recent date." He criticises Harrisse very severely for having charged Sebastian Cabot with mendacity, and is sorry to see (p. 17) Mr. Harrisse's example imitated by others; but while admitting that the landfall at Cape Breton is indicated on this map, he does not accept it, but turns round upon Dr. Harvey and me as if we had invented the theory, and so escapes explaining how Cabot came to put it there in 1544, and why he himself does not believe Cabot's statement. Sir Clements Markham, who had accepted the map,[96] seems to have been shaken by the recent denunciations of Cabot's character, but does not very decidedly pronounce against it. Tarducci accepts it with all its consequences, but then he does not believe that Sebastian Cabot was a liar and a scoundrel.[97] Judge Prowse rejects Sebastian Cabot and all his works. He is willing to take an inscription, based on an unknown authority on Mason's and DuPont's maps in 1625, in favour of Bonavista, but not one upon Cabot's authority on a map of 1544 in favour of Cape Breton. The legends, as Dr. Justin Winsor well observes, "interlink with the body of the map in such a "way as to make it apparent that they belong to the publication."[98]

The importance of this map is so great that it will be more satisfactory to give in his own words Mr. Harrisse's explanation of the Cape Breton landfall marked upon it. The map is dated 1544, and in 1547 Cabot removed to England. In the belief that Cabot was a liar and charlatan, he thinks Cabot falsely placed the landfall there. He says:[99]

"At that time (A.D. 1544) a great change had taken place in the "relative importance of the northern coast of the new continent. The "seas which bordered the Baccalaos region were no longer a common "fishing ground frequented by th. smacks of Portugal, Biscay, Nor-

" mandy and England. The successful explorations accomplished by " Jacques Cartier from 1534 until 1543 had been followed by the plant- " ing of French colonies. The part selected was not Labrador, on which, " in all maps of the period, was inscribed the uninviting legend, ' No ay " ' in ella cosa de provecho ' (here there is nothing of utility). On the " contrary, the French had chosen the country around the Gulf of " St. Lawrence and Cape Breton, which the reports of Cartier and Rober- " val to Francis I. represented to be a beautiful and fertile country, with " rich copper mines, fine ports, and the most navigable waters in the " world.

" Under the circumstances, the cartographical statement of Sebas- " tian Cabot, as embodied in the planisphere of 1544, may well have been " a suggestion of British claims and a bid for the favour of the king of " England. To place near the entrance of the Gulf of St. Lawrence the " landfall of 1497, was tantamount to declaring that region to be English " dominion, as the discovery had been accomplished by vessels sailing " under the British flag."

Much of this is absolutely novel to Canadians. We know of no such colonies round the gulf or on the island of Cape Breton. What really happened is summarized in a sentence by Abbé Ferland [100]—the most accurate of our historians : " Après le retour de Roberval en France, il " s'écoula bien des années, pendant lesquelles le Canada semble avoir été " complètement perdu de vue par la cour des rois très chrétiens. Néan- " moins la grande baye et l'entrée du fleuve St-Laurent continuaient " d'être frequentées par les Malouins, les Normands et les Basques qui " remontaient jusqu'à Tadoussac pour y faire la traite des pelleteries."

The history of Canada as we know it, is that Cartier's and Rober- val's expeditions were failures, and that the first successful colony inside of the gulf was led by Champlain in 1608, when he founded Quebec. The first settlement in Nova Scotia was at Port Royal, sixty years later than A.D. 1544, and as for Cape Breton, the old names of the bays—Baye des Espagnols, Havre aux Anglois, St. Anne's bay, Niganis—show that English, French, Spanish and Portuguese fished in contiguous harbours. Settlement there was much later than at Quebec. The pages of Hakluyt show that vessels of all nations resorted to the Ramea islands in the gulf, and no exclusive claim is disclosed by England anywhere in Baccalaos until Sir Humphrey Gilbert, in 1583, forty years later, took formal possession of Newfoundland. They never claimed within the gulf. This is very clearly stated by Father Biard in the Jesuit Rela- tions, A. D. 1611–16. He says : " The English lay no claim to all of New " France. They do not dispute the shores of the gulf and river St. " Lawrence. They claim up to Campseau and the island of Cape Breton."

Returning, however, to the strictures of Mr. Harrisse upon Sebas- tian Cabot in relation to this map of 1544, I would remark that it is mis-

understood by many persons because, in the books, an extract only can be given. That portion alone is shown which represents the eastern part of the continent of North America, and the majority of readers think that they have before them a complete map of what is now the eastern part of Canada and the United States, made *as such* by Sebastian Cabot. They are, indeed, told that it is a mappemonde, and, sometimes, that it is a planisphere, but often do not stop to think what these words mean. I am fortunately now, by permission of the Hon. Sydney Fisher, minister of agriculture and statistics, able to reproduce the whole map from a photographic negative procured by the Dominion archivist from Paris, and it will be seen to be a map of the world on an elliptical projection. No one knows what this map is better than Mr. Harrisse. He has no misconception about it, but, just as another Cabotian scholar held a brief against the father, he would seem to hold a brief against the son, and he draws a bitter indictment against Sebastian for barefaced plagiarism in constructing this map.

Now, consider what the map is; it is a map of the whole world, with geographical notes and remarks selected from all sources, ancient and modern. Suppose a publisher to-day makes a map, does he not draw from all sources as far as the copyright law permits? Whoever made the map of 1544 did what Stanford, and Johnston, and Bartholomew are doing every day now. Jacques Cartier's maps were then accessible and contained the latest information, and they, as a matter of course, were made use of. Every map-maker is, and must be, a plagiarist. If Cabot had made an original map out of his own head, then there would be good ground for calling him a liar. Suppose he did copy Cartier for New France; he copied others for other places—copied from the maps of the sailors who sailed there. A map is not, like a poem, spun out of one's own brains, but every one adopts from and improves on its predecessor. Cabot is by some, most unfairly, held to assert that all the North American geography laid down on this map is covered by the claim in legend No. 8. We say Columbus discovered America, and so he did; but he did not discover the Mississippi. This map says that the Cabots discovered the Baccalaos, and so they did; but it does not claim that they discovered the Saguenay, though laid down on this map under a barbarous distortion of Jacques Cartier's name. All Cartier's names are there twisted up in translations from French into Spanish and Portuguese by some one who, apparently, understood none of these languages, but compiled the information from maps of all these nations. Legend No. 8 refers to the number on the map. It is 3 there, by a palpable error, for, as it has been often shown, the map is carelessly engraved, but the heading identifies the reference. The spot on the coast of the region in question first discovered is marked, in the same characters as the rest of the map, *Prima tierra vista* (not *terra*), and we are informed in the legends when

and how the discovery was made. The description applies all over the region, and two bears are figured just under the Arctic circle, where bears are still, and yet some persist in bringing white bears down to the landfall, wherever they place it. That is not the fault of the map. It is plain enough there. Here, then, is positive testimony, and everything tends to corroborate it. If Sebastian Cabot marks in 1544 the same point on the coast as the "*prima vista*," that does not derogate from the statement of John Cabot on La Cosa's map in 1500. Let it be granted that Sebastian Cabot was a liar up to the n^{th} power of Ananias, the argument is unaffected. Suppose there was no such person, the evidence of La Cosa's map is sufficient. But if to this evidence be added the description given of the country and other particulars recorded by the contemporary letters, the presumption in favour of Cape Breton is very greatly strengthened. It is strangely assumed that, because Sebastian Cabot in 1544 said the landfall was at Cape Breton, *therefore* it was somewhere else—at Labrador, Bonavista, Cape St. John, Mount Squirrel—anywhere, in fact, but not where he said it was.

FIG. 14.—MICHAEL LOK'S MAP, FROM HAKLUYT'S "DIVERS VOYAGES," A.D. 1582.

In my first paper and in one of the appendices I discussed in detail the different editions of this map which existed in the sixteenth century.

Richard Eden, who was a personal friend and was with Cabot in his last illness, knew this map, and translated one of the legends in a work published two years before Cabot died.[101] Then, in Hakluyt's "Divers Voy-" ages," published in 1582, there is a map by Michael Lok with the inscription, "J. Gabot, 1497," upon Cape Breton, and in Hakluyt's "Western " Planting," written in 1584, but published in print for the first time a few years ago, this map of Cabot's, identified by its legends, is referred to in detail. All these maps were of Clement Adams's edition, and Michael Lok, who in some important points followed Verazzano's map, must have got his Cape Breton landfall from Clement Adams's copy of the Cabot map; and it is worthy of remark here that Lok has placed the island of St. John off Cape Breton and in the Atlantic. Here, then, we have the plainest evidence that in 1544 and in 1582 the landfall was placed at Cape Breton by Cabot himself, and by people who had his maps before them, and, arguing from Lok's map, one might assume that upon the copy he followed not only was the landfall at Cape Breton, but the island of St. John was off the point and in the Atlantic.

It has been shown why Cabot could not print a map in Spain, and why the maps made in Spain of necessity were made to the official Spanish pattern. Mr. Harrisse has an elaborate theory to prove Sebastian Cabot lied when he placed the landfall at Cape Breton, and now I may be permitted, in reply, to develop a remark in my first paper and to formulate at greater length a theory that, in this matter, Cabot was neither a liar nor a traitor.

It has been shown in the previous pages that Spain did lay claim to the whole of the new world up to the line of demarcation, and that the king, by the attempts made, as well as by the engagement of Sebastian Cabot, meditated taking possession at the north. It was the special knowledge of Baccalaos which Ferdinand stood in need of, for Ayala informed him that the land Cabot had discovered adjoined the land belonging to Spain under the convention with Portugal. Cabot had, therefore, found land close to the line agreed upon in the treaty of Tordesillas, and the king would take possession of it.

But in the meantime long and heated discussions arose between the two courts in consequence of Magellan's discoveries in the far east, and commission after commission had vainly tried to determine the longitude of the Moluccas. The struggle was keen; for, as the line of demarcation passed through the poles, any land gained in the west would be lost in the east. Experts were examined, and the pilots falsified the maps exhibited in the interest of their respective nations, so that the Portuguese refused to accept the Spanish charts altogether, and this struggle was going on when Robert Thorne, in 1527, wrote to the English ambassador, for he describes it at length. There was no way of ascertaining the longitudes of the places in dispute, and it resulted in the

occupation of Baccalaos and Brazil by Portugal. The controversy settled itself, in fact, and Portugal asserted her rights by a grant to Fagundez in 1521. That grant covered the southern part of Baccalaos (Acadia); as for Newfoundland, it was from the first conceded to Portugal.

It is evident, from the efforts made by Charles V. to induce the King of Portugal (*ante* p. 190) to join in crushing the expeditions of Cartier and Roberval, that the territory was at that period regarded as belonging to Portugal, and, on the refusal of Portugal to take action, nothing was done. Portugal was, in fact, too deeply interested in the east and south, and did not stir or even protest against the expeditions of France to the western world. The region of Baccalaos was tacitly relinquished.

While Spain had claims in that region, and even while Portugal, her partner in the world division, strongly adhered to her rights there, a real duty devolved on Cabot to make no public statement of his special information which might in any way conflict with the public policy of his master; but when the whole territory was abandoned by Spain, no such necessity continued to exist, and although he could not alter the standard map nor, of himself, give out in Spain a different map, there was nothing to prevent him from communicating information to others in another part of the empire not under the local laws of Spain.

That the English had made discoveries in 1497-1498 was in fact known all the while in Spain. Ferdinand knew it, for he had La Cosa's map in A.D. 1500. Peter Martyr knew it in 1516, for he recorded then that Cabot had sailed south to the latitude of the Strait of Gibraltar. Robert Thorne knew it in 1527, for the map he sent from Seville showed the English on the coast down as far as 40°, and Gomara, in 1552, and Ramusio, in 1556, record reports of previous years, making Cabot's discoveries reach as far south as 38°. There was nothing new, then, in Cabot fixing, in 1544, a landfall at 46°; there was nothing specially in that to make a claim for England, for Cabot had often previously stated that an expedition under the authority of Henry VII. had coasted south to 38°. He had not concealed it in conversation, but he could not, as a public officer of Spain, put it down on the official maps. When, however, the territory was, in fact, thrown open, by Portugal allowing her claims to fall into neglect, there certainly was no reason why he should abstain from stating the truth, for, as a matter of fact, in 1544, all exclusive claims had been abandoned and the whole of Baccalaos was open to the world, for vessels of all nations resorted there.

In giving information for this map, Cabot gave it to a subject of his own monarch, to be published in one of that prince's cities, probably Antwerp; it bore upon it the imperial arms, and express reference is made to Sebastian Cabot as chief pilot to his imperial majesty, and as being authority for the map. The map bears no printer's name nor imperial privilege, but no one would be likely to be bold enough to put the

imperial arms on the map unless he had some high authority to back him. The laws of Spain were not current in Flanders, and any publisher making a map would make as much use as possible of the name of the grand pilot of Spain to further the sale of his map, for the publishers of those days were as anxious to push their sales as publishers of our own times.

If this theory be accepted it will explain the deviations from the official Seville pattern on the map, without having to charge Sebastian Cabot with being a liar, a scoundrel and a traitor, and will account for the fact that he continued to be held in esteem by our own Edward VI. and by all in England to the day of his death. That Cabot did not see the proof of the 1544 map is clear from the gross errors in the spelling of the names in Spanish. Before passing to another point, I would invite special attention to the fact that the map refutes the theory that Cabot at any time entered Hudson's bay. Cape Chidley is not there, nor Cape St. John. The name of Bonavista is not found upon it, and the landfall is on the Atlantic coast.

15.—Dr. Grajales.

Those who have given close attention to this subject have often wondered how Sebastian Cabot communicated information for the map of 1544. In Mr. Harrisse's Discovery of America, p. 640, we find that indefatigable scholar had unearthed in the king's library at Madrid a MS. in Spanish, the title of which he thus translates :

" Explanation of the sailing chart of his lordship the admiral. It " contains a treatise concerning the sailing chart made (or written *hecho*) " by Dr. Grajales at Puerto Santa Maria, together with the use of two " tables to ascertain the rising of the sun and the setting thereof from the " altitude of 38° to 48°."

All that is known of this matter is from Mr. Harrisse's books, and he tells us that he has found out nothing else about it. He speaks of the writer as *a* Dr. Grajales and *one* Dr. Grajales. This MS. contains, first, the account Columbus wrote of his third voyage ; and, second, a Spanish version of the twenty-two legends attached to the map of 1544. I presume the tables are there also. Later, in his last book (John Cabot), we learn that he had found a copy of a pamphlet printed in Spanish (he thinks in Belgium) containing the Spanish text of the legends in the same type as those pasted on the margin of the engraved map now at Paris. The connection between the map and the pamphlet is then clear —there is no date, nor author's nor printer's name, nor privilege, to give any clue to where or when the pamphlet was printed. Dr. Grajales, however, was, of necessity, an educated Spaniard, and he lived near Seville.

While there are some things to be noted in relation to this, there cannot be a long argument, as all the information is from Mr. Harrisse's own researches.

In the first place I would remark that Grajales may have copied the legends for his own information, because he certainly did copy out Columbus's account of his third voyage, and the first legend in the pamphlet, as on the map, continues the history, for it commences, "No. 1 of the Admiral." Why should he be supposed to have been the author of the legends bound up in the same volume with the letter of Columbus, and covered by the same title? Why one more than the other?

The question is not, however, important, for it has been admitted by Mr. Harrisse that the information came from Sebastian Cabot. Dr. Grajales was then merely the instrument by which Cabot worked, and it is immaterial whether Grajales wrote the legends or not. Somebody beside Cabot wrote them, and it may as well have been Grajales as anybody else. He lived at Puerto Santa Maria, close to Seville, where Cabot resided. It brings the responsibility for the legends closer home to Cabot; that is really the outcome of the discovery, interesting as it is and creditable to Mr. Harrisse's powers of research. It will not do, however, to take Dr. Grajales too seriously. He is not more likely to have written the legends out of his own head than to have written, of his own knowledge, Columbus's account of his third voyage.

The conclusion I arrived at in 1894 concerning the celebrated map of 1544 was that, although it was not actually compiled by Cabot, it was largely based on information supplied by him. It seems to me impossible to deny that he had some hand in it, and yet the only copy now surviving was evidently not put forth under his immediate responsibility. Indeed, in 1544, he would not have dared to publish a map unofficially, for he was then holding an official position in Spain, and not long before he had suspended Guthierez for doing something of that kind. There were, however, of a certainty, some widely known maps existing in England during his residence there, which were attributed to him without a disclaimer on his part, and upon them the information concerning the island of St. John did exist. It is the English maps—especially the Clement Adams's edition of this map, published in England when Cabot was alive and in high office there, which told of the date and place of the landfall three hundred years before this 1544 map was found, and three hundred and forty years before Mr. Harrisse came upon the track of Dr. Grajales's private cosmographical studies.

16.—Cape Breton a Natural Landfall.

If any one will take the trouble to examine the map, he will see that if a vessel continue past Cape Race on a westerly course she will make Scatari island as her landfall. This is not in the least an original opinion. Judge Haliburton, in his "History," makes the same remark. He says (vol. 2, p. 213): "This island being usually the first land made by vessels "from Europe to any of the colonies east of the Bay of Fundy, and from "the common occurrence of vessels being ahead of their reckoning when "steering to the westward, the first news of its propinquity being often "given by the roar of its breakers or the concussion of its rocks; ship-"wrecks are of frequent occurrence, and few places on the coast of North "America more obviously call for the protection of a lighthouse." He was writing sixty years ago, and a lighthouse has long since been built. It was in old days noted for fatal shipwrecks.[102] The most celebrated of all was the "Chameau," a king's ship going to Quebec in 1725 with a number of distinguished officials on board.[103] Not a soul was saved, but the ship's papers were subsequently found, and they showed that no sight had been possible for several days from fog, and that Cape Race had not been seen. Going back farther it will be found that Hore's expedition,[104] sailing at the end of April, 1536, about the same time of year as Cabot, was two months out, and never touched land until they brought up at the point of Cape Breton. In like manner the "Bonaventure,"[105] early in May, 1591, did not see Cape Race, though they knew it was near, and they found their position, by the lead, on St. Pierre bank, and altered their course to the northwest for Cape Ray. Another voyage which throws light upon the question, is that of the "Marigold" in 1593. We learn from Hakluyt that she sailed for the island of Ramea (Magdalen), and being unacquainted with the locality, she beat up and down a long time, and at last "fell with Cape Breton." It has been stated in this discussion that there were no Indians on the Atlantic side of Cape Breton, and that they never fished there. That was not the experience of the "Marigold." Hakluyt's informant continues: "Here diverse of our men "went on land *upon the very cape.*" There is no mistake possible about the place—"where at their arrival they found the spittes of oke of the "savages which had roasted meate a little before." It is Hakluyt I am quoting, although the passage reads as if it had been written specially for this controversy. Then the "Marigold" sailed on four leagues to the west and the crew went ashore for water. Hakluyt continues: "And "passing somewhat more into the land wee founde certaine round pondes "artificially made by the savages to keep fish in, with certaine weares in "them made to take fish." This is clear proof that the very point of Cape Breton is a natural landfall; that there were Indians there, and

that they did fish there. The crew had reason to know it, for they had a fight with the Indians. Then the narrator goes on to describe the country: There were "goodly okes, fir trees of a great height, a kind of "tree called of us quickbeame, and cherie trees and diverse other kindes "unknowne." The quickbeam is the mountain ash, and "they found "also raspeses, strawberries, hurtes (hurtleberries), and herbes of good "smell and diverse good for the skurvie, and grasse very ranke and of "great length." All this is very much to the point, and Hakluyt could not have supported my view better if he had written expressly to combat, on my behalf, the idea that Cape Breton was a desolation of rocks and morasses, abandoned even by Indians. The people of the "Marigold" in 1593 were favourably impressed by the place, as John Cabot was in 1497.

Again, in the *Discorso d'un gran capitano*, in Ramusio (III., 423), the next point to Cape Race is said to be Cape Breton, and they are said to lie east and west. Chabert, a naval officer, sent by the king of France in 1750 on a scientific expedition, to correct the charts, says of Scatari: "This island is the usual landfall for all vessels sailing to Louisbourg."[106] He also sailed in a thick fog from the banks to Cape Breton. Markham, also, in his introduction to vol. No. 86 of the Hakluyt Society, has no difficulty in recognizing that, in case of fog, the island of Cape Breton is a natural landfall, and it is so natural that, in Sir Humphrey Gilbert's sailing directions for the expedition of 1583, Cape Race was the first point of rendezvous, "And if we shall not happen to meet at Cape Rase, then the "place of rendezvous to be at Cape Briton, or the nearest harbour to the "westward of Cape Briton."[107]

The above are instances from old voyages, and, on inquiry from those who have access to the logs of steamships sailing to the St. Lawrence, I am informed that in the month of June Cape Race is not visible three days out of four, because of the fogs which at that season are the rule rather than the exception, and that from the vicinity of Cape Race to St. Pierre island is the worst spot for fogs on the whole Newfoundland coast, for, unless the wind be either from the north or northwest, that coast in the summer months is wrapped in fog.[108] Any one may see for himself, who chooses to look at the pilot charts of the North Atlantic issued by the naval department at Washington, that such is the case. The weariness of this controversy is due to the singular fact that, no matter how absolutely trite any proposition may be, some one will be found to rise up and contradict it. Even the fog prevailing at Cape Race in June is disputed, and, to save a tedious discussion about that, I have given in Appendix C a table from the returns of the lighthouse-keeper at Cape Race, showing the number of foggy days in June during the last four years. Any one who knows better may contradict the lighthouse-keeper.

There is, therefore, no *a priori* reason why Cape Breton should not have been the landfall, and even the "infinite pains" expended upon Sir Clements Markham have not resulted in eliciting from him an opinion to the contrary. Dr. Justin Winsor said, in 1892, of Cape Breton: "It "is quite possible that more satisfactory proofs can be adduced of another "region for the landfall, but none such have yet been presented to "scholars."[109]

On the other hand, there are strong documentary proofs in favour of Cape Breton, such as exist for no other place named. There is the map of La Cosa, which locates the *Cavo descubierto* on a course west by compass from Cape Race; the point of contact is thus located upon a definite line. We have, then, the Cabot map of 1544 definitely fixing the landfall on the northeast point of Cape Breton island. Here is the independent testimony of father and son at an interval of forty-four years. As to the meaning of *Cavo descubierto*, we have a clue upon the map itself. On the coast of South America, opposite Cape St. Augustine, we have the landfall of the expedition of Vincent Yanez Pinzon in 1499 set forth as follows: "*Este cavo se descubrio en ano de mily CCCCXCIX. por Cas-* "*tella syendo descubridor Vincensians.*" (This cape was discovered in 1499 for Castile by Vincent Yanez.) On the south coast of Newfoundland, and on a course west by compass from Cape Race, the words *cavo descubierto* plainly tell us, was the landfall of the people who sailed in the *mar descubierto por Yngleses* prior to A.D. 1500. Moreover, the conditions recorded on group A of contemporary documents agree with Cape Breton better than with any other place mentioned. The landfall was in a temperate, pleasant region, where the land was good, and gave promise that silk and brazil-wood grew there. Though the point of the cape itself, like every ocean-washed promontory, is bare and rocky, the country near and especially around Sydney is very beautiful. There is nothing on the continent of North America to equal the scenery of the Bras d'Or, which is open from the sea close to Sydney harbour. In midsummer the climate is perfect. Fogs are infrequent there compared with other parts of the coast, and the summer heat is tempered by the ocean. Even this has been contradicted, although the beauty of the scenery and the special charm of its climate in the summer months are the constant theme of the Intercolonial railway guide books and are the attractions for summer tourists. They are the commonplaces of the newspapers. To put Cape Breton in the same category with northern Labrador is to underrate the information of one's readers. A few notices of the summer climate of Cape Breton have been placed in Appendix D, and to that I would refer; for to digress here would confuse the argument.

In my first paper I stated at length my reasons for believing that Cape Breton and not Cape North was the landfall, and in Appendix C to my second paper I showed, by a careful tracing from a photograph of

the original map, that it was not Cape North, but Cape Breton, which is indicated by the map of 1544. I am now in a position to show this clearly by a magnified photograph (fig. 15) of that part of the map taken from the negative procured by the Dominion archivist. I remarked in the same paper upon the accuracy with which Mr. Harrisse, in his first book, had read the meaning of the map and located the landfall at Cape Percy, only sixteen miles from Cape Breton, "at a small cape at the

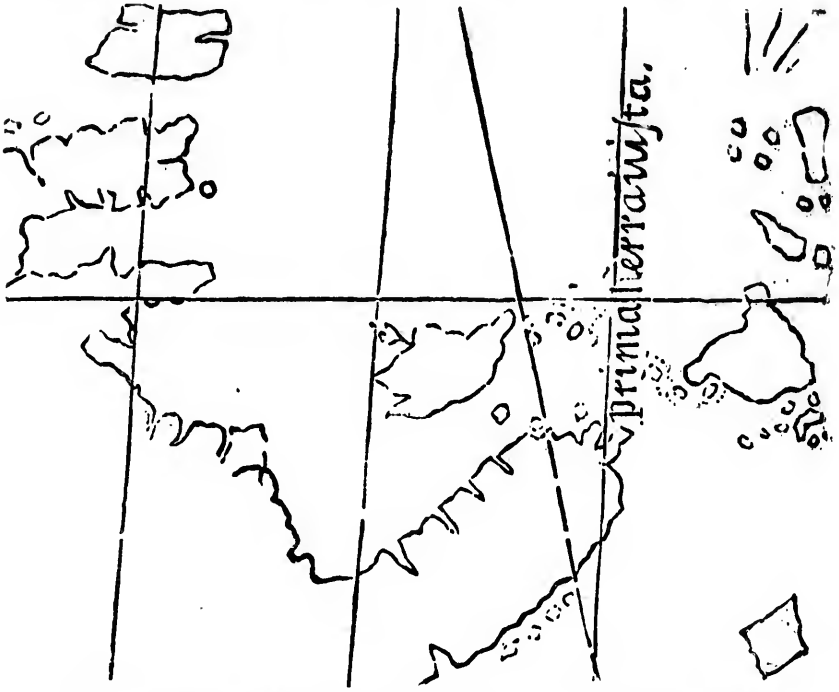


FIG. 15.—PHOTOGRAPHIC ENLARGEMENT OF OUTLINE OF CAPE BRETON COAST FROM CABOT'S MAP OF 1544.

"eastern extremity of the promontory."[110] Mr. Harrisse's argument is worth citing in full, if for nothing else than for its admirable statement of the method of dealing with such documents—a method sadly departed from by many contributors to the present controversy.

"Le critique, cependant, n'a pas qualité pour corriger un monument "graphique avec des hypothèses. Il doit prendre une carte telle qu'elle est, "l'interroger le compas en main, noter les différences, relever les légendes "et laisser les noms où il les trouve. Or, c'est bien sur la lisière de l'isle "du Cap Breton, à la pointe extrême, au nord-est, qu'on lit la phrase;

"*prima tierra vista*, et c'est en cet endroit que nous devons la laisser. "La transposer plus au nord et à l'ouest, serait arbitraire, car rien ne "prouve que Cabot, comme la plupart des cosmographes et des marins du "XVIe siècle, ait noté, ou même jamais connu la longue aiguille, qui "partant du port Dauphin, s'élève en ligne droite, jusqu'au cap North.

"C'est donc au cap Percé, et nulle part ailleurs, que selon la carte de "1544, Jean et Sébastian Cabot ont atterri; c'est là que, les premiers entre "les navigateurs de XVe siècle, ils auraient foulé le sol du continent "Américain et planté les bannières de Saint-Georges et de Saint-Marc, le "samedi, 24 Juin 1497, à cinq heures du matin." [111]

Cape Breton, and not Cape Percy, is the very easternmost point, and Scatari island is the first point made from sea, for it stretches farther east. Still, there is little to choose between them; the capes are only sixteen miles apart, and no one can suppose that after a lapse of 400 years any spot could be located as a landfall within a few miles. I take my stand beside Mr. Harrisse of 1882, but it is too much, after converting me, for him to ask me now to go to Labrador. I might have to go to Cape Farewell next, or even to Spitzbergen, for the shortest line by great circle sailing to Japan from Bristol, is by Spitzbergen.

17.—The Voyage of 1497.

I shall not protract this paper by futile speculations about John Cabot's doings upon this eventful voyage. I do not possess those powers of intuitive perception which enable some writers on the subject to follow the little "Matthew" on her lonely course. I do not know the extent of John Cabot's general information, nor what difficulties he had in engaging his crew or in raising money for his outfit; nor do I know in any special way the nature and scope of his meditations. When I am informed that "he knew the position of Greenland," [112] I do not dispute it, but I think it is a very bad reason for asserting he went there in May, 1497, when he set out for Cathay. When I am told that he "kept a daily log, "and plotted out his courses and distances on a map made especially for the "purpose," [113] I answer that all sailors have kept and still keep logs, and keep records in them of their courses; but whether he worked up his map every day or reduced his records into the form of a map when he returned, I do not know any more than I know where he could have got a map "especially made" of the unknown ocean he set forth upon. Columbus had Toscanelli's, for which see *ante*, p. 152. Cabot might have had one like it. Mr. Harrisse is, no doubt, correct in saying that Cabot was sailing in the region of "the brave west winds," for, in fact, his course lay through what Lieut. Maury called the zone of northwest winds,[114] and westerly winds do prevail; but I would prefer saying that he sailed in the region of variable winds, because I remember that in the late fall of

1861 the wind blew east for twenty-five days in spite of Maury's book, and a ship I was sailing in took four weeks to get from Quebec to the longitude of Cape Race, which was not passed until December 9. For my part, I feel sure that Cabot had wind from all points of the compass, although more from the west than any other quarter, and probably, as it was June, a little more from the southwest than the northwest. I am not surprised that he told Soncino that he "wandered for a long time," and that leads me to think that Cabot's voyage was a greater trial of courage than the admiral's voyage in the sunny regions of the trades. Still, I like to believe in the uniformity of nature, and that, within certain limits of variation, the winds revolve in their courses as we read that they did in the days of King Solomon. As a refuge, then, from the eccentricities of controversy, when winds and currents are improvised to set ships on appropriate landfalls, I fall back on the pilot chart of the North Atlantic for last June, where the probable winds are laid down for the guidance of sailors by officials at Washington, reckless of Cabot and his landfall. There was nothing unusual about the June weather of 1897, and I find that the winds expected were northwest, 6 days; southwest, 9 days; calm, 2 days; variable, 13 days. Total, 30 days. We shall never get nearer than that, argue as we may.

A very good idea of the conditions of a voyage such as Cabot's may also be formed from Edward Haies's account of Sir Humphrey Gilbert's expedition in 1583. Haies was captain and owner of the "Golden Hind." The fleet set sail from Plymouth on June 11th, for Cape Race as its first rendezvous, and, missing that, the vessels were to meet at Cape Breton. He says: "From Saturday, the 15th of June, until t' 18th, we never "had faire day without fogge or raine and winds bad, much to the west-"north-west, whereby we were driven southward unto 41° scarse."[115] After saying that in March, April and May the winds are usually more favourable for western-bound vessels, he adds: "Also we were encombred "with much fogge and mists in maner palpable, in which we could not "keepe so well together." From this we may see that John Cabot must of necessity have followed his compass. He was sailing on an absolutely unknown sea, and there must have been long periods when he could not get an observation by day or even see the stars at night; therefore, as he intended to return to England, he had only his compass by which to retrace his course. We may also see how easily Cabot might have dropped south of Cape Race and have passed it in a fog.

For these very excellent reasons we may spare ourselves vain speculation as to Cabot's actual experiences upon the ocean. Still, we do know that there were, as there still are, certain invariable forces on the North Atlantic which exert a constant influence to divert southwards a vessel on a westward course. One of these, the magnetic variation, has already been discussed; the other is the Arctic current, and Cabot must have

entered into its influence at longitude 40°; for there is the eastern limit on the chart of the drift of icebergs. I must now ask my readers to refer back to page 150, and they will see that Bishop Howley makes Cabot, sailing west from Cape Farewell, 345 miles to the meridian of Cape St. John, drop south to that cape through a distance in latitude of 600 miles. That is, as I observed there, a very immoderate use of the Arctic current. In my first paper I followed the Admiralty sailing directions and rated it, not at two miles, but at an average of one mile an hour. I submit, then, that all these influences must have carried Cabot well south of his proposed course, and that it is not "absurd," "ridiculous" or "preposterous" to conclude that he "Matthew" did pass Cape Race and make a landfall at Cape Breton—a natural and probable landfall, moreover, to which every indication of the contemporary documents (group A) points.

From what precedes in this connection it will be clear to the reader that it will be lost time to base any argument on the rate of sailing of Cabot's vessel. Bishop Howley fixes upon a rate of 140 miles a day, or nearly six miles an hour.[116] His argument is that the navigators said on their return that, now they knew the way, they could sail the distance in fifteen days; then, taking the extreme distance, 700 leagues, as 2,100 miles, and dividing it by 15, he arrives at 6 miles an hour, or 140 miles as a day's sail. But such a loose statement is not a basis for a mathematical argument. To use it as a foundation of practical calculation is misleading, for it is arguing from the constancy of ideal conditions of weather. It is better to inquire what was in other known instances really and actually the average rate, and here the log of Columbus will be of assistance. Now, I hope that no one will say again that I am arguing *a pari*, for I am not. I am arguing *a fortiori*. Capt. Fox, U. S. N., has with great pains gone over the log of Columbus, and, with the authority of a professional seaman, has ascertained his average rate of sailing to have been 4·4 miles an hour. I find also that, while on seven days he made 140 miles and a little over, on seven days he made less than 50 miles. My argument, therefore, is that if Columbus, with fair winds, fair weather and a straight course, made only 4·4 miles an hour on his whole course, Cabot, in a region of variable and, probably, much contrary wind, must have made less. I shall not venture to say how much less, for fear that Mr. Harrisse may again apply to a table of logarithms for a solution of the problem.

I come now to a really difficult point—to the varying statements given by the contemporary documents as to the distances reported by John Cabot, and here there must be some hypothetical argument, for the distances cannot be reconciled with the distances actually existent on the Atlantic, in whatever direction we may suppose the "Matthew" to have sailed. Before proceeding I would, however, observe that the word

"islands" in these old documents must not be construed too strictly. Humboldt warns the student against that. He says (Ex. Crit., i., 359): "Dans les premiers temps de la conquête de l'Amérique on avait coutume "de considérer chaque partie nouvellement découverte comme une île "plus ou moins grande. Peu à peu on reconnaissait la contiguité de ces "parties, et lorsque les observations manquaient, on hasardait sur les "cartes de réunir et de prolonger les côtes d'après de vagues indications."

On examining the contemporary statements it will appear that Pasqualigo says that the distance sailed was 700 leagues, or 2,100 miles, "*to "the mainland of the country of the Grand Khan.*" The others indicate that some nearer land was at a distance of 400 leagues. Soncino says that two large and fertile islands were discovered, he does not give the distance, and adds then, "having, it would seem, discovered the Seven "Cities 400 leagues from England to the westward."[117] A reference to the original will show the distinction between the two propositions: "Et a ritrovato due insule nove, grandissime et fructiffere, *et etiam* "trovato le septe citade lontane da l'insula de Ingliterra lege 400 per lo "camino de ponente." Weare's translation is more accurate than Markham's, "having likewise discovered." If the statements of Ayala and Puebla be now examined, they will be seen to agree that something had been found not more than 400 leagues away. In other words, they are chiefly dwelling on the point that there was land 400 leagues west of England; and Soncino says what was 400 leagues away was the Seven Cities, while Pasqualigo alone gives the landfall as being on the mainland of the Grand Khan. This particular point has been most clearly brought out by Archbishop O'Brien, and had not previously received sufficient consideration.

The difficulty is not with the 700 leagues; it is with the 400 leagues, and that is one of the reasons why Bishop Howley sends Cabot to St. Kilda's, in the Hebrides, straight north through seven degrees, or 420 miles, of latitude, in order to get him to a place where he would be 400 leagues away from something. St. Kilda's is exactly 1,135 miles distant from Cape Farewell, and it is 420 miles from Cape Clear. That will not solve the problem, for Cabot is made to sail 1,550 miles to Cape Farewell instead of 1,200, and it is not, moreover, in accord with fact to say that the distance of Cape Farewell is 400 leagues west of England. It is not correct either as to distance or direction. Archbishop O'Brien dwells upon the name "Seven Cities," and thinks that Chateau bay, on Labrador, is intended; but that will not help, because the theory introduces many new difficulties both as regards the Seven Cities (see Appendix B) and as to the distance, which is not 1,200, but 2,000 miles away.

Under these circumstances we must make a distinction between what was found at these two distances, and, as nothing exists upon the Atlantic so near to England as Cape Race, either that is intended or some error

has crept into the record. It is probable that, with the wish to minimize the distance from the nearest point of the new land, or from a real error, because of the inability at that time to compute longitude, or from having had a good run home with favouring west winds, Cabot stated the distance, not of the landfall, but of the new land, to be one-fourth less than it really is, and La Cosa's, as also the succeeding maps for a number of years, do in fact draw the east coast of Newfoundland a long way east of its proper longitude. On La Cosa's map, as before observed, it is drawn east almost to the longitude of the Azores.

There remains now, therefore, the statement of Pasqualigo that the landfall on the new land was 700 leagues, or 2,100 miles away, and in the table of distances calculated in view of a proposed line of steamships I find the distance between Milford Haven and Sydney to be exactly 2,186 miles. Milford Haven is near Bristol, and Sydney is near the eastern-most part of Cape Breton.

I am well aware that all I have said of the 400-league distance is hypothesis, but that is unavoidable. The nearest point must be taken, unless, indeed, we restore the mythical island of the Seven Cities to its old longitude on the map and put it twenty degrees north of its old latitude. The only remaining difficulty is that Pasqualigo says Cabot coasted for 300 leagues. There seems scant time for that. The distance from Cape Race to Cape Breton is 300 miles. It is possible that Cabot may have coasted for some distance farther west along the shore of Nova Scotia before he turned to go back, and then counted the coasting twice as it really was, though in his outward course he did not see the Newfoundland coast. These considerations I put forward not as proved, but as hypotheses to reconcile the divergent statements which otherwise are irreconcilable, for it is impossible to get over the fact that nothing exists now across the Atlantic so near to England as Cape Race, and that it is far more than 400 leagues distant.

18.—The Island of St. John and the Legends of the "Cabot" Map.

In the first paper of this series, the legends on the map of 1544 were very fully discussed, and I would refer to that paper any one who may suppose that I am passing over this important point. It has, however, been necessary to make incidental mention of Legend No. 8, and some farther notice is required here in view of the more recent controversies. The statement in that legend on Clement Adams's map is, in effect, that the landfall was made early on the morning of June 24, and that there was an island, lying out before the land, discovered the same day, which Cabot called St. John. The landfall, if ascertained, will identify the

island ; or the island, if ascertained, will identify the landfall. The conditions are:

1st. The island was discovered the same day.

2nd. It was opposite and near the landfall.

3rd. The landfall upon the map, to which the legend refers, was at the northeastern point of Cape Breton.

I have shown (fig. 15) by a tracing from a photograph of the map of 1544 that Cape Breton was the northeastern point. I am not trying to demonstrate within a few miles where Cabot struck land. The fact, however, is undoubted that Cape Breton is the easternmost point; that it was the first point to get a name; that it was the best known point, and that it has an island opposite and near to it, which, inside of seven years after the first voyage and for 100 years subsequently, was called St. John. If I say that Scatari island is St. John's island, I am only, after all, repeating Pedro Reinel, who drew it on his map in 1505 with its name.

I would call attention to the fact that no other landfall mentioned complies so fully with the conditions as Cape Breton. The word "island" is in the singular number. If, then, near any place suggested there are a number of islands, that place does not comply with the specified conditions. In the version on the map engraved by Clement Adams, while Sebastian Cabot was exercising in England that supervision of nautical affairs which pertained to his office, nothing is said of the size of the island. It is simply "an island." The version on the 1544 map calls it *insulam quandam magnam*, and the Spanish translation on the same map, "una isla grande," shows that the island was by that writer supposed to be large. On the only surviving copy of all the various editions of Cabot's map, there is indeed a large island named St. John, which has been shown at great length in my first paper (1894) to be in reality the large central island of the Magdalen group. In the same paper, in Appendix F, I gave a series of tracings (repeated at the end of this paper) which I still think absolutely demonstrate the correctness of my view. I must refer the student to that paper, and remind him that I made no new discovery. The opinion had been held by Markham; and Ganong in his most thorough investigation, had established it, and it was adopted by Harrisse. This seems to me to be the clearest part of the whole controversy, and it may be reduced to absolute certainty (see App. F) without the help of assumptions, or postulates, or hypotheses of any kind whatever. To discuss that point here, however, would have the effect of a digression, and I must revert to the main current of my present argument and call attention to two important facts. First, that the island of the landfall was a single island, and while the coasts of Newfoundland and Labrador are studded with many islands, this single island in some way characterized the landfall; and, second, that in the version

made five years after in London, during Cabot's life, the word *magnam*—"large"—was omitted. From this it may be fairly argued that it was purposely omitted.

Those who argue for a Labrador landfall can find no single island along the coast to mark any one place specially. The islands are numerous, and those who argue for Newfoundland are in the same position. Bishop Howley, when speaking of an island of St. Mark now existing on Labrador, incorrectly quotes Clement Adams as saying the island was *small* (Lect., p. 22). That island is probably one of the many islands near the latitude mentioned, about 55°. It is not on my maps or in the index of the "Labrador Pilot" but when, at page 37, he is objecting to Judge Prowse's islands in Bonavista bay, he quotes the other version to prove that it was a "large island," and decides that these are too small. The disputants take the islands as they find them at their landfalls, and quote either version as may suit. I, however, claim that the version made with Cabot's acquiescence is more probably right, and that he said nothing at all about the size of the island.

The position of the island in relation to the landfall is described by different but almost synonymous words and the fact adds emphasis to this indication. It is "appositam" (Chytræus), "oppositam" (Paris map), "ex adverso" (Clement Adams), "which lieth out before the land" (Hakluyt). Bishop Howley takes the Latin and Spanish of the Paris version to mean "an island which stood out in front of the land "and "not far off."[118] The word "adversus" is defined in its relation to locality as "*Juxta, vel potius in conspectu; e regione*" by Ducange, "Lexicon Manuale" (Ed. Migne), from all which definitions I conclude that the English phrase, "over against," with a sense of propinquity, would fairly convey the meaning. It was not one out of a cluster of islands. It was single, opposite and near, to all of which indications Scatari conforms.

I come now to an objection which, as I previously pointed out, is based on a gloss of Hakluyt, and has crept into his translation of Clement Adams's Latin original. If the Latin be taken it will be seen that after the word *Baptistæ* is a colon and the next word, *Hujus*, commences with a capital letter, thus making it refer to the whole territory, to wit, *Baccalaos*, described in Legend No. 8. This was argued in detail at page 67 of my first paper (1894), and I think that Sir Clements Markham has scarcely weighed my argument when he charges (Journal Geog. Soc. for June, 1897, p. 608) Sebastian Cabot with asserting that there were plenty of white bears on Cape Breton island. A glance at the map will show that the bears were in the region *Bacallaos*, for there they are portrayed, two of them, walking along close under the polar circle, and they are still there and catch fish in the way described.[119] The inscription there reads: *De la tierra de los bacallaos a tabla primera No. 3.* The figure 3

is an evident error for No. 8, because legend No. 8 does refer to Bacallaos and No. 3 to Mexico. Mr. Harrisse goes further, and puts the bears on the island of St. John,[120] and thus adds another count to his long indictment of Sebastian Cabot's mendacity. I feel sure that if Clement Adams's text be taken alone, and apart from all glosses, it will be seen that no such meaning is intended. All the misconception has arisen from reading the extract of the map—the American portion as usually pre-

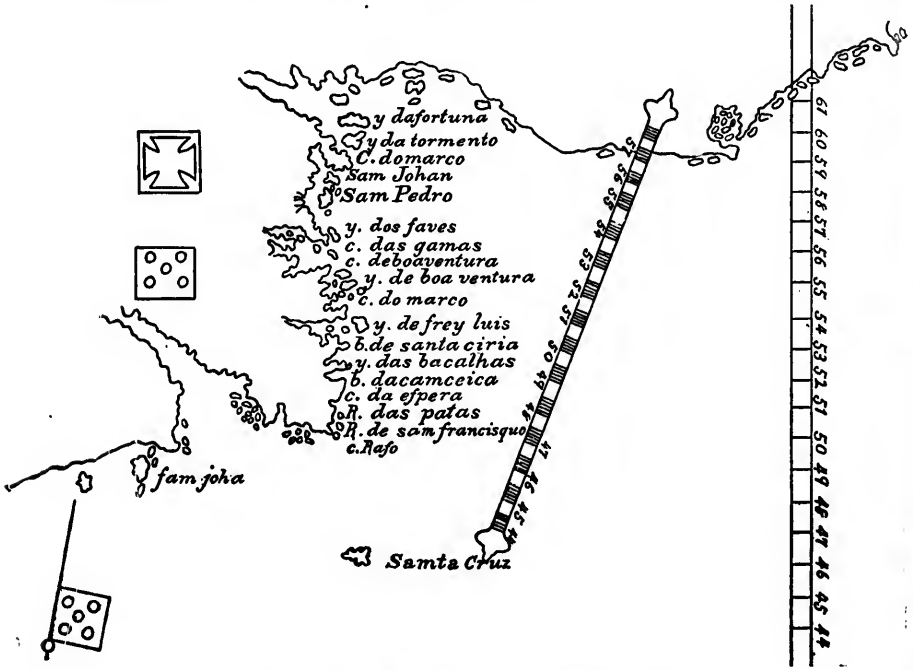


FIG. 16.—PEDRO REINEL'S MAP, A.D. 1505 (FROM KOHL).

sented—and not taking the map, as a whole, and referring legend No. 8 to its corresponding heading on the map, as every reader at once does with the other legends. Legend No. 8 covers all Acadia, Canada East, Newfoundland and Labrador to the farthest north.

I trust that the student of this question will refer to the map of 1544, given at the end of this paper in photographic facsimile. No other photographic copies of the complete map, excepting the twelve made for the late Dr. Deane, are known to me, and it is a great privilege to be able to publish this in easily accessible form. Close under the feet of the two bears will be found the reference in two lines:

De la tierra delos bacalla | os ue a tabla primera No. 3.

To make this clear I have repeated the extract of the American part of the map on a larger scale, and thus it will become plain that the information in the legend applies generally to the whole region, and is not an exception in that respect to all the others.

And, finally, I come to the positive portion of my argument, the persistency on the maps of an island of St. John in the Atlantic and close to the easternmost point of Cape Breton. In my first paper I dwelt upon this point at great length, and gave tracings of very many maps. Some of these are, for other reasons, repeated here (the Majollo map, p. 177; Lok's, p. 197). Mr. Harrisse is a witness to this persistency. It is a fact, impossible to explain away, that from the very earliest period, A.D. 1505, for one hundred years, the east point of Cape Breton is laid down with an attendant island, which, when named, is always St. John. At page 107 of Mr. Harrisse's "John Cabot," the following passage confirms my proposition: "So far back as the map constructed by Pedro Reinel, "in 1504 or 1505, we find to the east of the peninsula of Cape Breton, in "the latitude of 49° according to its scale, a large isle denominated 'Sam "'Joha.' This island, which as such is fictitious, may owe its carto-"graphical origin to a misconception of the great peninsula which "stretches into the Atlantic from the southernmost or Sydney region of "Cape Breton island, to which it is joined by an extremely narrow "isthmus. We find it in all Lusitanian maps and their derivatives, in-"cluding those of Dieppe, and with the names of 'Iª de S. Joan' (Mag-"giolo of 1527); 'Y. de S. Juhan' (Wolfenbuttel B.); nameless in "Viegas's, but Y de St. Jehā in the Harleyan, and Sam Joam in "Freire's portolano."

There was, indeed, a flying island called St. John Estevan far out in the ocean, and many others, as Antillia (the Island of the Seven Cities), St. Brandan and Mansatanaxio. They flew off the map eventually because they never had any objective existence, but this island of St. John never flew, and there it is yet, in the Atlantic, opposite Cape Breton where it always was. I cannot repeat the whole of my argument of 1894, but I would ask the reader to refer to what I have said there under this head, particularly to the argument from Lok's map of 1582. How utterly misleading, then, it is to talk of the Cape Breton theory as a new theory, and to associate with it Dr. Harvey's name and mine—to plead an immemorial tradition for two distinct places in Newfoundland—a tradition now French, now English, now Portuguese, when, in 1505, in 1527, in 1544, in 1582, in 1600, and in many intervening dates, the landfall of Cape Breton laid down in 1544 and 1582 is identified by the island of St. John.

19.—Date of the Landfall.

While the actual landfall has been long the subject of controversy, no one, until Mr. Harrisse has, so far as my reading goes, disputed the date of June 24th. When it is remembered that June 24 has been accepted for 350 years—that it was accepted in Queen Elizabeth's time and before that by men in England who personally knew Cabot in his later years, and that it has been challenged only in 1896, one naturally looks for some new fact, or some new document, with which to disturb a belief founded on the statement of a contemporary, a son of the chief actor and a partner in the letters patent of 1496. No new evidence is adduced, and the date seems now to be disputed on the general ground that Sebastian Cabot was no sailor, no geographer, but a humbug, an impostor, a charlatan and a liar. But even if that were true, he had nothing to gain by fixing upon June 24. No profound political import attaches to that day more than to any other day, and it is incredible that even such a man as some assume Cabot to have been, should have told a wanton lie about a matter of so little moment. How, then, according to Mr. Harrisse, did "this spurious date" ever come to be named. He says, in brief, that "one Dr. Grajales, living at Puerto Santa Maria about 1544, concerning "whom we do not know anything else," wrote the "matter of the "legends on the map, and that, when he saw on the map the name "Island of St. John, he may well have assumed that the landfall was on "St. John's day, and so wrote it down, because he knew of the almost "constant practice in those days of naming islands after the saints on "whose days they were discovered." Then, further: "That island "was probably supposed by Sebastian Cabot, in 1544, to be identical "with the one, also imaginary, when he (Cabot) then borrowed from a "French map, where it is inserted in the same place." [121]

Here is an aggregation of hypotheses upon which to challenge a date in history accepted for 350 years! Dr. Grajales, in this question, is an utterly superfluous person, inasmuch as Mr. Harrisse acknowledges that Sebastian Cabot supplied the information for the map and its appendages. The argument is really nothing more than that the date cannot be true because Sebastian Cabot is the authority for it. Mr. Harrisse accepts August 10, 1497, found in the public records of England, as the date of John Cabot's arrival in London, on his return from his first voyage, and he thinks that August 5 is a reasonable date to fix as that of his arrival at Bristol; and he believes also, from independent testimony, that the date of Cabot's departure was the beginning of May. If, then, we fix upon the 4th of May as the day of departure, whatever happened must have occurred within 93 days. If the day celebrated at Halifax be the right day, that will allow 50 days out and 43½ days for landing and the

voyage back. We know by experience that the outward voyage is usually longer than the return, and Cabot also had to face the prevailing westerly winds for he himself told Soncino "that he wandered for a "long time until he hit on land." When, however, he turned to go home he had a straight, known course, and the chances are enormously in favour of his having had a continuously fair wind. Some actual examples will assist in forming an opinion as to the length of the return voyage and they will be taken from voyages under similar conditions. On June 19, 1536, Cartier left Cape Race and arrived at St. Malo on July 6, in 19 days. In 1603 Champlain made the same passage in 18 days; in 1607 he was 27 days from Canso to St. Malo. Canso is close to Cape Breton, and if we allow John Cabot the extreme 27 days and the landfall be at Cape Breton, he will have had 16 days to spare for landings and examination of the country, and for wood and water, and refitting. In speaking of the distance John Cabot himself put it at 15 days from land to land, basing it, no doubt, on his run home from Cavo de Ynglaterra. No one but Pasqualigo mentions coasting; but Mr. Harrisse takes his 300 leagues of coasting and doubles it, because he thinks that Cabot retraced his course and went twice along the Labrador coast. It seems to him so easy to saunter along there! The coasting need not have delayed him if his landfall was Cape Breton. The south coast of Newfoundland is high and the water bold in its whole length. Its features are clearly visible from a vessel sailing along, and Cabot was not making a survey, but a reconnaissance preparatory to a future expedition.

The 10th chapter of Mr. Harrisse's last book is headed, "June not the month of the landfall," and he throws it back into May. This navigation along Labrador, from Hamilton inlet to Cape Chidley (from 54° to 60°), was not, according to his last theory, late in June and early in July, but late in May and early in June, because in his opinion "Cabot and his "crew rested a while, and devoted some time to refitting or repairing "their diminutive craft, as well as taking in wood and water, and renew-"ing the stock of victuals, which could be done only by hunting and "salting game on shore."[122] Very little wood could possibly be needed to cook the food of eighteen men. They might have filled the "Matthew" up in half a day. Water, no doubt, they required, and the rest of the day might have filled their casks; a pool on any iceberg off the coast of Labrador would have supplied them. He told Soncino that the sea swarmed with fish, and that they could be dipped up in a basket. What better food could he have than the food of the fishermen of the locality now? But then, at Labrador, he would be a month too early for the cod to strike in. Possibly he might have got ducks or geese, but as for caribou, they would not be down on the coast. Bears and seals, however, might have been numerous.

There is one strange thing about all this sailing up and down the Atlantic coast of Labrador—no mention is made in the contemporary

documents of ice. Of course, John Cabot would not have mentioned it if his landfall had been at Cape Breton on June 24, for the good reason that he would not see any, but Mr. Harrisse sends him up to Labrador in 54° to 60°, and omits to take into account the ice there.

Let it be supposed that Mr. Harrisse is right, and the landfall was, to quote his words, "between Cape Sandwich and Cape Chidley," we shall be in the midst of difficulty, for how did Cabot's little cock-boat, the "Matthew," get across the outer stre m of Arctic ice, 50 to 100 miles wide, coming down along the Labrador coast, far outside of the ice which sets against the shore and fills the bays ? (See Appendix A.)

Mr. Harrisse himself suggests a solution of the problem when he says:[123] "Either the landfall in 1497 was not effected on the 24th of "June, or, *contrary to Sebastian Cabot's asseverations, both cartographical "and descriptive*, only a very limited portion of the coast of the new "world was visited on that occasion." I accept the latter alternative, for I have maintained that the first voyage was merely a reconnaissance, only I cannot find that Sebastian Cabot said anything to the contrary, and in this passage is again evident the confusion of the two voyages, which I strove at such length to disentangle in 1894. The asseverations of Sebastian Cabot referred to the second voyage, and placed the landfall in a region of ice, and so tallied with his official duty in not compromising the Spanish view of the ownership of all the habitable portion of the western world up to the line of demarcation where the claims of Portugal commenced.

But, beyond all this, it is inaccurate to say that the date we are celebrating rests exclusively on a statement made by Dr. Grajales, or even on the map of 1544 at Paris; because the map was only discovered in 1843, and Dr. Grajales was only discovered in 1892. It has rested for 300 years upon numerous maps referred to by writers in Queen Elizabeth's time, and notably upon one map which hung up in the queen's gallery at Westminster. These maps were stated, by Hakluyt and all other writers of that day, to have been made by Sebastian Cabot. Hakluyt, in his "Western Planting," written in 1584, while Clement Adams was alive, says: "And the day of the moneth is also added in his (Cabot's) owne "mappe, which is in the queene's privie gallerie at Westminster, the "copie whereof was set oute by Mr. Clement Adams." Mr. Harrisse admits that Eden had seen the map when he wrote, and that Eden was personally acquainted with Cabot and published his work before Cabot's death, and, again, Clement Adams issued the map in 1549, while Cabot was alive and living in London. Here, then, is written evidence traced back to Sebastian Cabot and reduced to writing in his lifetime.

Again, it is misleading to vary the proposition slightly and say that the date is only to be found in the legends on the planisphere of 1544, when we know that later editions of this map existed, dated 1549, and that, while

they differed in the wording of the legends from the copy now extant, they agreed in this respect. Clement Adams's map was not an impression of the engraved plate from which the Paris map was struck, for it was re-engraved, and the legend which fixed the date of June 24 was copied by Hakluyt from *that* map, and thus had the authentication of Cabot while he was living in England. It matters not who wrote the words—the legend was hanging up in the queen's gallery on a map made by a royal officer, engraved by Clement Adams in the lifetime of that officer—Sebastian Cabot, to wit, whose duty it was to supervise the maps and examine the pilots of England.

The reader will, doubtless, notice that I have avoided reference to the interesting controversy going on between Mr. Harrisse, on one side, and Mr. G. B. Weare and Mr. G. R. F. Prowse, on the other, relative to the Fust chronicles and the records of the city of Bristol. That subject can be much better treated in Europe than in Canada, and it is in competent hands. It is not essential to my argument, and I am glad to leave it with those upon whom it has fallen.

20.—Conclusion.

And now, having, so far as my abilities permit, replied to my most estimable even if too hasty critics, I am suddenly brought up by a most unexpected deliverance of Judge Prowse in his criticism of Archbishop O'Brien's address. He says: "The real landfall of Cabot in North "America must forever remain among the things that are unknown and "unknowable." O, most lame and impotent conclusion! Has all this historic heat, then, been spent for naught? Have all the names for stupidity in the English language been exhausted upon Dr. Harvey and myself for no practical utility? Has all this rhetorical energy coruscated in vain? It cannot be. The judge's illustrious disciples must not be left thus to wander amid the "unknowable," for not to that end were "infinite pains" bestowed upon their conversion. There must be a conclusion; so, putting aside all superfluities of language, let us address ourselves to that most desirable, nay, longed-for, result. It is true the great object has been achieved, and the name of John Cabot has been rescued from the obscurity in which for four centuries it had been enveloped; but something is still due to the irritated historical susceptibilities of the public, which will refuse to be satisfied by the "unknown," and, still less, by the "unknowable."

It will appear, upon a careful perusal of the preceding pages, that there is no physical or geographical reason *a priori* why Cape Breton may not have been Cabot's landfall, and that the voyage was intended to be upon a westerly course. It will also appear that all the conditions existing upon the North Atlantic tend to make a westerly course swerve to

the south, and that there is, therefore, a strong preponderance of probability in favour of a landfall at Cape Breton.

To that same conclusion the positive evidence of the strictly contemporary documents also points, and that same landfall was set forth eighty years before any other was specifically named. It has been shown that John Cabot gave to Pedro de Ayala, Spanish ambassador in London, a map of his discoveries on his first voyage, and that map was sent to Ferdinand of Spain late in the year 1498, before the second expedition returned. The same king employed Juan de La Cosa to make a mappemonde in the year 1500, and that cartographer compiled it out of the materials then accessible. His mappe-monde contains the English discoveries on the northeast American coast, to wit, the discoveries of the Cabots, for there were none others made at the time, and the conclusion is, therefore, irresistible that La Cosa's map contains the results of John Cabot's first voyage.

It has been, moreover, made clear, and admitted by very high authority, that Cavo de Ynglaterra on that map is Cape Race, and it therefore follows that the coast discovered and named was the south coast of Newfoundland, and was directly west of Cape Race. At the end of the list of names is *Cavo descubierto*, in a position, and direction on a magnetic course, corresponding to Cape Breton. *Cavo descubierto* is a Spanish name, meaning "the cape discovered," and denotes, when put plainly, the cape of landfall.

Further proof is given that the landfall was a southern one in the despatch of Dr. Puebla to their Catholic majesties expressing his belief that the land found belonged to Spain. This belief is shared by De Ayala, who says that from the direction he is certain the lands belong to Spain, and because the map does not show the islands known to be the property of Spain, i.e., the Antilles, he thinks the map is false. This proves that the direction and discovery was well to the south and west, but also near to the line of demarcation; and the line of demarcation passed a little east of Cape Breton and cuts off Newfoundland and Labrador.

It is proved that the land of the first landfall was in a temperate, well-wooded, pleasant region, where the sea abounded in fish. This cuts off the whole northern region. There was no ice there, for ice was a novelty to sailors, and it is not mentioned. It is a region where brazil wood and silk might be expected to grow.

That is John Cabot's testimony to his landfall of 1497.

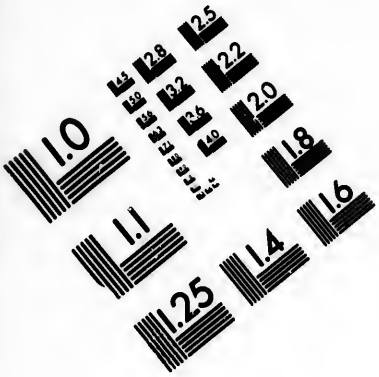
It has been proved that maps were made in the years 1544–49, if not by Sebastian Cabot, yet on information received from him, and one dated 1549 was cut by, or for, Clement Adams in England, when Cabot was at the head of the nautical affairs of that kingdom and the official examiner of all pilots.

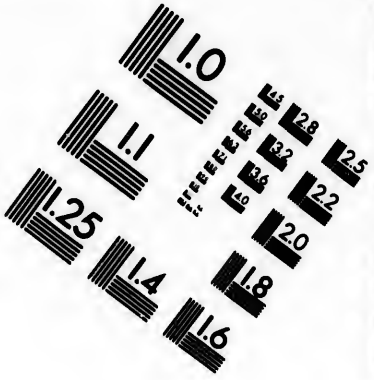
On that map the landfall is expressly laid down "prima tierra vista" at the northeast point of the island of Cape Breton. This is confirmed by Lok's map, in Hakluyt's Divers Voyages, published in 1582, while Cabot's map was hanging in the queen's gallery. Lok's map also gives, on the point of Cape Breton, the words, "J. Cabot, 1497," and places near it the island of St. John in the Atlantic.

It was shown that Pedro Reinel's map of 1505 placed an island of St. John at the point of Cape Breton—eight years only after the voyage of 1497, and that ever since that time an island has been shown to exist there.

If we may argue from Lok's map (which is supported by all the other maps), the island of St. John on Clement Adams's map of 1549 was also in the Atlantic, off the cape. On the only copy existing of the map of 1544, and on that alone of all the maps, an island of St. John is, indeed, inside the gulf, and occupies the place of the Magdalen group; it must, moreover, be held to be that group, because Prince Edward island was at that time, and for fifty years afterwards, supposed to form part of the solid continent. The geography of the gulf has been proved to be derived from Cartier, but Sebastian Cabot's evidence confirms that of his father as to the landfall on the Atlantic, and, if any persons in the world knew where the landfall was, they did.

These are the main conclusions I venture to submit, and until some new map be found, or some additional evidence be produced, I think that they are probable to the very highest degree attainable in such matters. After fifty years of discussion, Watling's island has been generally received as the landfall of Columbus, and a landfall for Cabot at Cape Breton is equally probable. There are, no doubt, difficulties in the case of Cabot, as, indeed, in that also of Columbus, but the weight of evidence is in favour of both. If, however, any one elects to turn his back upon the only positive testimony in existence, and to follow elaborately woven hypotheses; if he prefers to seek out new landfalls and propose them for general acceptance, the maps, at least, of this paper will assist the public to form a reasoned opinion concerning them. It is longer than I wished; but all the really important maps are now presented, and the leading authorities are clearly indicated, and, if my conclusions be not accepted, the materials for an independent judgment are now plainly set forth. The inquiry is worth the trouble, for the primal event in Canadian history is in debate. When all the capes on the northeast coast of America and the capes inside the Gulf of St. Lawrence have been exhausted, the general consensus of scholars will probably accept the only positive evidence in existence, and fine-spun hypotheses and short-cuts of conjectural geography will drop into the inevitable "budget of paradoxes" which awaits the close of every keenly fought controversy.





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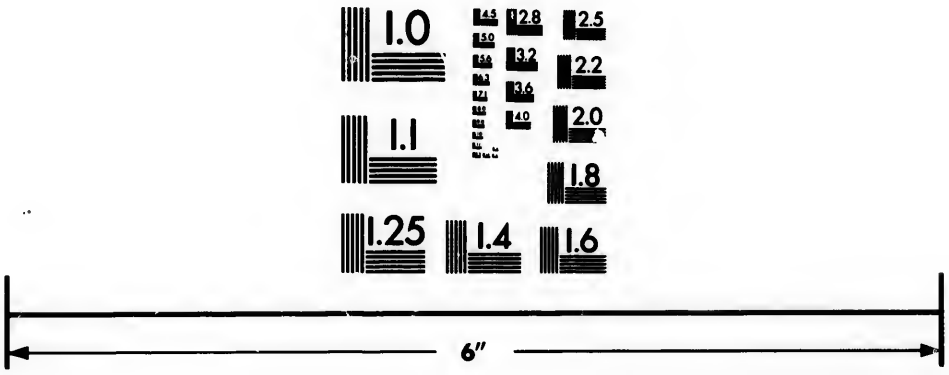

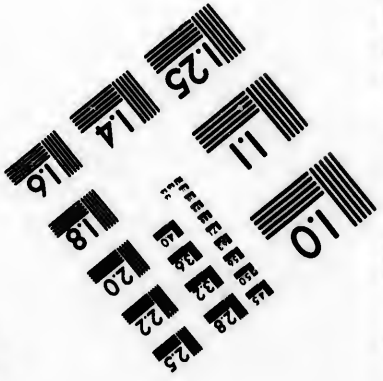

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APPENDIX A.

The Labrador Coast.

In both of the previous papers of this series I gave testimonies from the most unimpeachable authorities as to the real nature of the Labrador coast. I went back even to Jacques Cartier, and covered a period of 350 years, because it has sometimes been thought that the climate has deteriorated in recent times. Similar testimony could be cited to an endless length. I shall, however, add only a few more extracts, simply that they may remain in a place of convenient reference for those who, at some future time, may take up this inquiry. I would remark that it is no answer to this mass of evidence to say that sealing vessels enter the floe ice, or to postulate certain exceptional conditions or circumstances in which a vessel might get through the ice and reach the shore. No ice at all is recorded on John Cabot's voyage of 1497, and he reached the shore without mention of any trouble. The country he reached was of a temperate climate, and the sea swarmed with fish. On the contrary, in 1498, there was abundance of ice, and it is mentioned as something new and without precedent. Those who argue for Labrador must sweep the ice off the coast. They must find some proof that it does not exist—that somebody went there and saw no ice—and that the fisheries go on along Northern Labrador, as a usual thing, late in June and early in July. They must show that the climate is warm enough, and the soil is good enough to give promise of "silk and brazil-wood," and that the land is "fertile." It will not be sufficient to show that some vegetables may be grown in little plots in sheltered places, where they may be covered during frosts, but that they grow without any precautions in the open air. It will not be sufficient to show that at the heads of the deep inlets spruce or other sub-arctic trees may be found, but they will be required to show that the country is forested down to the shore, that the trees may be seen from a passing ship, and seen so that Cabot could have formed an impression that he was coasting along a fertile country, or, on landing, that he could have found, a few miles from the seashore, indications of the fertility he reported.

In my previous papers I made reference to the voyage of the "Alert," under command of Lieut. Gordon, R.N. A further account of the voyage will be found in "Good Words" for 1888, written by Captain (now Admiral) Markham, who accompanied the expedition. On the 1st of July the steamer rounded the eastern point of Labrador (latitude 53°), that is, south of the point supposed to be the landfall. "Icebergs innu-
"merable lay stranded along the shore, some of them of very large di-
"mensions." On July 2nd "snow was falling, the weather was gloomy,
"and the ship was surrounded by loose, drifting ice, whilst the tempera-
"ture was down to freezing point." "One of the icebergs we passed
"was estimated to be at least two hundred feet in height and half a mile

" in length." "The coast of Labrador—a bleak and inhospitable country " —the utter sterility of which appeared its most noticeable feature; the " summits of the hills and the valleys were still retaining their wintry " garb of snow." The following is a description of the coast off Cape Chidley on July 5th to 9th: "Our progress was sadly interfered with, " and our movements hampered by ice and fog." "On deck the scene " was wild and dismal. The wind was howling through the rigging, " snow was falling heavily, and the ship was entirely surrounded by ice, " whilst the noise of the ice as it was broken by the irresistible pressure " of the pack, mingled with the howling of the gale that was raging, was " so great that it was absolutely impossible to hear people speaking close " alongside. On the 9th of July we passed Cape Chidley."

This is the testimony of Captain Markham, one of the commanders on the "Nares" expedition, and now an admiral in the Royal Navy. The following is the testimony of an expedition of United States scientific men which left St. John's, Newfoundland, in the steamer "Miranda." The extract will be found in a volume published by the Appletons, of New York, in 1896. It is entitled, "Greenland Icefields," and is written by G. Frederick Wright, D.D., LL.D., F.G.S.A., and Warren Upham, A.M., F.G.S.A. Starting on July 15th from St. John's, they intended to steam up along the coast of Labrador. On July the 17th they ran into an iceberg off Cape St. Charles, and had to go back to St. John's to refit. The book is nicely illustrated, and the engravings will be an antidote to any idea of silk and spices on that coast. They met masses of floe ice and many bergs close to Belle-isle. The earlier chapters describe the conditions of navigation as follows:

Floe ice is crowded by the earth's revolution on Labrador so "as " greatly to interfere with navigation. Oftentimes a whole summer " passes during which it is almost impossible to enter any of the northern " ports on account of the ice, and sometimes it is difficult to get into any " of the ports even as far south as Hamilton Inlet, until past the middle " of summer."

The following is a description of that part of the coast between Cape Charles and Hamilton Inlet, 50° to 54° latitude:

" Everywhere the aspect of the coast is barren in the extreme. No " timber is in sight as one sails along the shore, and in the interior, what " little there is in the lower valleys has small commercial value. Snow " lingers throughout the entire summer in protected places, even down " to the water's edge, and a long, even line of water-washed rocks bear " enduring testimony to the height and violence of the waves."

An extract from Mr. Low's description of the coast is given in Appendix A of my paper of 1896. The following extracts are from Dr. Robert Bell's reports for the Geological Survey in 1885. He also was on the "Alert" expedition:

"Beyond the straits of Belle-isle numerous icebergs were passed " every day, both in the open water and among the field ice. When in " the latter position they were observed to be almost always, more or " less, completely surrounded by a space of open water. On the " voyage back from Newfoundland to the Straits, between the 27th of " July and the 3rd of August, icebergs were again equally numerous, " especially as we approached the Labrador coast, but on neither occasion " did we meet with any of remarkable size or height, the great majority " of them being comparatively small." (D. D., p. 6.)

"We entered Nachvak inlet on the 1st of August, and were informed "by Mr. Skynner, who had been in charge of the observatory station "there since the previous year, that the fixed ice of the inlet had only "disappeared on the 12th of July." (D. D., p. 7.)

"In the months of June and July wide lanes of open water were "formed between the field ice and the land. As far as could be observed, "this ice was clear, or free from dust and rock-debris, as if it had been "formed away from the land. The clear ice continued until the end of "June, when foreign matter began to appear upon the slowly moving "floes." (D. D., p. 7.)

"The annual precipitation at the present time is not great, otherwise "small glaciers would probably form among these mountains, which lie "between latitudes 58° and 60°, and which overlook a sea bearing field-"ice for half the year, and from which bergs are never absent. Patches "of snow, however, remain throughout the summer in shaded parts of "the slopes and on the highest summits, which range from 4,000 to 6,000 "feet above the ocean." (D. D., p. 8.)

In a paper on the Labrador peninsula, contributed by Dr. Robert Bell to the Scottish Geographical Magazine for July, 1895, we read:

"The Labrador peninsula, as a whole, may be said to be more or "less clothed with forests, with the exception of a small area in the north-"western extremity, and another along the northern part of the Atlantic "coast, which may be called 'barren grounds,' like those north of the "forests on the west side of Hudson's bay." In the map by Dr. Bell, appended to the report in 1888 of the select committee of the Senate of Canada, the whole coast from the Straits of Belle-isle north is coloured yellow, to show that it is part of the "barren grounds." Such evidence as I have cited cannot be waived aside by mere confident assertions in a discussion. The ice is on the coast, and the trees are not, and it is now in order for those who praise the climate and fertility of Labrador to quote some authority to support their statements.

Let it be supposed that one of my readers wishes to go to Labrador—to the supposed landfall of Cabot there in 1497—to go now, in this year of commemoration. He would proceed first to St. John's, Newfoundland, and there he would find that the Newfoundland Coastal Steamship Company would despatch the first steamer of the season on the first Tuesday in July (the 6th) and would be informed that she would go to Battle harbour (latitude 52° 17′) and as much further up the coast as the ice will permit, and that while she may reach Hopedale, it is not probable she will be able to go so far. He will learn also, in St. John's, that the regular steamer on the northern route will proceed to the Strait of Belle-isle, on her first trip "on Labrador mail service," on July 13th, 1897. We are called upon to believe that the little "Matthew" dropped upon this coast and navigated up and down, and the crew landed, and hunted, and salted game, and saw nothing unusual.

While the above lines were being written, the October, 1897, number of "The Toilers of the Deep" arrived, containing a narrative of the first trip this year of the mission steamer "Julia Sheridan" to Labrador. She was trying, from June 23rd to 26th, to get into Battle harbour—battling with the ice, and as she was specially built for such work, she drove in among the ice with sails set and every pound of steam on. A steam launch close behind had its bows stove in But when the "Julia Sheridan" got into the harbour she could not reach the landing stage for ice.

Battle harbour is not more than twenty miles north of Belle-isle island—as near as possible in 52° 17′, and far south of the supposed landfall. On July 3 the harbour was again full of ice, and on the return of the vessel on July 8, the cod had not struck in at the Strait of Belle-isle. It was not until the steamer reached Blanc Sablon, inside the strait, that the fish were met. The pilot charts record "an endless number of bergs" off the coast in June; and, in July, they report the strait was full of bergs. I beg that it may be carefully borne in mind that these statements are not made on my authority. I have never seen any part of Labrador beyond the southern coast. They are the statements of men who have sailed, and are sailing and working along the coast. It will not avail to elaborate an ingenious hypothesis with "if," and "perhaps," and "possibly," and "it may be supposed," and "no man will doubt," that Cabot might have slipped in through some opening in the ice, loosened by an off-shore wind, and got into the inner water and coasted between the ice and the shore; any one who reads the testimony cited in this and my previous papers—testimony of people not entangled in controversy, and with no Cabotian theories to support—will see that the physical conditions of the coast of Northern Labrador are irreconcilable with the records of the voyage of 1497.

This, then, is the coast which some insist answers to the contemporary reports as fertile (fertile), as fruitful (fructiffere), as temperate (temperata), as endowed with excellent soil (terra optima), and with such a forest growth as suggests silk and brazil-wood. If it be necessary that John Cabot should have found his landfall there in 1497—if the documents say so and it can be demonstrated—then let us say that, by some happy stroke of luck, he got through the field ice and touched the shore, and that on his return he and the rest of his crew conspired to make a false report, and that he dared to take an expedition there the next year to make a settlement.

APPENDIX B.

The Seven Cities.

Among the mythical islands of the Atlantic was the island of Antilia, or the Seven Cities. The story is given shortly upon Martin Behaim's globe, made in the year 1492, and now at Nuremburg, to the effect that: In the year 734, after the conquest of Spain by the Mahometans, this island, Antilia, was discovered and settled by an archbishop from Oporto, in Portugal, who fled to it in ships with six other bishops, and other Christian men and women. They built there seven towns, from which circumstance it has also been called "Septemcitade" (the island of the seven cities). In the year 1414 a Spanish vessel came very near to it.

Behaim and Toscanelli place this island close to the Tropic of Cancer, but many of the maps put it a little further north, in the latitude of Lisbon. Everybody believed in this island for a long time after Cabot, and we have in the name "Antilles" a survival of this universal belief. The shape of the island as laid down on the maps is uniformly an oblong, like the annexed cut, which is traced from Benicasa's map (A. D. 1482), in Kretschmer. It is interesting to note that there are names on the map,

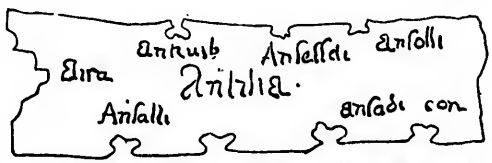


Fig. 17.—The Island of the Seven Cities.—From Benicasa, A.D. 1482.

and notches at regular intervals along the coast, probably the harbours—all of which is encouraging to those who take these mediæval maps so seriously. As the island has disappeared, it is not worth while to spend time over the names. The chief value of the island in this discussion is that, as the latitude of the Seven Cities was never higher than 40° N., the indication is of a discovery in a low latitude. There were other islands to the north, laid down with equal precision. The Island of Mansatanaxio was the next farther north—the island of the hand of Satan—where, as some imagined, a great hand issued from the sea and dragged unfortunate mortals into the abyss. Others have supposed the name to be a corruption of San Athanagio (Athanasio), but the isle of demons which lingered on the maps for more than a hundred years longer on the Newfoundland coast was probably a transference of this island. North of this was the island of Brasil, west of Ireland, and Isla Verde [124] and Maida, both in the same part of the north Atlantic. All these islands have disappeared, but reminiscences of them lingered on the maps as uncertain dangers almost down to our own times, in names whose origins have been long since forgotten. One of the islands off the Cavo de Ynglaterra of La Cosa is the imaginary Isla Verde, and it is so named, although Archbishop O'Brien finds it to be an island northwest of Cape Chidley. It will be remembered that the abortive expeditions from

Bristol, prior to Cabot, were all in search not of the Seven Cities, but of the island of Brasil. The search for the island of the Seven Cities had been long going on from the Canaries and Azores in more southern latitudes.

In the presidential address of this year attention is called to the mention of the Seven Cities, by Soncino, as having been found by Cabot at 400 leagues' distance, and Chateau bay, on Labrador, is supposed to be the place indicated, because of the basaltic cliffs which rise steep from the shore and form by their peculiar shapes a grand scene, suggestive of castles and turrets. The distance from England, however, is 2,000 miles, and the scenery, though imposing, is desolate, nor could the cliffs ever be mistaken for buildings, so that it is not easy to recognize in it any suggestion of the rich and populous island colonized by the seven bishops. The whole story and the island itself are merely Middle-Age legends, and the residue of fact germane to the present question is that the land found was to the west and well to the south, and that it was not over 400 leagues from England. The coast of Newfoundland, from Capo Race to St. John's, is the nearest land to England, but it also is far more than 400 leagues away. There is nothing about it to suggest the Seven Cities. I venture to think that, if Soncino had been an Englishman or an Irishman, he would have called the land Brasil or St. Brandan's; but, being an Italian, the legend most familiar first suggested itself to his mind. These early maps and first impressions of the new world will lead us astray if we interpret them as if they were authoritative statements of geographical truth. Humboldt says that in the Middle Ages conjectures were religiously inscribed upon maps, as is seen by Antilia, S. Brandon or Borondon, the Hand of Satan (Mansatanaxio), Isle Verte, Maida, and the immense continents of the south. The first chapter of Mr. G. E. Weare's recent book, "Cabot's Discovery of North America," gives a very interesting summary of the legendary lore about these imaginary islands.

APPENDIX C.

Fog off Cape Race.

Report of the Engineer at the Lighthouse at Cape Race for the month of June, in the years 1894–95–96–97.

June.	1894.	1895.	1896.	1897.
1	Fog.	Fog, a.m.	Fog.	Fog and rain.
2	Fog, p.m.	Fair.	Fog, rain.	Fog and rain.
3	Fog.	Fine; rain at night.	Fog, a.m.	Fine.
4	Fog.	Fine.	Fog.	Fine.
5	Fog.	Fog, a.m.	Fine, N.E. gale.	Fine.
6	Cloudy, rain.	Fine,	Fine, N.E. gale.	Fine.
7	Fog.	Fog.	Fog.	Fine.
8	Fog, a.m.	Cloudy; fog, p.m.	Fog.	Fine.
9	Fog, a.m.	Fog.	Fog.	Fine, a.m.
10	Fog.	Fog.	Fog, a.m.	Cloudy.
11	Fine.	Fog, a.m.	Fog, a.m.	Cloudy.
12	Fine.	Fog, p.m.	Fog, a.m.	Hazy.
13	Fine.	Cloudy.	Fog, a.m.	Hazy.
14	Fine.	Fog, rain.	Fine.	Fog and rain.
15	Fine.	Fog.	Fog, a.m.	Fog at intervals.
16	Fog, p. m.	Cloudy; fog, a.m.	Fog, a.m.	Fog at intervals.
17	Fog.	Cloudy.	Fog, p.m.	Fog at intervals.
18	Fog.	Fine.	Fog, a.m.	Fine.
19	Fog.	Cloudy; fog, p.m.	Fog.	Fog, p.m.
20	Fog.	Fog.	Fog, a.m.	Fine.
21	Fog.	Fog.	Fog, p.m.	Fine.
22	Fog.	Fog.	Fog.	Fog, a.m.
23	Fog.	Fog.	Fog.	Fine.
24	Fine.	Fog, rain, storm.	Fog, a.m.	Fine.
25	Fine.	Gale.	Fog, a.m.	Fog, a.m.
26	Fog.	Fine, gale.	Fine.	Fog.
27	Fog.	Fog at intervals.	Fog, rain.	Fog.
28	Fog.	Fog, rain.	Fog.	Fog, p.m.
29	Cloudy.	Fog at intervals.	Fog.	Fog at intervals.
30		Fog.	Fog.	Fog, a.m.

APPENDIX D.

The Climate of Cape Breton Island.

If the question of the Cabot voyages were debated only in America, it would be unnecessary to say anything about the climate of Cape Breton; but the literature of the subject is studied by scholars in European countries, who have never had the opportunity of visiting the shores of this favourite summer resort of tourists. I have elsewhere portrayed the character of Labrador. Of Newfoundland I would only say that its farming lands and grand scenery are on the west coast. I shall confine myself to a few notices of the summer climate of Cape Breton by people not interested in this controversy, in order to show why John Cabot told Raimundo da Soncino "that the land is excellent and the cli- "mate temperate, suggesting that brasil and silk grow there." The attractiveness of the Cape Breton summer has become widely known on this continent since the Intercolonial railway opened up the island to travel. In the Badeker Guide (p. 87) the charm of this route is mentioned thus: "The chief attractions of Cape Breton to the tourist are its "delightful summer climate and the scenery of the Bras d'Or lakes." These are not lakes in the usual sense, but arms of the sea opening into the Atlantic, and the largest vessels may pass into them with ease. Sydney harbour is one of the best in America, and is a very beautiful spot; it is about twenty-five miles from Scatari island, and close to it is the opening into the Bras d'Or, a veritable golden arm of all beauty of sea and shore which the poet or painter could dream of.

The following is Charlevoix's description of the country around Ste. Anne's bay, where the French fishermen gathered in early days. It is a few miles beyond the opening into the Bras d'Or:

"La pêche y est très-abondante; qu'on y trouve quantité de bons "bois, comme des érables, des hêtres, des mérisiers, surtout des chênes "très-propres à la construction et des mâtures, qui ont depuis vingt-huit "jusqu'à trente-huit pieds de haut; que le marbre y est commun, que la "plus part des terres y sont bonnes, que dans la grande et petite La Bras "d'Or, qui n'en sont qu'à une lieue et demie le terrain est très fertile et "qu'elles peuvent contenir un grand nombre d'habitants." (Histoire et description de la Nouvelle France, vol. 2, p. 398. Paris, 1744.)

Bacqueville de La Potherie thus describes the island. He is writing of the Atlantic side of it:

"En éffet, c'est une trés belle isle, a la côte de l'Acadie, vis-à-vis la "pointe du Sud de l'Isle de Terre-Neuve, que forme l'entrée du Golphe de "Saint Laurent. La terre y est admirable. Ce ne sont que Plaines, que "Préries, que Forêts remplies de Chênes, d'Erables, de Cedres, de Noyers "& des plus beaux Sapins du monde & des plus propres pour la Mâture. "L'on pourroit y construire des Moulins à scier pour faire des Planches "de Sapins, de Noyers, & de bordages de Navires, qui seroient d'un "grand Commerce pour la France.

"L'on y feroit une seconde Normandie si l'on vouloit y planter des "Pepins de Pommes, le Calville surtout y seroit d'un goût exquis comme "celui de l'Acadie. Le Chanvre y vient naturellement, & l'on y en "trouve des champagnes toutes remplies. Le Bled y seroit plus beau qu'a "Quebec: le Houblon y viendroit aussi.

"La Chasse aux Outardes, aux Oyes sauvages, aux Perdris de "France, aux Gelinotes de bois, aux Tourterelles, aux Canardes, aux "Pluviers, aux Sarcelles, aux Beccassines, & a toute sorte de Gibier de "riviere y régne de toutes parts. Je ne parle point de la Pelleterie du "Canada, qui n'y manque point.

"L'on n'auroit pas si loin à aller pour faire la pêche de la moruë "comme à Plaisance, et l'on n'y courroit point le même risque, d'autant "qu'elle s'y fait presque terre à terre tout le long de l'isle." (Hist. de l'Amerique Septentrionale par Bacqueville de La Potherie, vol. 1, p. 20. Paris, 1753.)

The following is from Haliburton's "History of Nova Scotia":

"Although the soil of the island has hitherto (1833) been worked by "ill-instructed and careless cultivators, who, possessing abundance of "land, take little pains to make it productive, yet the discovery has "already been made that in fertility it is superior to any of the uplands "of Nova Scotia." (Vol. 2, p. 258.)

"A line of coast extends from the great Bras d'Or, in a southeast "direction, as far as Cow bay, about thirty miles, which may be denomi- "nated the coal coast, nearly the whole range being faced with perpen- "dicular cliffs, streaked with veins of coal. The country on the summit "of these cliffs is level, but becomes undulating in the interior. The land "is well adapted for cultivation, and in the unsettled parts is clothed "with timber of good size, except near the margin of the cliffs, where it "is usually overspread with stunted spruce and other fir trees, all inclin- "ing landwards from the fury of the Atlantic storms, flattened at the "top into the semblance of so many umbrellas. In the cultivated parts, "however, the coast wears a very dissimilar aspect, the summits of the "cliffs being arrayed in a green sward, gently rising as it extends back- "wards to the forest, which shows in the distance a wall of majestic "trees, generally beech, birch or maple." (Vol. 2, p. 204.)

Speaking of Sydney, Haliburton says: "The surrounding land is a "fine agricultural tract." Between Sydney and Lingan "the soil is fer- "tile and well timbered both near the shores and in the interior." Still continuing south, Haliburton says (p. 211) of Salmon river: "The waters "gush through a narrow channel, fourteen miles further, into the beauti- "ful Miré bay, a crescent of fair sandy beach, well wooded and com- "manding a noble prospect of the ocean."

Then follows, only five miles away, the point of Cape Breton and Scatari island. The soil from thence southwards is poor, beyond Louisbourg and along the coast, until it turns west at the Lennox passage. Cape Breton itself is the lowest part of the coast, and both it and Scatari island are exposed to the full sweep of the Atlantic. The coast there is rocky, and the rock is hard, being the terminal point of the hard Cambrian rock which skirts the coast of Nova Scotia. Haliburton says that the cape of Cape Breton is "better known to the mariners of the coast "by the name of Port Novy Land, from the small adjacent island of "Puerto Nuevo." This little islet is on the charts as Port Nova,[123] and the name is a survival of the earliest times of Portuguese voyages along the coast.

I have preferred to make quotations from these older writers, because in 1725 and 1833 the coast was less changed, and both Father Charlevoix and Judge Haliburton have been long gathered to their fathers, and are beyond the reach of adjectives or other rhetorical mis-

siles. The counties on the Atlantic are called Cape Breton and Victoria counties. An official description may be found in a small book, published with the authority of the lieutenant-governor of the province, as follows: "This county (Victoria) is 80 miles in length and only 15 to 20 " miles wide. The northwestern part is mountainous and but scantily " settled. The southwest is better adapted for agriculture, and the soil is " particularly good in many parts." Of the other t. ' description is as follows: "There is good land, suitable for agricultural purposes, in this " (Cape Breton) county, but it is not in general well cultivated. Dairy " farming is carried on to some extent, and a good deal of butter is ex- " ported to Newfoundland. A large number of the people are engaged " in mining and shipping coal, and many earn a living by fishing."

Mr. Richard Brown resided on the island for many years as agent for some English mine owners. The following is his account of it:

" The summers of Cape Breton, say from May to October, may chal- " lenge comparison with those of any country within the temperate " regions of the world. During all that time there are, perhaps, not " more than ten foggy days in any part of the island, except along the " southern coast, between the Gut of Canso and Scatari. Bright, sunny " days with balmy westerly winds follow each other in succession week " after week, while the mid-day heats are often tempered by cool, re- " freshing sea-breezes. Of rain there is seldom enough; the growing " crops more often suffer from too little than from too much." (History of the Island of Cape Breton, etc., by Richard Brown, F.G.S., F.R.G.S., London, 1869, p. 6.)

The following is Charles Dudley Warner's description of the climate. Mr. Warner's writings are classic in America.

" There was an inspiration in the air that one looks for in the moun- " tains rather than on the sea-coast; it seemed like some new and gentle " compound of sea-air and land-air which was the perfection of breath- " ing material. In this atmosphere which seems to flow over all these " Atlantic isles at this season one endures a great deal of exercise with " little fatigue, or he is content to sit still and has no feeling of sluggish- " ness. Mere living is a kind of happiness.

" Certainly, as we glided out upon the summer waters and began to " get the graceful outline of the widening shores, it seemed as if we had " taken passage to the Fortunate Isles. It was enough to sit on deck and " absorb by all the senses the delicious day." (Baddeck, by Charles Dudley Warner.)

The cape of Cape Breton is a projection of a band of Primordial rock protecting the Carboniferous basin of the island. It is five miles wide from the sea to a narrow band of Silurian three miles wide, and then the Carboniferous rocks succeed. There is an outlier of Carboniferous limestone on the south side of Mira bay, and at the north point the coal comes out on the shore in the Tracy seam. Scatari island is of Primordial rock also. It is seven miles long, of a remarkable triangular shape and deeply indented by the sea. The outer portion consists of high barren moors 100 to 150 feet above the sea, not marshy, but with shallow ponds, and the remainder is scantily wooded. The point of the cape consists of low moors with shallow ponds, backed by hummocky hills and thickly wooded with dwarf spruce. Only six miles distant from the point of the cape is Mira bay, into which the Mira river falls—"a noble " stream which broadens a few miles from its mouth into a long, expan-

"sive lake surrounded by well-wooded hills, and is justly named Grand "Mira by the people." I have been particular in describing this point, because an attempt has been made to apply to the whole island the physical peculiarities of this rocky point, exposed to the full sweep of the ocean, much as if one should argue concerning the fertility of Spain from the specimens presented at Gibraltar, Cape St. Vincent or Finisterre. The quotations I have given are from old authors or from writers not interested in this controversy. It is not me my critics are contradicting; it is Charlevoix, Bacqueville, Haliburton, Brown, all of whom are dead; it is Charles Dudley Warner, who is a well-known living United States writer; and only the last sentence just preceding, in inverted commas, is by a living Canadian, Dr. Bourinot, who was born within twenty miles of the valley of Mira river. It is of no avail to say the point of Cape Breton and Scatari are rocky. Every promontory projecting into a wide and stormy ocean must be rocky or sandy. It was not the point Cabot wrote about; it was the general character of the country around

APPENDIX E.

The Tanais.

I am very much afraid that our president underrates, in his address, the extent of general information concerning ancient, and especially mediæval cartography, because, in fact, that subject has been worked up in many excellent treatises, during the last fifty years. I do not think the attentive reader will be impressed with the ignorance of those who have, for so many years, been discussing this question, and I think it will be very unsafe for any one to count upon them being unfamiliar with anything really important upon the subject. So far as the mediæval people are concerned, the case is very well put by Humboldt (Ex. Crit., I, 120): "Le moyen-âge ne vivant que de souvenirs qu'il supposait clas-"siques, et n'ayant foi dans ses propres découvertes qu'autant qu'il croyait "en trouver des indices chez les anciens, a été agité, jusqu'au temps de "Colomb, par tous les rêves cosmographiques des siècles antérieurs." They were in real truth excessively weak in geography, if their maps are the faintest reflex of what they knew, and until Ptolemy was (in 1409) translated into Latin their cosmographical notions were extravagant and fanciful; and even afterwards, when the science of the Greeks began to spread, it was only such intellectual giants as Friar Bacon, Cardinal d'Ailly and Albertus Magnus, few in number, who could apprehend it. The mass of men were of the order of mind which resisted Columbus for seventeen years. Still, in the manner of this special controversy there is much that reminds one of the Middle Ages, for the exceedingly strong mode of expressing dissent recalls the trenchant style of Cosmas Indicopleustes when he boiled over with indignation at those perverse ones who persisted in believing the absurd theory that there were antipodes, and that men could walk with their heads downwards, and that rain could fall upwards. That was indeed "absurd," "senseless," "preposterous," "puerile," "childish," or anything else disagreeable which the outraged common sense of that irritable writer could suggest.

The real state of geographical knowledge of that period is well expressed by Nordenskiold: "During the next millennium after Ptolemy "the art of drawing maps had become almost extinct among learned "men and scholars in Europe. Yet some passages in writings from this "long period may be cited showing that maps, of which a few are still "to be met inserted in old manuscripts, were then in use." He then goes on to show that these maps were similar to the diagram fig. 18. He speaks of a map by Cosmas, which has survived, and of several others as "not deserving the name of maps," and says they exercised no more influence on the development of cartography than the wind-heads on the maps of the fifteenth and sixteenth centuries. He continues: "From the "twelfth century the mediæval maps first become of general interest in "the history of civilization through their greater fullness of detail, though "they were, with the exception of the portolanos, in every respect in-"ferior to the old work of Ptolemy." "Yet their only influence on the "art of map-making was the introduction of the custom prevailing to "the end of the sixteenth century, of adorning maps with drawings of

"towers and temples, of kings sitting on their thrones in full attire, of "monsters and ethnographic details, and with inscriptions of a doubtful "geographical character, borrowed from the heathen mythology or "Christian mythology."

In my first paper I ventured to state that when Soncino said that John Cabot had reached the "region of the Tanais" he simply meant that Cabot had reached the regions of Asia on its northeastern side, and I will now give my reasons for that opinion. In inquiries of this kind it is before all things necessary to put one's self as much as possible in the position of a person living at the period under consideration, and I therefore now give reproductions of some of the maps current at that time or anterior to it; and here let me recall the fact that the time in question is previous to A.D. 1497, the date of Soncino's letter. Naturally Soncino could not have been referring to maps published one hundred years later—in A.D. 1618, for instance.

Our own Alfred the Great, in his translation of Orosius, gave a summary of geographical opinion which held good until the discovery of America. He wrote: "Our forefathers divided the orb of all this earth, "saith Orosius, which is encircled by the ocean, which is called *Garsecq*, "into three, and named those three parts Asia, and Europe, and Africa, "though some men have said that there were only two parts, Asia, and "the other Europe. Asia is bounded to the southward and eastward by "the ocean, and this comprises half of all this earth from the eastern "part. Then on the north part, that is of Asia, and on the right side, "Europe and Asia join together in the River Tanais; and then from the "same River Tanais south along the Mediterranean, and west of Alex-"andria, Asia and Africa join together."

To illustrate this idea I give the following cut (fig. 18) from Nordenskiold.[126] It is from the *Orbis Breviarium* of Zacharias Lilius, printed in 1493—a very popular work at that time. This diagram, or something similar, is often found in old manuscripts, and in printed books down to and beyond the time of Cabot.

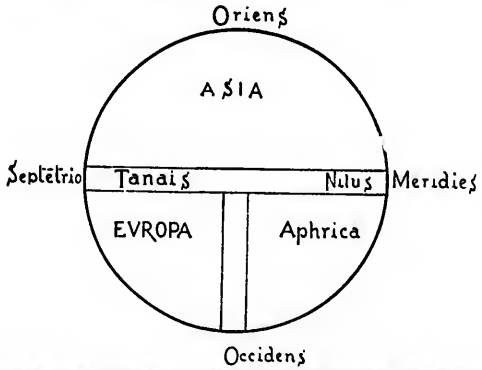


FIG. 18.—IT MUST BE TURNED HALF ROUND TO BRING THE NORTH ON TOP.

Fig. 19, on next page, is from a Codex of the eleventh century at Leipzic. It will, like most of the mediæval maps, require to be turned half round to be understood, because our method of drawing maps, with

the north pole at the top, was derived from Ptolemy. Tanais will be seen at the top and Nilus at the bottom. Troy and Jerusalem occupy the centre. The Mediterranean sea is the radius. The great ocean surrounds the world.

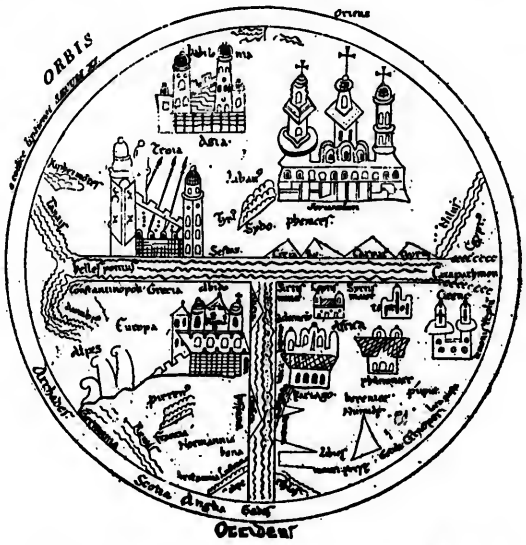


FIG. 19.—FROM A CODEX OF THE ELEVENTH CENTURY.

The next map (fig. 20) is from a Codex at Paris of the twelfth or thirteenth century. The *flumen Tanais* is seen marking off the whole of

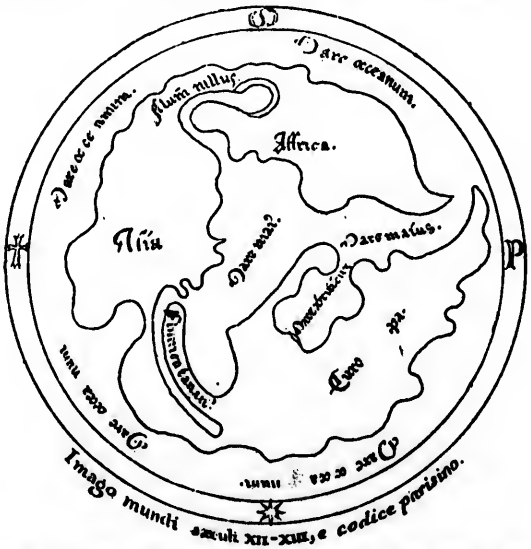


FIG. 20.—THIS MAP MUST BE TURNED UPSIDE DOWN TO GET THE NORTH ON TOP.

the northern part of Asia to the surrounding ocean. The *flumen Nilus* marks off southern Asia.

The following (fig. 21) is by Marino Sanuto (A.D. 1320). It is a fair map of the country round the Mediterranean and Black seas. At the end of the Black sea is the River Tanais flowing from the Riphæan mountains.

FIG. 21.—FROM MARINO SANUTO, A.D. 1320.

The next (fig. 22, p. 236) is from a Codex in the library of Rheims, and illustrates a manuscript of Pomponius Mela. The Tanais is seen there to be the dividing line at the north, as the Nile at the south. It is the western boundary of Scythia, a name synonymous with Tartary.

One of the most learned men of his day was the Cardinal d'Ailly. He wrote a book which was a great support to Columbus in his anxious moments. It was printed in 1483, long after the author's death. The map (fig. 23, p. 237) is his *Imago Mundi*, or map of the world. The word "thanai" will be found across the parallel of France and Rome, and Tanais is not a river but a region, and east of it are the Armenian mountains and the Caspian sea. While such maps as these are found in the more learned treatises, the general conception of the habitable world was expressed in a concise form, in such popular manuals as existed, by the diagram fig. 18, and this figure is so expressive of the views of the

whole period that Nordenskiold has selected it as the characteristic adornment for the cover of his great work on ancient and mediæval geography. Whatever Asiatic land lay north of the line of the great central sea was, in a general way, associated with the Tanais, and whatever land lay to the south was associated with the Nile. The Mediterranean, as its name imports, was the great sea, central among the continents, and the most convenient and universally known standard for reference.

These are specimens of the maps upon which popular opinion was founded, and we see that while the Tanais was, no doubt, known to be a

FIG. 22.—IMAGO MUNDI, A.D. 1417.

river, the country of the Tanais was a region considered to answer to Scythia of the ancients. "Scythia was," says Heeren, "a vague name "for the country in the north of Asia occupied by the Scythians, and for "moderns, Mongolia and Tartary, and of it the Tanais was the western "boundary separating it from Europe." Of this country Cambaluc (Pekin) was the capital. It was the northern capital of the Grand Khan of Tartary. Cabot sailed for that very country—the country of the Grand Khan (see Toscanelli's map, p. 152), and he thought he had found it and had sailed along its coasts, precisely as Columbus thought he had found Mangi. It is what we still call Chinese Tartary, and Cambaluc is still the capital. In 1403-6 Clavigo was sent on an embassy to the Emperor Ti-

mour, and Col. Yule (who edited his travels for the Hakluyt society) points out, in a note, that Grand Tartary extended from the Volga to the ocean, and from the Gihon to Siberia. "There was," says Kretschmer, "in the fourteenth and fifteenth centuries still the ground idea of the "Tanais and the Nile, and the end of the Mediterranean being the western "boundary of Asia," and the region as shown on the preceding maps was a very indefinite one. The notion that Canada was the extreme east of Tartary survived for many years, and Allefonsce, in his "Cosmographie," says of Canada: "Les terres tiennent à la Tartarie, et pense que se soit "le tout de l'Asie selon la rondeur du monde." In like manner Jacques

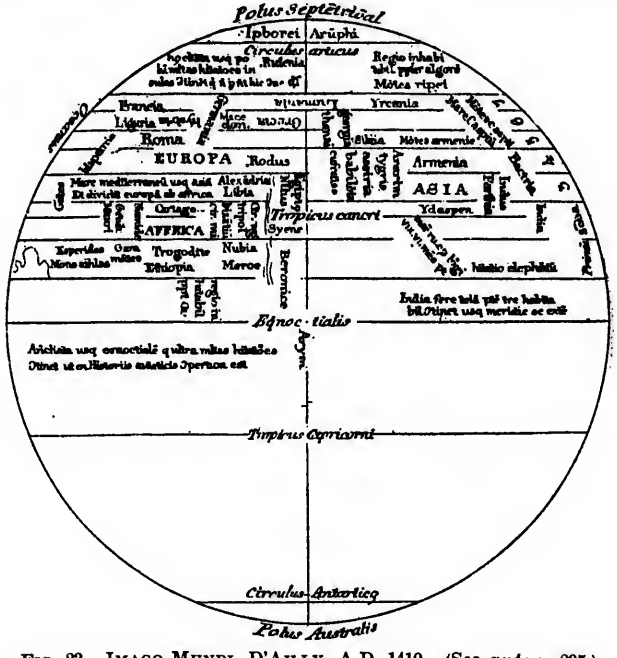


FIG. 23.—IMAGO MUNDI, D'AILLY, A.D. 1410. (See *ante* p. 235.)

Cartier's commission read: "Des terres de Canada et Ochelaga passant "un bout de l'Asie du cost de l'Occident." In like manner it is recorded that Columbus was encouraged by the tale of a sailor, who, when going to Ireland, was driven westward to a land which he thought to be Tartary. As a matter of fact, Tartary did then extend from the Tanais to the eastern coast of Asia, for the successors of Jenghis Khan ruled from Moscow to Pekin. In his well-known book, "Cathay and the Way "Thither," Col. Yule illustrates this point as follows: "Thus Mela says "that the remotest east of Asia is occupied by the three races—the "Indians, the Seres, and the Scythians, of whom the Indians and the "Scythians occupy the southern and northern extremities, and the Seres "the middle. Just as in a general way, we might say still, that the ex-

" treme east of Asia is occupied by the Indies, China and Tartary, the three " modern expressions which answer with tolerable accuracy to the India, " land of Seres and Scythia of the ancients." That such a vague idea was prevalent at the time is manifest in the "Historia rerum ubique ges- " tarum," by Æneas Sylvius (afterwards Pope Pius II.). A copy of this still exists in the Columbian library, annotated by the admiral's own hand, and the following passage has a number of his remarks on the margin. Mr. Harrisse, in his "Notes on Columbus," gives a photograph of the left half of the page, but the whole passage has been copied from another edition : "Scriptores alii Scytharum nomen multo majus efficiunt, quos a " Germanico limite, usque ad ipsos Seras, et orientale pelagus occupare " arbitrantur ; et sicut habitabilis terræ australia Æthiopibus tradiderunt, " pari modo septentrionalia Scythis, quos cum Sarmatis confuderunt."

Further on is related the origin of the Scythians from two brothers, the offspring of a being called Scythas, half snake, half woman. Their descendants conquered the regions west of the Tanais as far as Thrace, and then, turning their arms eastwards, reached the Nile, reducing all the intermediate nations, and their power extended to the Caspian sea and the Ocean of the East.

To suppose that the disputants in this discussion had not weighed these matters is a serious error, for Harrisse[127] has cited the very same passage from Soncino's letter to prove that the landfall was not south of Labrador, but on its northeastern coast. It was a mistake for any one arguing for Cape Breton to build on so narrow a foundation as the rendering of a word so indefinite as *assai*, and to take a general name like Tanais in a sonse so restricted. The archbishop's argument is as follows : That Tanais is not a broad or vague term, but a definite and well-known country, that region, to wit, inclosed within the great bend of the river Don and inhabited by the Tanaitæ. The city of Tanais, he further points out, was lower down, at the mouth of the river, not in the country of Tanais, but on the Asiatic side. He then locates this country between 48° and 50° N. lat., and he interprets Soncino to mean that Cabot considerably overpassed that country. He says that Cabot could not have overpassed its longitude, therefore he overpassed its latitude, and as Bristol is in 51° 30′, Cabot sailed south and, considerably overpassing lat. 48°, of necessity he made his landfall somewhere on the island of Cape Breton. He concludes : "The premises rest on unimpeachable authority, " and the conclusion, therefore, emphatically and inexorably excludes " Labrador, Cape St. John and Bonavista." The argument relies much upon the translation of the word "assai," and it is based on Ptolemy and upon the assumption that this definite country inclosed within the bend of the Don was south of 51° 30′ upon Ptolemy's maps at that time—which is not the case.

It is necessary to remind the reader that, up to about A.D. 1569 or later, when Mercator and Ortelius broke frankly away from the traditions of the ancient geography, the faith of the learned in Ptolemy was unbounded. The great edition of Ptolemy is that published at Rome in 1478. The same copper-plates were used, unchanged, for the edition also printed at Rome in 1490. These very plates and no other could have been known to Cabot, Columbus, Soncino or anybody else before the year 1508. If these authorities referred to Ptolemy at all, that was the Ptolemy—the Greek Ptolemy of A.D. 141, and printed in 1490 or previously—the only Ptolemy existent for them. We learn from a note how

the archbishop got astray in this part of his theory. He was using the edition of Bertius, published in 1618–19, with Gerard Mercator's annotations, 120 years after the events now in controversy.

The Ptolemy maps then before the eyes of Soncino could be none other than those published at Rome in 1490, and these may be readily consulted in Nordenskiold's facsimile atlas; but in it the great bend of the Tanais is not south, but north of Bristol. It is in latitude 56° not only on the special map of the region, but on the general map of the world. The city of Tanais is there, and, as the archbishop says, it is to the south, and not in the country, as he supposes, of the Tanais. In the text of his geography Ptolemy also gives its latitude as 54° 40′, three degrees north of 51° 30′, the latitude of Bristol; and the great bend of the Tanais, where the Tanaitæ were located, is expressly stated in the text of Ptolemy to be in lat. 56°. It is Cape Breton which the archbishop has inexorably excluded as well as Newfoundland, and he has inadvertently exploded his own landfall and assisted that of the advocates of northern Labrador. In fact he might carry us to Greenland, if the word *assai* be stretched as far north as he has stretched it south.

It will be interesting to trace the origin of this singular error, for in fact the great bend of the Tanais is in 56° in all the editions of Ptolemy. Kind and very learned correspondents have examined for me in the great libraries the series of Ptolemy atlases, and have sent me tracings, and it is certain that in the edition of 1511 (Sylvanus's), in that of 1535 (Servetus's), in that of 1542 (Munster's), in that of 1564 (Ruscelli's), the latitude is 56°. These are the chief editions until Bertius's. After Bertius's edition Ptolemy ceased to have any weight, for then the modern era had been firmly established, for it commenced in 1569 with Mercator.

But even in the Ptolemy of Bertius this whole region is north of Bristol. That edition is in reality a collection of geographical treatises in two volumes, usually bound together. It contains, 1st, The text of Ptolemy and the maps of Ptolemy; 2nd, Annotations on Ptolemy by Gerard Mercator; 3rd, The Itineraries of Antoninus Pius; 4th, The Peutigerian Tables; 5th, An Atlas of Maps by Ortelius. The work was printed by Hondius at Amsterdam and Leyden in 1618 and 1619. With the maps of Ortelius we have nothing whatever to do. The Ptolemy maps alone have any bearing on this question.

Whoever consulted this atlas on behalf of the archbishop was unaccustomed to such documents, for he did not observe, or did not report it if he noticed it, that by a palpable error of the engraver 50° was put for 56°, for 50° occurs below in its proper place. No expert could be deceived, because reading the latitudes upwards on the margin they follow thus, 54°, 55°, 50°, 57°, 58°, etc., etc., and the line of what is in reality 56° runs through the centre of the great bend of the Tanais. The edition of Bertius thus corroborates the latitude of 56° in all the other editions, and the same latitude of 56° is confirmed by the text of Ptolemy. Convenient reference may be made to Didot's edition (Greek, with a Latin translation), where the latitudes are as follows: Occidentale os Tanais fl. 54° 20′, orientale os 54° 30′, inflexio fluminis 56°. It will be seen then that the whole river is north of 51° 30′, the latitude of Bristol, for the mouth is at 54° 30′, and the great bend where the archbishop locates the Tanaitæ is at 56°. The oppidum (city) Tanais is in Ptolemy's text at 54° 40′.

The argument, therefore, of the address being based on an error falls to the ground, and, besides, on the very maps upon which the discussion

is turning the fact is apparent that the Tanais was supposed by everybody for 100 years after Cabot to be north of Bristol. Take La Cosa's map and follow the east and west line running through the great bend of the river. It passes to the north of Scotland and far north of the Cavo de Ynglaterra; nor will it help if the coast be wheeled up at right angles on the pivot of the last flag, for then the Cavo Descubierto, which the archbishop admits to be the landfall on Cape Breton, is still north of the bend of the Tanais and north of Scotland as laid down by La Cosa. The same is evident on the Cabot map of 1544 and on the great Dauphin map of 1546.

The passage in Soncino's letter which is the subject of this digression reads as follows: *Et andando verso el levante ha passato assai el paese del Tanais.* This is translated by Markham: "And proceeding towards "the east he has passed as far as the country of the Tanais." Weare translates, "Has passed much of the country of the Tanais." Harrisse makes it, "Has passed far beyond the country of the Tanais." He states that the country of the Tanais "was a well defined coast bordering the "eastern seaboard of Asia." It seems to me a little strong to call it "a well defined coast" on the east of Asia, but it is nearer the truth than to place it in European Russia and to inclose it in the bend of the river Don. I have given the Italian, and the reader may translate it for himself. It seems easy enough, and I have no hesitation in following Markham's translation, but the coasting along the region Soncino called the country of the Tanais will allow any reasonable extension of the word *assai*. The coasting is not said to be north and south, and was, as I have tried to show, east and west from Cape Race to Cape Breton, and applies to longitude and not to latitude.

A few words are necessary about Tana—the *oppidum Tanais* of the Latin version of Ptolemy at 54° 40'. There has always been a city at the mouth of the Don, and this one was called Tana by the Genoese, who had factories there until twenty-two years before 1497. It had been the chief western entrance to the dominion of the Grand Khan, and, although destroyed by Jenghis Khan, had been rebuilt. It was taken by the Turks under Mohammed II. in 1471, and the Black sea was in 1475 absolutely closed to all Christian powers, so that it was not so likely to be referred to as a standard of latitude as any of the large commercial cities of western Europe; and, indeed, it is of itself unlikely that a locality in the heart of the continent, the haunt of semi-barbarous tribes of Sclavs or Mongols, inclosed in the bend of a Russian river, should be a standard of either latitude or longitude for a discovery upon the seaboard across the western ocean.

I return, then, to the ground I took up in 1894, and I repeat that the country of the Tanais was an indefinite region corresponding to the ancient Scythia and the mediæval Tartary, and that it was generally understood so in the manuals and books of the Middle Ages, of which figure 18 is a general type; that it was not in Europe, but in Asia; that the Tanaitæ of Ptolemy, if they ever existed as a distinct people, had been wiped out of human memory for a thousand years before 1497, as Soncino must have known; for Huns, Avars, Bulgarians, Mongols of every conceivable race had swept over that country because it was the gateway through which the hordes of Asia had precipitated themselves upon Europe from the remotest period.

APPENDIX F.

PRINCE EDWARD ISLAND NOT CABOT'S ST. JOHN.

I come now to a point of very great interest, not only in relation to the Cabot voyages, but to the early history of the Dominion, and on the threshold, I would express my indebtedness to Prof. W. F. Ganong, whose researches[128] on the cartography of the Gulf of St. Lawrence have cleared up a subject very much obscured by hasty assumptions and imperfect information.

The question has been raised anew in the president's address published at the commemoration, and to be found in permanent form in the "Proceedings" in the present volume. His position briefly stated is, that Cabot not only missed Cape Race, but passed through Cabot strait without seeing land; that he got to the south after passing the strait, and that he made his landfall near Mount Squirrel on the inside (or gulf side) of Cape Breton island. He supposes that Cabot remained on land for only two hours, and then sailed west at 8 o'clock a.m., and discovered Prince Edward Island about 6 p.m. on the same day, which island thus became his Island of St. John; that thereupon he sailed through Northumberland strait and went northwest, inside of Anticosti, which he circumnavigated, and passed out by Belle-isle, seeing Chateau bay as he passed and taking it to be the Seven Cities.

The reasons I gave in my paper of 1894 against a landfall at Cape North I still hold to be conclusive. Cabot's westerly course by compass would bear him to Cape Breton, and, as he was sailing on an unknown ocean, and had not seen land, there was nothing to suggest to him, at a certain point south of Newfoundland, to turn sharply to the northwest and strike the centre of Cabot strait. This is fully covered in my first paper, and nothing has occurred since bearing upon it, save the surveys of Mr. W. Bell Dawson, to be considered later on.

A careful consideration of the presidential address will reveal the highly theoretical bases upon which its conclusions rest. There are three conditions declared to be essential: First, the landfall must be west of Bristol—no one disputes that. Then, it must be south of the Tanais, which is assumed to be in 48° and south of Bristol, whereas a reference to Appendix E will show that, according to the knowledge of that day, as well as according to the authorities he has cited, the country taken by the archbishop to be the Tanais was in 56°, and north of Bristol. Then the landfall must be 2,100 miles distant from Bristol. This is near enough for an approximate distance; if, however, we are to make the landfall inside the Gulf of St. Lawrence at Mount Squirrel, we shall be compelled to add at least 125 miles, for we shall have to sail round the whole northern part of the island (if we can do so) without seeing land. The landfall inside the gulf fails, therefore, to comply as fully as a landfall at the cape with the condition of distance.

The archbishop, moreover, concludes that the landfall could not be on the Atlantic coast of Cape Breton, because no part of that coast complies with the required conditions of soil and climate. In answer to this

I would refer the reader to Appendix D, where I give, not my own account, but the testimony of a catena of authors far removed in time and space from this controversy. I would, moreover, observe that, as the whole northern promontory of the island is equally elevated above the sea, there seems very little difference in the conditions of a landfall on the Atlantic at the foot of Cape Enfumé, 950 feet high, or at the foot of Mount Squirrel, in the gulf, 1,220 feet high. It is exactly on the far side of the same tableland. The landfall I have suggested as that indicated by Sebastian Cabot is a low rocky point, within five miles of which the land is fertile continuously to where the beautiful harbour of Sydney opens up, and beyond where the mouths of the Bras d'Or permit ships to sail into the nearest approach to a summer paradise which this continent affords. From the point of Cape Breton to the commencement of the high table-land is a stretch of sixty miles, along which the interior carboniferous basin of the island opens upon the Atlantic in numerous capes, harbours and inlets plainly visible in a map on the smallest scale.

That it should have occurred to any one to suggest a discovery of America from the inside of a landlocked gulf like the Gulf of St. Lawrence is one of the strangest things in this remarkable controversy. Not only is it landlocked, but, at Cabot strait, and for a long distance, as the shores of Cape Breton and Newfoundland approach, the land on both sides is exceedingly high and bold. The height of these coasts is easily seen upon the Admiralty charts and the Geological Survey maps. Commencing at Cape Dauphin, where the northern promontory of Cape Breton begins, in a distance of 45 miles to Cape North are Cape Dauphin, 1,045 feet; St. Anne's mountain, 1,025 feet; Cape Enfumé, 950 feet, and in rear, the Sugar Loaf, 1,218 high; and a little further away is Cape North, 1,000 feet high. Turning westwards through the strait is Cape St. Lawrence, eight miles off and 1,000 feet high. The coast then turns south and a succession of capes follow, from 950 to 1,130 feet high, until at 35 miles distance from Cape St. Lawrence is Mount Squirrel, 1,220 feet high. The simple fact is that all this north extension of the island is a tableland, of which the outer edge is from 800 to 1,200 feet above the Atlantic on the east and the gulf on the west. It is everywhere visible from sea at a distance of forty miles.

The south coast of Newfoundland is bold, also. Table mountain, three miles in rear of Cape Ray, is 1,700 feet high. The cape is a very remarkable headland and is visible at a distance of 50 miles. While the strait is nearly 60 miles wide, St. Paul's island divides the distance. It is 14 miles from Cape North to St. Paul's island, and 42 miles from St. Paul's island to Cape Ray on the coast of Newfoundland. St. Paul's is 500 feet high and is visible for 30 miles from sea. For the purpose of this argument Cabot strait is, therefore, not more than 42 marine miles wide, and Cape Ray is visible all the way across. The time of the voyage was midsummer, when the weather is good and the nights are very short, and while the fog sweeps up from the south and frequently hides St. Pierre and Cape Race, the pilot charts for June show no probability of fog in Cabot strait at the western end of Newfoundland, and, in fact, there is very little fog in that region.

I have given the height of land from the Admiralty charts, and the well known laws of visibility from sea prove that the ranges of visibility of two coasts so high as these greatly overlap the mid-channel of a strait 42 miles wide. Therefore it is plainly impossible that a vessel, even if she

struck the very centre, could pass in anything like clear weather through the strait without seeing for many hours the land on one side or the other. For my part, while I have given the above details for the sake of those who have not sailed through the strait, I know, of my own personal knowledge, that the land is seen on both sides from the deck of a passing vessel. The circumstance of such a fact being disputed will justify this mention of a personal experience.

It was my fortune in May, 1882, to be returning home in the SS. "Peruvian," and on the 7th we entered field ice off St. Pierre island. While the vessel was slowly steaming through the openings, a small piece of ice passed unnoticed under the ship and stripped off all the flanges of the screw close to the boss. This happened at 5.20 a.m. and in broad daylight. We had met what is locally called "the bridge," for the last of the field ice coming down from the gulf, had filled up the strait.

The vessel was then precisely in Cabot strait; St. Paul's was 19 miles and Cape Ray 22 miles away on either hand, and there, in the very strait itself, she drifted about from May 8th until May 19th, so that for the space of 11 days I had the opportunity of studying at leisure the contours of all these surrounding lands—St. Paul's, Cape North, Cape St. Lawrence and Cape Ray. Being helpless we drifted close under the land in the bay between Cape St. Lawrence and Cape North (for the water is everywhere deep), and then, caught by the outward current, passed seawards between St. Paul's island and Cape North. All this while the land around was visible, and I am, therefore, in a position to be more certain than most people that for John Cabot to get through Cabot strait without seeing land was impracticable.

Let us consider the conditions involved in this new theory. John Cabot set out to sail due west and that course would bring him to Labrador. Magnetic variation is waived aside as being a merely "academic question," so he did not sail by his compass. Still, by the force of the Arctic current and perhaps the winds, he dropped south of Cape Race. He still sailed west and naturally one would expect him to strike Cape Breton, but he did not. He turned instinctively to the northwest, just at the point to strike the middle of Cabot strait. The inward current off Cape Ray carried him through and, although to be in that current he could not have been farther from the Cape than 10 or 15 miles, he did not see Table Mountain, 1,700 feet high, three miles in rear of the point of land. Then he changed his course and again sailed west, and the Magdalen Islands lay in front of him, but the other current running out through Cabot strait caught him and turned his course southwest until he saw Mount Squirrel, 35 miles south, on the Cape Breton coast. Here is another difficulty. Entry Island, of the Magdalens, was straight ahead, 580 feet high, and visible at a distance of 32 miles. There are only 45 marine miles between Entry island and the nearest point of Cape Breton, but he did not see it either, and thus having passed within 20 miles of land, 1,700 feet high, which he did not see, he saw land to the south far behind him, 500 feet less in elevation. It is understating the case to say that such a course is impossible in any arrangement of winds, tides, currents, or fogs, which can be imagined.

This very circuitous navigation, out of sight of land, is supposed to have been effected by currents in the strait, and we have at our hand at p. xvii. of the "Proceedings" in the front of this volume, Mr. W. Bell Dawson's summary of his surveys in the gulf during the past three years. On

reference to pp. xvii. and xviii. it will be seen that the main outflow of the St. Lawrence river is by Cabot strait on the side of St. Paul's Island, and that the circulation of the gulf is kept up by an inflow on the Cape Ray or northern side of the strait, and that there is a space of neutral or variable current between. As the strait between St. Paul's and Cape Ray is 42 miles wide a vessel to be influenced by either current must stand well in to the land. The current inwards turns round Cape Ray and flows, *not northwest*, but to the north northeast along the coast of Newfoundland, crosses the gulf to the north shore towards Cape Whittle, and thence flows westward to Anticosti, to the outflowing Gaspé current. In that way the circulation of the gulf is maintained. The hydrography of the gulf, as ascertained by the very latest surveys, thus shows that a vessel, in the influence of the current on the Cape Ray side, would be drawn to the north along the lofty coast of Newfoundland; if, however, she should be on the St. Paul side the current flowing out would set her on the Atlantic coast of Cape Breton, for as the whole discharge of the St. Lawrence passes out there, it is a well defined and persistent current and is often felt as far south as Scatari island (p. xviii).

The archbishop considers it very unreasonable to suppose that any one sailing along the Atlantic coast of America should not have seen and sailed through the entrances to the gulf. I have just stated the width of Cabot strait. The only other entrances are the Strait of Canso, eight-tenths of a mile across, and the Strait of Belle-isle, *not thirty but twelve miles* across, because a strait is measured where it is most strait. There is nothing surprising in the fact that the gulf was not opened up until Cartier's time. Similar things have taken place almost in our own day. In 1818 Sir John Ross mistook Lancaster Sound, 30 miles wide, for a bay surrounded by mountains, and he even named them the Croker Mountains. Again, on the Pacific coast of the Dominion, precisely parallel cases occurred. Captain James Cook made a survey of that coast in 1778 and did not find out that Vancouver was an island. He touched at Nootka Sound on the west coast of the island, but missed both the Strait of Juan de Fuca and the Dixon channel. Fur traders had been for some years on the coast when Meares named the strait in 1788 which Barclay had discovered in 1787, and Dixon named the channel after himself, which he discovered the same year. Captain Vancouver conducted a scientific survey of the whole coast in 1792-3, and discovered and named Puget Sound and Burrard inlet, and was the first to circumnavigate Vancouver Island. But even Vancouver supposed the broad estuary of the Columbia to be a bay until after Captain Gray had entered it.

Then, again, it is the fact that the Bay of Fundy does not appear on any of the maps or in any description of the coast for a very long period. Cartier gives no hint of observing the entrance to the River St. Lawrence on his first voyage, but sailed from Gaspé to Anticosti. He entered by Belle-isle and sailed out the same way, not knowing then of the existence of Cabot strait. On his second voyage, however, he sailed out by way of St. Paul. If Cabot did, as the archbishop supposes, sail round Anticosti, how is it that he did not see the great estuary of the St. Lawrence leading to the west, for it is 81 miles wide, and the north shore is low, and not visible from the south shore until opposite Point de Monts? There is no "pal-"pable absurdity" whatever in supposing the early sailors to have passed the opening of Cabot strait, and, moreover, we know for a fact that Stephen Gomez, in 1525, actually did so. He spent ten months on the

coast, searching from Cape Race to Florida for a westward passage; and in the account of Oviedo and the map of Ribero, we can trace his course from point to point along the coast and see where, from the Burgeo islands, he crossed to Cape North and thence to Cape Breton. It was a broad ocean they were all expecting, and such openings as these were taken to be bays.

But, after all, what can be more conclusive than the maps? There they are in the books, and many of them were reproduced in my preceding papers. They speak for themselves and declare that, until Gaspar Viegas's map of 1534, there was no gulf marked on the coast to represent in the faintest way the Gulf of St. Lawrence. This fact cannot be waived aside by generalities. Let some one produce a map before 1534, or cite an author before Jacques Cartier in the same year; but until that is done of what avail is it to multiply adjectives? Archbishop O'Brien wheels up the whole coast of La Cosa's map from what he assumes to be Cape Henry at an angle of ninety degrees, but he does not thereby open up the great inland sea of Canada, 500 miles long and 243 miles wide. The coast is still closed, and it remained closed to the outer world, until the Breton sailor opened it up. Again, we are told that the evidence is only negative. It is the only evidence possible. The makers of maps never positively state that such or such a bay or island does not exist. That would prove they had heard of it. They draw the coast to their utmost knowledge, and if a map of the gulf does not contain this or that island, it is conclusive proof that, for that cartographer, the island was non-existent. One wearies of a discussion where phrases like "absurd," "senseless," "ridiculous," "childish wilfulness," "puerile wilfulness," "bolstering up "preconceived opinions," do duty for maps, or citations from acknowledged authorities. One map, one reference, is worth more in this, or in any similar controversy, than many pages of unsupported assertions or of contradictions without evidence to sustain them.

But, again, let us suppose the "Matthew" did first touch land at Mount Squirrel on the morning of June 24, it is most unlikely that Cabot left again two hours later, at 8 o'clock, to sail westwards. The difficulties multiply. He was short of provisions, and he started again westwards over an unknown ocean without knowing he would drop upon Prince Edward Island. The winds and tides swept the vessel through Northumberland strait and round Anticosti at the rate of 100 miles a day—but the west winds would not have helped him, nor the calm midsummer days, nor the tides, for they ebb as well as flow. The archbishop does not think with Mr. Harrisse, that vessels in those days anchored at night, but thinks that soundings were taken, and depth of water and nature of bottom carefully recorded. Nor did they, he thinks, sail from headland to headland, but crept along hugging the shore at a distance of from two cables to half a league with lead in hand.

Cabot, by this theory, was passing through narrow seas, and although we know from Cartier's narrative that Indians were numerous then and, at that season, were probably fishing in their canoes, it is expressly recorded that he saw no man in all that inland navigation, nor is there any record of his landing on any part of that attractive coast.

Everyone who essays to form an intelligent opinion on this question must study the works of Mr. Henry Harrisse. If he finds in them, as he will in abundance, extracts from maps or rare books or documents of any kind, he may rest assured that they are faithfully reproduced. Mr.

Harrisse does not claim infallibility, and when he draws deductions from these data his reasoning may or may not be conclusive to those who are conversant with another order of facts, but the student may implicitly depend upon the accuracy of the extracts, and reason for himself as confidently as if the documents quoted from were spread out before him in his own study. Now, if my readers will turn to page 94 of Mr. Harrisse's last book, "John Cabot," they will find a flood of light thrown upon the Cabot map of 1544 by the reproduction of a map by Desliens, made in 1541, three years previously. They will find by a comparison of these two maps there placed face to face, that the Cabot map was compiled from the same materials as the Desliens map, and that these materials were none other than Jacques Cartier's. Mr. Harrisse has completely demonstrated the main propositions laid down by Mr. Ganong and accepted by Mr. Joseph Pope and Bishop Howley. I do not think that the conclusions of these writers on Cartier's course will ever be shaken, excepting in some relatively unimportant details.

It is not my intention to go over Cartier's course. I merely wish to dwell upon what Cartier discovered between the undisputed points, Cape St. John (Cape Anguille) and Cap d'Esperance (Miscou Point). What he found there is on Desliens's map and is equally on Cabot's map. There is absolutely no other alternative ; either the Cabot map is, as regards the gulf and river St. Lawrence, copied from Desliens, or both are copied from one prototype—to wit, the charts made under Cartier's own supervision. In that fact is an absolutely unanswerable proof, on Sebastian Cabot's own authority, that neither he nor his father ever passed through Cabot strait or entered the gulf. Every name but one is Cartier's, and that one is changed from the prototype, as Desliens's map witnesses and as Cartier's narrative establishes.

If we take now Appendix 2 of Mr. Ganong's paper (R. S. C. Trans. 1889) we shall find all the places mentioned by Cartier in order from Cape St. John. They are Isles de Margaulx, Ille de Brion ; nobody disputes these to be the Bird Rocks and Bryon island. Then he came to Cape Dauphin, a goodly cape on a land "laquelle semble estre comme "une isle environnée d'islettes de sable noir." Cartier could not land because of the wind, but he coasted along this land for about ten leagues, and we learn that it lay west southwest.

I would now ask the reader to consider the following description of this land from Cartier's narrative in Hakluyt. He sailed ten leagues until "we came to a cape of redde land, that is all craggie, within the "which there is a bracke looking toward the north. It is a very low "country. There is also between the sea and a certaine poole, a plaine "field ; and from that cape of land and the poole unto another cape "there are about 14 leagues. The land is fashioned as it were halfe a "circle, all compassed about with sand like a ditch, over which as farre "as one's eye can stretch, there is nothing but marrish grounds and "standing pooles. And before you come to the first cape, very neere the "maine land, there are two little ilands. About five leagues from the "second cape towards the southwest there is another iland very high and "pointed which we named Alezai. The first cape we named St. Peter's "cape, because upon that day we came thither."

A more graphic description of the Great Magdalen island could hardly be written, and I would ask the reader to compare the map of the island and the description from the Admiralty Sailing Directions.

(See pp. 247, 257.) Here are bold capes, a craggy cape of red land, and five leagues from one of the capes is Alezai, "a high and pointed island." The Admiralty Sailing Directions describe Deadman island as such a high and pointed island. "It is about 170 feet high, with steeply sloping sides "meeting at the summit like a prism, so that when seen end on it re-"sembles a pyramid."[129] Of this island a drawing is given on the Admiralty chart, and it is stated underneath to be 13 miles distant from Grindstone island, and in order to press this upon the attention of the reader I give below a photographic reproduction of this drawing. The island Alezay (Alezai) is a very important point in the controversy.

Deadman Island. Grindstone Island. 13 miles.

FIG. 24.—DEADMAN'S ISLAND.

Here, then, Cartier found a sandy island containing pools and lagoons and marked by bold capes. It lay N.E. and S.W.; near to the northeast point were three islands—Isles de Margaulx and Ille de Brion—and near the S.W. point was Alezai. It is of no avail to object that Alezay is a small island—so are the Bird Rocks (Isles des Margaulx). I give (fig. 25) a reproduction of the drawing on the Admiralty chart. The scale

North Bird. Great Bird. 1½ mile.

FIG. 25.—THE BIRD ISLANDS.

is the same. We shall find the large central island so unmistakably identified by its unique physical characteristics, always on the maps, and no matter what its shape may be its axis is always N.E. and S.W., and its attendant islands stamp its name beyond mistake. On his second voyage Cartier called it "Les Araynes," and it will be found for 100 years under names, in whatever language written, conveying the same idea of *sands*. In French, Isle d'Arènes; in Portuguese, corrupted or translated into Isle Dorean, or Ille de Sabloes. This group of islands lies in the fairway from Cabot strait, and, excepting in thick weather, some of them must be seen from the deck of every vessel going to the River St. Lawrence.

Leaving this group of islands Cartier sailed for a day and a night, when he discovered a land which at first he thought was two islands, but afterwards found to be a low and plain land, "the fairest that may pos-"sibly be seene. full of goodly meadows and trees." He could find no harbour, "because it is full of shelves and sands." He described the country as very fair and sweet-smelling, with pines and cedars and ash, and many other trees. There were many birds, and, in Cartier's own language, "there wanteth nothing but good harboroughs." So it is with the north shore of Prince Edward Island to this day. Cartier had to land in boats, and he named along that shore Cap d'Orleans, Ripuaire des

Barques and Cap des Sauvages, identified by Ganong, Pope and Bishop Howley as Cape Kildare, Richmond bay and the "North Point." From the Cap des Sauvages, Cartier followed the shore until he saw land on the north. That was the coast of New Brunswick, and he saw "that it did "joyne with the land abovesaid." He saw the interlocking headlands of Prince Edward Island and the mainland joining, as any one may see them now, and he thought it was a bay, and called it the Bay of St. Lunario. He thought it was "as deep as it was wide," and so, on the maps, it is laid down as a semi-circle, which, in fact, it roughly resembles, for the opening of the strait is not seen, and Cartier did not see it, for he then followed the New Brunswick shore to Miramichi bay, which he correctly described as triangular, and from thence he went to Miscou Point (Cap d'Esperance).

What I wish particularly to impress on the reader is, that when Cartier struck land on Tuesday morning, after leaving the Magdalen, he thought it was the mainland from the Cap d'Orleans to Miscou Point. It was for him one long, continuous coast; and so, in truth, it was, for all cartographers, explorers, sailors and historians for nearly one hundred years after. The maps are unanimous on this point. No amount of rhetoric can dislodge this fact. A map of an earlier date would do it. A citation from an early writer would do it. In the meantime, until such a map or such a book be produced, it will not mend matters to charge me with "puerile wilfulness." It is not my fault that these people omitted to recognize Prince Edward Island. I have often passed through Cabot strait to Quebec, and I certainly never saw it on these occasions; but I have crossed from Pictou to Charlottetown and from Shediac to Summerside, and have seen the land closing in with long, low points overlapping on the far horizon, and then I saw how the error could have existed so long.

I am not singular in supposing that Cartier did not recognize the coast to be part of an island. I am following Ganong and Pope and Bishop Howley, but the archbishop himself admits it, and admits also that the maps of the Cartier group do not recognize Prince Edward Island. He gives it as a reason that Cartier entered the gulf by Belleisle and always subsequently steered for the north. We know, however, from Cartier's narrative, that on his return from his second voyage he did not steer north, but southeast, and passed through Cabot strait to St. Pierre Miquelon and Renews.

The point to which all this has been tending is that if any island be found in the gulf at all in these early maps, it can be no other than the Magdalen group, for no other is known in the narrative. I am not speaking of Anticosti and the Labrador, but of the bosom of the gulf. I would also point out that the axes of the Magdalens and Prince Edward Island lie nearly at right angles to each other. On these early maps Cartier's Prince Edward Island names, often disguised by blunders and translation, will be found, but always attached to the mainland.

Again, in so far as regards the gulf and river St. Lawrence, this Cabot map of 1544 is a map of the Cartier group, for it contains Cartier's names; but they are twisted by translations and errors so as to be nearly unrecognizable. Scarcely one is spelled right. Thus Lac d'Angoulesme becomes Laaga de Golesme, and Cap de Tiennot, C. de Tronot. It is in the highest degree misleading to interpret these old maps as if they were verbally and literally inspired documents, where a particle might modify

the meaning of a verb, or an *iota subscript* affirm or deny an important doctrine. Even Champlain's maps contain many errors, though they are French and were engraved in France. Thus *isles aux Margaux* become *isles aux Tangeux*, and even *isles aux gros yeux*. If the reader will turn back to fig. 12 (the Du Pont map) he will realize the difficulty of reading some of these documents—a difficulty not appreciated by those who are accustomed to lean on the modern helps of capitals and settled spelling. If such mistakes could occur in a French map engraved in France, it is no wonder that they should superabound, as they do, in the Cabot map based on a French document, translated into Spanish or Portuguese, and engraved far away in a Flemish city. On the map of 1544 Cartier's Prince Edward Island names—Salvayos (Cap des Sauvages) Rio de paris (Ripuaire des Barques) C. de linaro (Baye de S. Lunario) are on the main land.

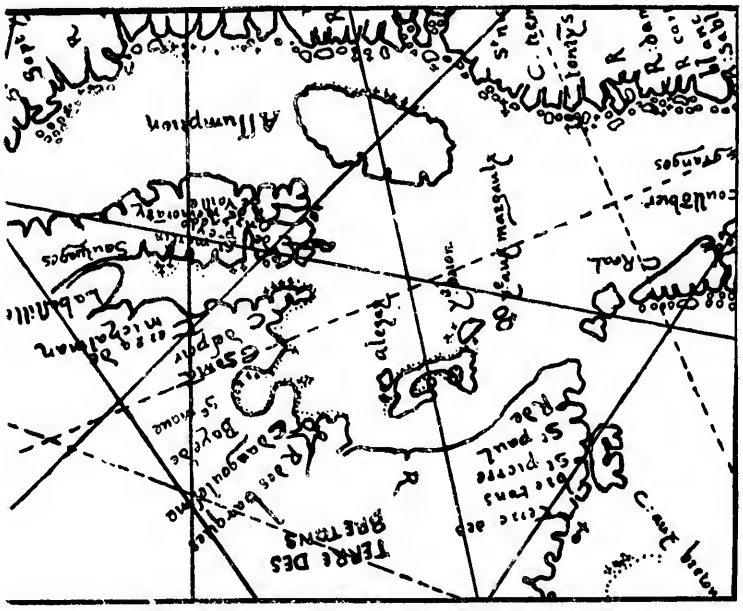


FIG. 26.—DAUPHIN MAP, A.D. 1546. (See p. 250).

Only one deviation from Cartier is found and that is *Les Araynes*, is called ; de s. juan. This same island is plainly seen named on Mr. Harrisse's photograph of Desliens's map of 1541 as *ysle des arènes*. It is a pity the map is so small, but that name may be plainly read with a magnifying glass. That it really is Les Araynes of Cartier is manifest on the Cabot map by the direction of its axis and the three little islands at the northeast point, as well as by its position. The error is apparent, and I am not bound to account for it. Still an explanation may be sug-

gested ; the names are generally written in small italic letters. There are few or no capitals, and the words are often close together. In that way the Spanish transcriber or the Flemish engraver not understanding French well might have taken isle defarenes for isle desanjean, and on looking at legend No. 8, to which the map refers, he would be confirmed in his supposition, as the island appears to be near the *prima vista;* but, be that as it may, the name is shown to be wrong by the whole series of maps and by the fact that England never made a claim by discovery inside the gulf.

All this is confirmed by the Dauphin map (1546). I append an extract (fig. 26, p. 249). There the great Magdalen is identified by its shape and by the named Bird Rocks, Brion Island, and Alezay, as well as by its position in the fairway and the direction of its axis. It is, moreover,

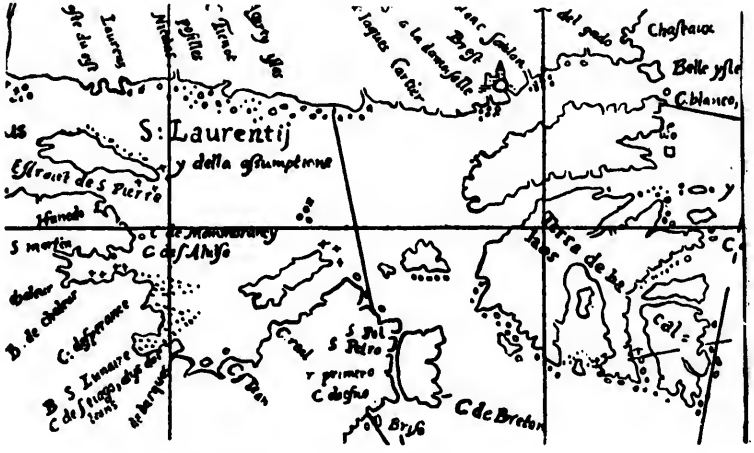


FIG. 27.—GERARD MERCATOR. A.D. 1569.

stamped beyond dispute by the little island in the jaws of the main island, which is the very remarkable position of Entry island (compare modern map, fig. 35, p. 257). On the mainland are R. des barques, C. d'angoulesme, Baye de lunarie, answering to St. Lunario, and on the same coast C. de d'espoir—the Cap d'esperance (Miscou) of Cartier. Prince Edward Island is adherent, therefore, to the mainland, and its north coast is seen extending from the semi-circular bay of St. Lunario down past the Rivière des Barques, to where a break in the coast line marks the inlet at the east end of the strait of Northumberland. Take now the map of Mercator (1569) also appended (fig. 27). There the island is identified as the Magdalen by its position, its axis, and the three islets on the northeast, and the Prince Edward names on the mainland are R. des barques, C. des

FIG. 28.—WHYTFLIET, A.D. 1597.

Sauvages, and Bay St. Lunarie. The same indications are on the Whytfliet map (1597) (fig. 28)—there are Miscou (C. d'esperance) Bay de St-Lunarie, C. des Sauvages, R. des barques, and there, very plainly, as also on the Mercator map, is Cap de S. Jean, on that part of the coast where we shall see the real Isle de St. Jean separate away later on. Continuing, I append (fig. 29) an extract from Hakluyt's map (1600). On it the shape, the position, the axis, and the attendant islets, identify the island concave to the east as the Magdalen, and there is no other island there.

FIG. 29.—HAKLUYT, A.D. 1600.

This closes the series of 16th century maps. I come now to the works of the men who colonized New France, and I give an extract from the map (1609) of Marc Lescarbot (fig. 30). The names are indicated by numbers on the map. Only the more important are written out at length. The numbers refer to a table, and I cite only those bearing on this point.

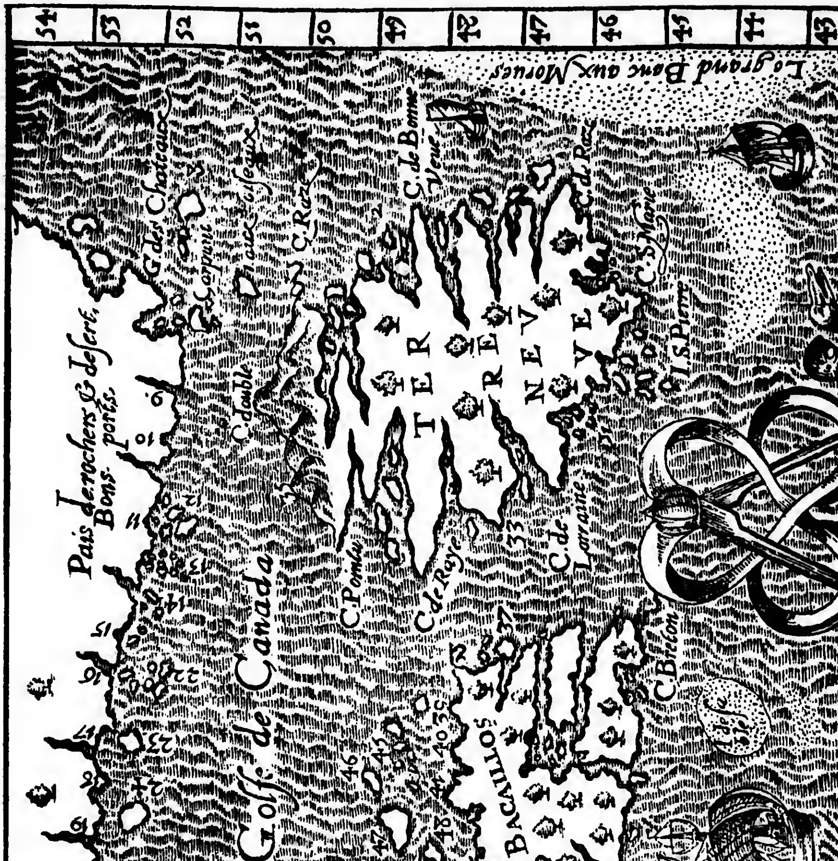


Fig. 30.—Lescarbot's Map, A.D. 1609.

It will be observed that the only islands in that part of the gulf are, in Lescarbot's own words, Nos. 45, Iles Colombaires, alias Iles Ramées (which we know as the Magdalen); 46, Isle des Margaux (Bird Rocks); 47, Ile de Brion (Brion Island); 48, Ile d'Alezay—the sharp pointed rock of Cartier (Deadman's island). Then on the mainland are the Prince Edward Island names—50, Fleuve des Barques, 51, Cap des Sauvages, 52, Gulfe Sainct Lunaire. My point is that Lescarbot did not know of any island in the gulf which can be strained to do duty for Prince Edward Island. No. 53 is Cap d'espérance (Miscou Point).

I come now to Champlain. No. 1 (fig. 31) is his map of 1611. The only islands are the islets of the Magdalens, which are those he saw when sailing to Quebec. On No 2, (fig. 32, p. 254) (1613) these islands of the Magdalen group are more developed, and are named, and here, just where on Whytfliet, Mercator and other maps was placed Cap de St. Jean, Champlain has put Isle St. John, which marks the east end of

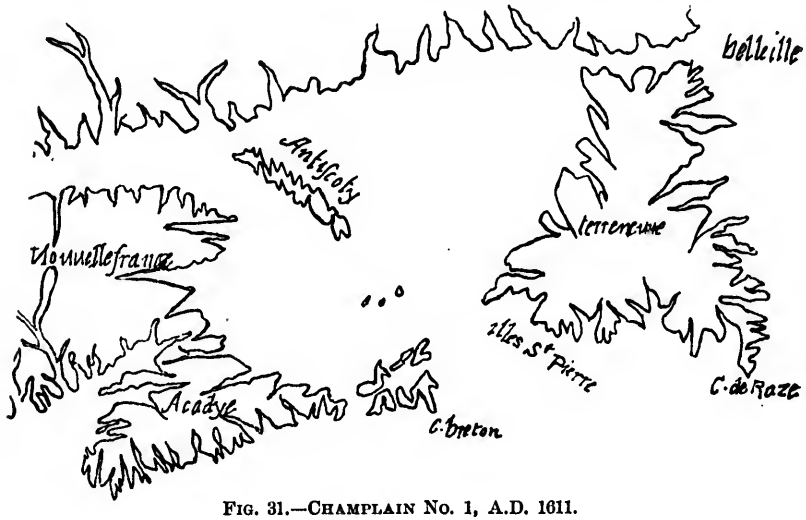


FIG. 31.—CHAMPLAIN No. 1, A.D. 1611.

Prince Edward Island, then separating from the mainland for the first time. This map is absolutely conclusive, for Prince Edward Island is given as Isle St. Jean, in addition to the other islands we have seen on the maps all along. We now see it begin to appear, and the proof is positive as well as negative. I give, as next in order of date (fig. 33, p. 255), Mason's map (1625). It is the mainstay of Judge Prowse's argument for Bonavista, but I place it here because, in the position of Prince Edward Island, he has plainly set down and named Nova Scotia. This map will require to be turned upside down to get the geography right. Lastly (fig. 34, p. 256), I give Champlain's map of 1632, on which the true Island of St. John—our Prince Edward Island—is shown for the first time so far as my reading goes. If there exist some map of an earlier date showing it, why does not somebody more learned than I produce it? I cannot prove an absolute negative, but until such a map be produced, rhetorical argument is wasted.

Before passing on, a few words are necessary concerning the Magdalen islands. In my paper of 1894 I collected, in Appendix F, a number of notices showing what they really are. Some who write on this question minimize the length of the main island to twenty miles. The following is the official description, extracted from the sailing directions published by the Admiralty:

"When first sighted from sea the Magdalen islands appear like "several hilly islands with channels between, but, on nearer approach, they "are seen to be all connected together, with the exception of Entry island, "by a double line of sand bars and beaches inclosing extensive lagoons "having very narrow entrances by which the tide finds access and egress." ("St. Lawrence Pilot," vol. 1, p. 41.)

FIG. 32.—CHAMPLAIN NO. 2, A.D. 1613. (See p. 253.)

With regard to the length of the great Magdalen it will be seen on page 40 (vol. 1, "St. Lawrence Pilot") that it is given as thirty-five miles, and the whole stretch of the group from southwest to northeast lies across in front of Cabot strait for a distance of fifty-six miles, from Deadman's island to the Great Bird. This is not my measurement. It is that of Admiral Bayfield, and is on the Admiralty chart as well as in "The St. Lawrence Pilot." Any one may read it there. Any one may measure it. (See map, p. 257.)

It is very evident that on its western and southern sides the gulf was very little known for a very long time; and the reason is plain. They

were fishermen, not farmers or explorers, who resorted to these coasts, and they found the cod swarming in all the Atlantic harbours of Nova Scotia, Cape Breton and Newfoundland far beyond their needs. Canso, in Nova Scotia, near by, was a great fishing station. On Cape Breton the English frequented the Havre aux Anglais (Louisbourg); the Spaniards, Baye aux Espagnols (Sydney); the French, Baye de Ste. Anne (Port Dauphin); and the Portuguese have left their traces in Port Nova island and Mira bay. The Magdalen islands were well known and frequented for hunting seals, walruses and whales by Basques and Bretons, and later by English, as has been shown in the voyages cited from Hakluyt. The fur traders to the St. Lawrence also passed by these islands and necessarily knew them. None of these people were searching

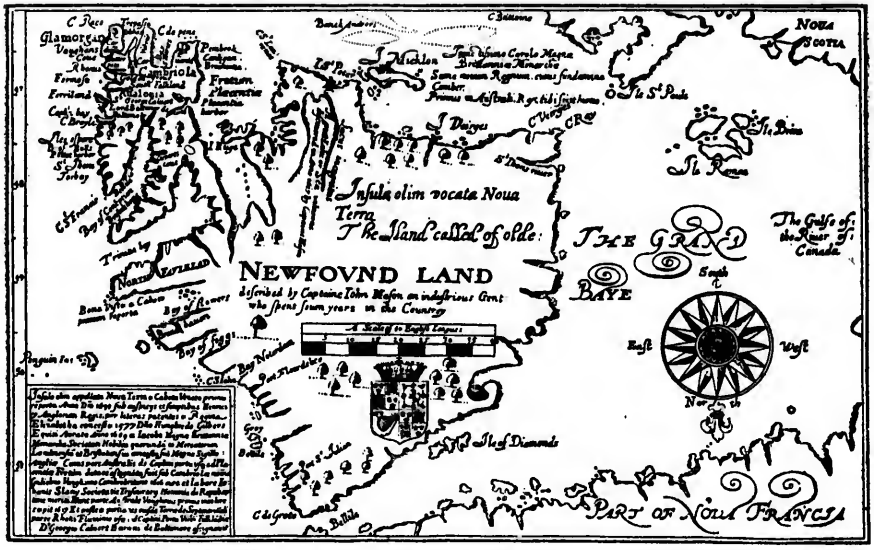


FIG. 33.—MASON'S MAP, A.D. 1625. (See *ante*, p. 253.)
(Turn upside down to get the north to the top.)

for farm lands to settle upon, and the rocks and sands of the Magdalen and its harbours gave them all the facilities they required for shelter and refitting, as well as for drying fish and trying out oil. This is expressly stated by Hakluyt in the voyage of the "Bonaventure" in 1591. He describes these islands, and sets forth the advantages of the good pebble beach for drying fish. The ship is said to have sailed with the "fleet" for Canada, and she had two consorts. They killed 1,500 morses or sea-oxen on the islands. All the vessels then came in the spring and went in the fall, and their object was purely commercial; not in the least agricultural or scientific.

In the pages of Hakluyt no knowledge of Prince Edward Island can be detected. There are voyages to the gulf, such as the voyage of the "Bonaventure" in 1591 to the island of Ramea, and that mentioned

in the letter of Thomas James, of Bristol, to Lord Burleigh the same year, and the voyage of the "Marigold" in 1593, and George Drake's voyage the same year; as well as those of Sylvester Wyatt and Charles

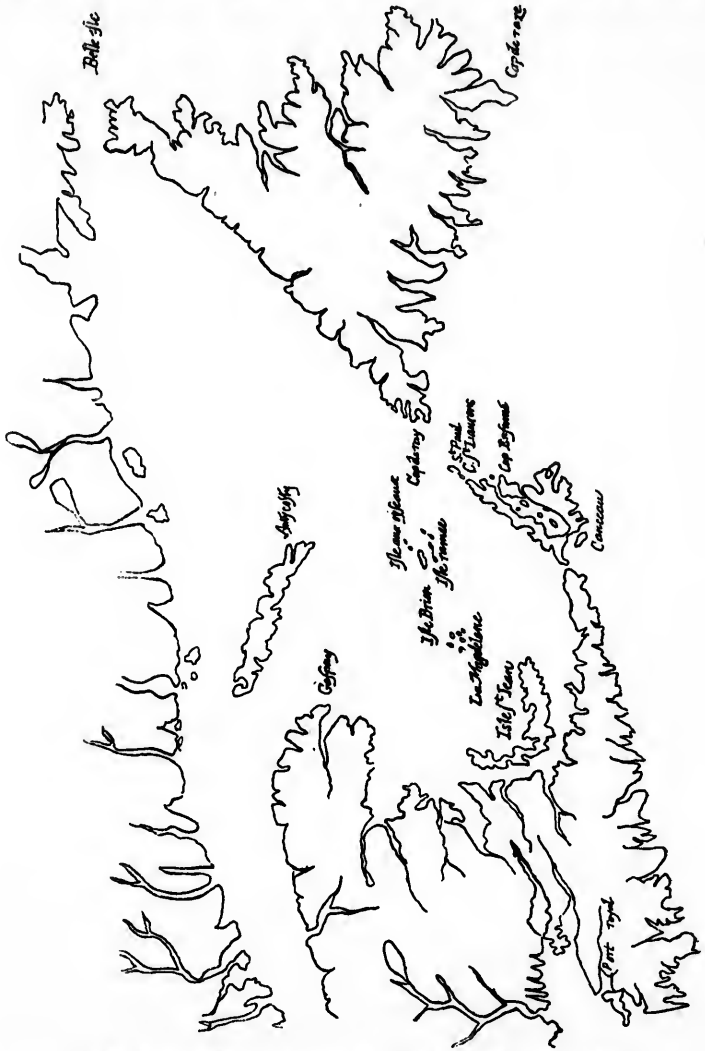


FIG. 34.—CHAMPLAIN'S MAP, A.D. 1632. (See *ante*, p. 253.)

Leigh. Then we read of the voyage of the "Grace," of Bristol, in 1594, to Natiscotec (Anticosti) for whales, and of the "Hopewell" and "Chancewell" in 1597 to the island of Ramea for morses. These voy-

ages Hakluyt introduces by such headings as "a *discovery* of the island of "Ramea"—not in any such sense as we now use the word, but "because "they are the first for ought that hitherto is come to my knowledge, of "our own nation, that have conducted English ships so farre within this "gulf of St. Lawrence and have brought us true relation of the mani- "fold gaine which the French, Britaynes, Baskes and Biscaines do yearly "return from sayd partes." Would Hakluyt have said that if he had thought that Cabot had sailed round the gulf, or if Cabot's maps hanging

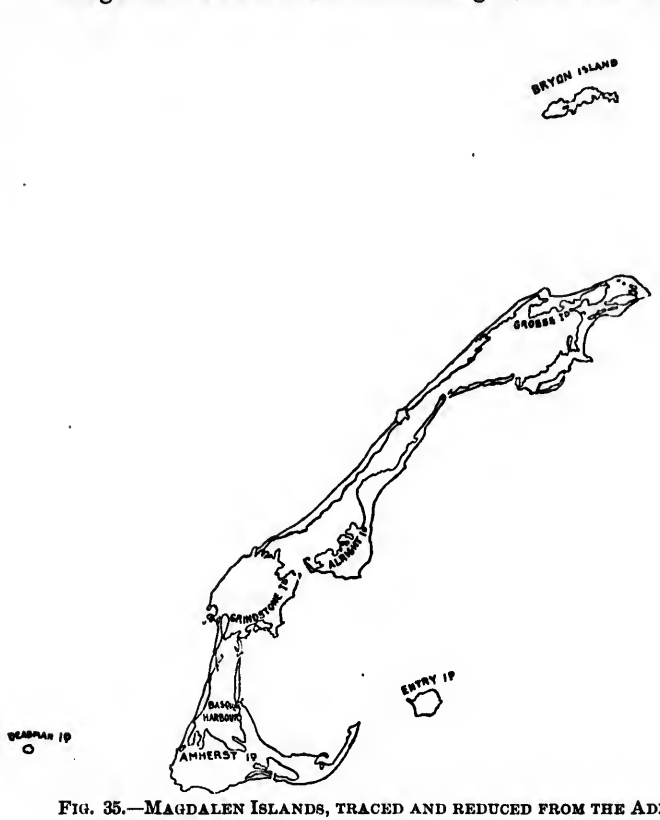


FIG. 35.—MAGDALEN ISLANDS, TRACED AND REDUCED FROM THE ADMIRALTY CHART.

in the queen's gallery had given any hint of such a thing? The language excludes any such idea, and if it had been written for this controversy it could not be more appropriate.

Having so far discussed the maps, I would observe that there are notices of the island of St. John found in the works of early writers which prove conclusively that it was not within the gulf. In Appendix D to my paper of 1894 I called attention to the report of Estevan Gomez in 1525, as contained in notices by Oviedo and Cespedes. From these it appears, as indeed the map of Ribero shows, that he reported a continuous

coast and that the island of St. John was on the Atlantic seaboard and that the Cape of Cape Breton was upon it. A passage in the Cosmography of Jean Allefonsce (1545) expressly mentions these places. He says :—"Turning to the isle of St. John, called Cape Breton, the outmost "part of which is in the ocean, in 45° from the Arctic pole, I say Cape of "St. John called Cape Breton." That is surely precise enough. There is no need to follow it further. He knew nothing about any other island of St. John. Much more to the same effect might be cited, but it cannot be necessary further to prove what is so plain.

Before closing it is proper to advert to a passage [130] from the treatise of Galvao (Galvano), cited in the presidential address. The archbishop suggests that the discovery of the gulf by Cabot is indicated in it. He gives the original Portuguese : "Descobindo toda a baya, rio, enseada, "p'ra ver se passava da outra banda." He then says : "Hakluyt trans- "lates it—discovering all the bay and river named Deseado to see if it "passed on the other side." That is correctly quoted from the volume, but the conclusion is not justified when all the facts are known. The archbishop says that Hakluyt may have had reason to know that Enseada was the name of a bay and river. "Thus," he adds, "we have the name "given by Cabot to the Gulf of St. Lawrence and to our noble Canadian "river, for no other bay or river could be possibly meant. A beautiful "and appropriate name in sooth. It is the desired or desirable." The meaning is correct of "Deseado," but not of Galvano's word, which is "enseada," for that is the Portuguese way of writing the Spanish "ensenada," creek or inlet ; and the passage simply means in English, "searching every bay, river, and inlet, to see if it passed on the other "side." Any argument founded on an evident mistranslation and substitution of words must fall to the ground. We know from Oviedo where the Rio de la Ensenada was, and it is put down on the great map of Alonso de Santa Cruz (1542), far away from the place where he has indicated the position of the Gulf of St. Lawrence. While upon this point I would observe that the presidential address seems to indicate a radical misconception of this matter, because Hakluyt expressly says that the translation he edited of Galvano was not his. In real truth he never had the original. He tells us that it was a manuscript which had been in his possession for twelve years—a translation made by "some honest and "well affected merchant" whose name even he did not know. The original work was published, after Galvano's death, in 1563, and we are in a better position than Hakluyt to know what is in it, for a copy has recently been found and published by the Hakluyt Society, in connection with the translation Hakluyt acquired. Hakluyt says he annotated and supplemented the manuscript in places, but as he had not a copy of the original work he was unable to correct the errors of translation which evidently existed in it. There is no doubt about the meaning of *enseada*, for elsewhere Galvano mentions *a enseada de Bigala*—the Bay of Bengal —and elsewhere Galvano, in describing an island discovered by Columbus, calls it *Desejada*. The translation says : "Deseada, that is, "the desired or wished island." I need scarcely add that *desejada* is a different word from *enseada*, and no argument based on a substitution, even by Hakluyt's well disposed merchant, of one for the other can possibly be valid.

My argument is now closed, not from want of matter, but from reluctance to occupy more space. The question is now placed before those who will give the time and attention necessary to understand it.

No one can regret more than I do the length of the paper, but if there is one duty more than another incumbent on the members of this section it is to see that the history of Canada is built upon a solid foundation. We must not leave it to be elucidated by scholars of other nations. Such questions as these cannot be set at rest by authority, nor by rhetoric. Long and patient investigation is absolutely necessary, and scholars of many nations have cheerfully given it. Many very learned men have joined in the discussion, and their learning has not been wasted, for much concerning the Cabots, which was obscure, has been solidly established. It is not erudition which has entangled this controversy, it is assertion and contradiction without evidence. Myth and legend are well in their places. They are interesting and poetical, but in a question of geographical history, such short cuts to knowledge are inapplicable.

Note on John Cabot's Pension.

The Marquess of Dufferin and Ava, in his address at the Cabot commemoration at Bristol on June 24, 1897, brought to public notice, for the first time, some original manuscripts of the accounts of the Collectors of Customs at that port, in which the name of John Cabot twice appears. The manuscripts were found in the Chapter House of Westminster Abbey by Mr. Edward Scott of the British Museum, and he, with the co-operation of Mr. Coote (also of the British Museum), deciphered the crabbed writing into plain Latin, translated the documents into English, and secured their reproduction by the autotype process. These documents are of much interest, for while they are not absolutely conclusive, they afford a presumption that John Cabot returned alive to England after his second expedition—that is, from the expedition which sailed in the spring of 1498. It will be remembered that up to October 28, 1498 (when William Purchas ceased to be Lord Mayor of London), the expedition had not returned, and also that no mention of its return has hitherto been found; nevertheless, Cabot's pension for that year would seem to have been drawn.

On December 13, 1497, in the thirteenth year of his reign, Henry VII. granted, during pleasure, to John Cabot, a pension of £20 per annum, charged upon the King's revenues at Bristol, to date back from Lady Day, or March 25th, the usual commencement of the year at that period. On January 28, 1498, this grant passed the seals. On February 22, 1498, another royal order was issued. It set forth that "Caboot" had been delayed in obtaining payment because the king's officers at Bristol had no funds. The order was, therefore, directed to the Exchequer to issue to "Caboot" two tallies for £10 each. Tallies so issued were available for payment of taxes or other moneys due to any public accountant, and when they came to final clearance were checked by being placed against the counterstock or other half of the split stick, when the notches would at once be seen to correspond, if no fraud had been committed.

The accounts of the collectors ran from Michaelmas, September 29, and they have been reproduced in autotype for the twelfth, thirteenth and fourteenth years of the king. The annexed phototype is a facsimile of a few lines of the account in the thirteenth and fourteenth years of Henry VII., or from September 29, 1497, to September 28, 1498. On the

fifth line is the entry : *Et in thesaurio in una tallia pro Johanne Coboot, xx Li.* : In the treasury in one tally in the name of John Coboot, £20. The presumption is that one tally was really issued for the whole amount, and that John Cabot negotiated it with some one who owed the king money for dues.

So far the transaction seems clear, for we know John Cabot was in England until May, 1498, during the currency of that account, but the account for the following year has also been reproduced (that is the year September 29, 1498, to September 28, 1499), and in it is also an entry to Cabot as follows—this time spelled right: In the treasury one tally in the name of John Cabot, £20. It would therefore appear that a tally for the second year of the pension was issued and negotiated, but whether it could have been issued, during Cabot's absence, to his representative, or whether, of necessity, it had to issue to him in person, some one more learned in such matters than I am must decide. The second year of the pension, it must be remembered, began to accrue on March 25, 1498, before Cabot sailed, although the tally was passed in after September 29, 1498. The point is, whether a tally could issue in advance against the second year of the pension, which really had commenced to be current while Cabot was straining his resources to fit out his second expedition. If that was not possible, Cabot must have returned after September 28, 1498, and have got the tally himself. The question is not easy to answer, for it demands a very intimate knowledge of the rules of the Exchequer at that time, and it is unsafe for any one in a new country to express an opinion upon such a subject without long and careful inquiry. No doubt every facility possible was afforded to Cabot, for the king advanced £30 to Thomas Thirkill and £30 to Thomas Bradley, as straight loans, and he gave a gratuity to John Carter of £40 5s in aid of their ventures "going "to the new ile."

These autotypes came to hand just as this paper was closed, and hence are not referred to in their proper place. Only 150 copies were issued. (William George's Sons, publishers, Bristol.)

Mr. G. E. Weare, in his "Cabot's Discovery of North America" (London, 1897), published for the first time an extract from a statement of the accounts of the collectors of the port of Bristol, by which it appears that they had in their possession an acquittance for £10 paid to "John Calbot, a Venetian, late of the town of Bristol," on account of his annuity of £20 per annum, "to wit, for the term of the Annunciation of the Blessed Virgin Mary." Mr. Weare concludes that the term referred to was up to and inclusive of the 25th of March, 1498, and that therefore John Cabot sailed on his second expedition at some time after that date. Other considerations lead to the same conclusion. Questions concerning the history and antiquities of Bristol will, however, be more appropriately left in the hands of those who, like Mr. Weare, have made an especial study of them upon the spot. The materials for forming a sound judgment do not exist in Canada.

Ashtanga Hridaya - Sutra Sthana - Adhyaya 8

Doshadi Vijnaniya Adhyaya

Then Atreya and others approached Punarvasu Atreya, who was seated comfortably, surrounded by his disciples, and requested him to explain the science of Doshas, Dhatus, Malas, Agni, and Srotas.

Punarvasu Atreya said:

Vata, Pitta, and Kapha are the three Doshas.

Rasa, Rakta, Mamsa, Medas, Asthi, Majja, and Shukra are the seven Dhatus.

Purisha, Mutra, and Sweda are the three Malas.

Jatharagni, Bhutagni, and Dhatvagni are the three Agnis.

Pranavaha, Annavaha, Udakavaha, Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Majjavaha, Shukravaha, Purishavaha, Mutravaha, Swedavaha, and Artavavaha are the fourteen Srotas.

TRANSLATION OF ANNEXED EXTRACT.

	£	s.	d.
Bristol.—Arthur Kemys and Richard ap Meryk, collectors of the King's Customs and Subsidies there, from Mich, 13th y^r^ of this king, to the same feast next following, render their account of	1282	8	11¾
In the treasury in three tallies in the name of the King's household	600	0	0
In the treasury in two tallies in the name of Eastmarch	121	12	5
In the treasury in three tallies in the name of said collectors	169	0	0
In the treasury in one tally in the name of Thomas Lovell, Kt	100	0	0
In the treasury in one tally in the name of John Coboot	20	0	0
In the treasury in one tally in the name of John Heron	13	6	8
&c., &c., &c., &c.			

NOTES.

1.—(Page 139). Collections of the Nova Scotia Historical Society, Vol. 9, 1893-94. The paper was read Nov. 14, 1893, and is entitled "The Voyages and Discoveries of the Cabots."

2.—(Page 141). Cabot's Voyages; a Lecture delivered at St. Patrick's Hall, St. John's, Newfoundland, January, 1897, by the Rt. Rev. Bishop Howley. St. John's, N.F., pp. 29.

3.—Trans. Royal Soc. Can. for 1894, Sec. 2. First paper of the series of Cabot papers, pp. 55.

4.—Jean et Sébastien Cabot par Henri Harrisse. Paris, 1882.

5.—The Discovery of America by Henry Harrisse. London, 1892.

6.—(Page 142). Letter, Sept. 5, 1896, to Evening Telegram, St. John's, N.F.

7.—Magazine of American History, Vol. 26, p. 267.

8.—Letter, Jan. 27, 1897, to St. John's Telegram.

9.—The Forum for June, 1897, p. 473. New York.

10.—This paper was published in the Morning Chronicle, Halifax, N.S., May 13, 1897. Capt. Smith commanded for many years steamships of the Allan Line. Valuable tables of ocean distances and courses are given.

11.—(Page 143). Presidential Address before the Royal Society of Canada, published in the Halifax Herald, June 26, 1897, and in the Proceedings at the commencement of the present volume.

12.—Morning Chronicle, Halifax, N.S., Aug. 7, 1897.

13.—Letter in Evening Telegram, Sept. 19, 1896. St. John's, N.F.

14.—The Earth and its Inhabitants. Appletons, New York. See the volume on America. Translated from the original Paris edition

15.—(Page 144). Life of Columbus, p. 342.

16.—St. John's Evening Telegram, Jan. 26, 1897. Letter criticising Bishop Howley's Lecture.

17.—St. John's Evening Telegram, Jan. 26, 1897.

18.—*Ib.* Same date.

19.—(Page 145). Lecture, p. 36.

20.—(Page 148). *Ib.*, p. 16.

21.—*Ib.*, p. 13.

22.—(Page 149). *Ib.*, p. 13. John Cabot had heard this during his travels in the earlier part of his life. As the Christian names are not given in this passage, the personalities of the two Cabots are confused.

23.—*Ib.*, p. 17.

24.—(Page 150). *Ib.*, p. 22.

25.—(Page 151). See Art. 13 of the Treaty—conveniently in Prowse's History, p. 258. The error is, doubtless, a slip of the pen, for the fact is well known to everybody in Newfoundland. It was not until 1783 that Cape St. John was fixed upon by the Treaty of Versailles.

26.—Lecture. Note at p. 28.

27.—(Page 152). Answer to Archbp. O'Brien in Halifax Morning Chronicle, Aug. 7, 1897.

28.—Newfoundland and Labrador Pilot, p. 349. London, 1887.

29.—(Page 153). *Ib.*, p. 16, and p. 381.

30.—(Page 154). Forum, June, 1897; and "John Cabot," p. 63.

31.—Toronto Globe, Sept. 22, 1896.

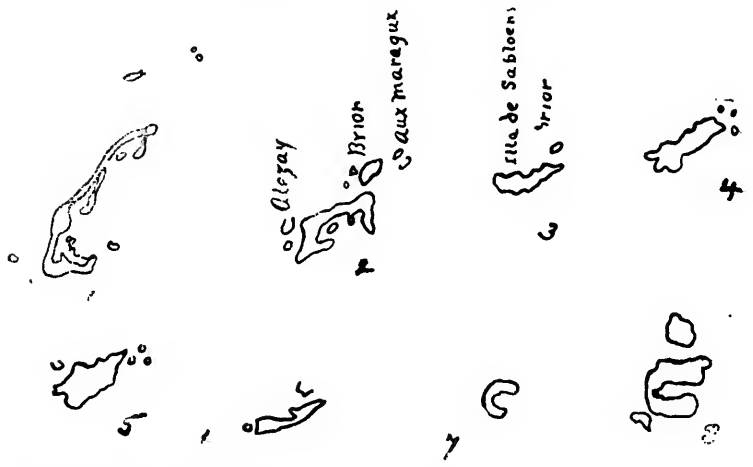
32.—(Page 154.) John Cabot, p. 63. London, 1896.
33.—(Page 155). Fabyan's Chronicle.
34.—(Page 156). Maxwell's Newfoundland and Labrador Pilot, p. 17. "It is better to "make northing on leaving the channel. The New York sailing packets "and the autumn sailing vessels now go up to 55° to make the Gulf of St. "Lawrence." In the Newfoundland and Labrador Pilot, published by the Admiralty, 1887, it is stated at p. 17, that "Admiral Lavand, of the "French navy, observes that the best route to follow on leaving the Eng-"lish Channel is to make a little northing." Cabot could not have known all the reasons which now dictate this course, but he did know well that he was sailing on a globular, and not on a plane surface.
35.—Introduction to Vol. 86 (1893), Hakluyt Society, p. xv.
36.—(Page 158). Discovery of North America, p. 451.
37.—See Appendix A to my paper of 1894 for a translation of this valuable and apposite treatise.
38.—(Page 159). The Discovery of North America by John Cabot, the alleged date and landfall; also, the ship's name, the "Matthew," a forgery of Chatterton. Third edition, revised and enlarged, with a supplement—Mathematical Demonstration of the Fallacy, etc., etc. London, B. F. Stevens, 1897.
39.—(Page 162). United States Coast and Geodetic Survey. Report for 1880, p. 414.
40.—*Ib.*, p. 407.
41.—(Page 163). Discussion following the reading of Sir Clement Markham's paper.
42.—Halifax Morning Chronicle, Aug. 7, 1897.
43.—(Page 164). The Cabot Controversies, p. 12. Cambridge, Mass., 1896.
44.—(Page 168.) The Discovery of America by John Fiske, Vol. 2, p. 14.
45.—*Ib.*, Vol. 2, p. 16.
46.—*Ib.*, Vol. 1, p. 447.
47.—Dr. Justin Winsor (Cabot Controversies, p. 12) says there is good reason to believe that Ruysch used Cabot's charts.
48.—(Page 169). Facsimile Atlas to the early History of Cartography, by Baron A. E. Nordenskiold. Stockholm, 1889.
49.—Examen Critique, Vol. 4, p. 161.
50.—(Page 170). Lecture on Mediæval Maps.
51.—(Page 172). History of Newfoundland, p. 13.
52.—Newfoundland and Labrador Pilot, p. 27.
53.—(Page 174). Halifax Morning Chronicle, Aug. 7, 1897.
54.—*Ib.*
55.—(Page 175). Report and Editorial in London Times.
56.—Letter in St. John's Evening Telegram, Sept. 14, 1896.
57.—(Page 176). *Ib.*
58.—*Ib.*
59.—Magazine of American History, Vol. 26, p. 287.
60.—Trans. R. S. C., Vol. 12, Sec. 2.
61.—(Page 178). The best facsimile of this important map is in Harrisse's Discovery of America, p. 217. It is reproduced twice in Winsor Narr. and Crit. Hist., in part Vol. 2, p. 219, and fully in Vol. 4, p. 38, where the features noted in the text will be found. Kretschmer's facsimile is defective on the coast of Greenland in not indicating *ille ferme*. Terra or Tierra firma is not found in any of them.
62.—Discovery of Newfoundland by John Cabot, St. John's, N.F., 1897, pp. 10. A facsimile of Mason's map is given on p. 253 *ante*.
63.—(Page 180). Letter to Evening Telegram, St. John's, N.F., Jan. 27, 1897.
64.—History of Newfoundland, p. 60.
65.—Edward Haies's Account of Sir Humphrey Gilbert's Expedition in Hakluyt's Principal Navigations.
66.—(Page 181). Lecture, p. 35.

67.—(Page 181.) Lecture, p. 37.
68.—(Page 182). John Cabot, p. 115.
69.—Letter to St. John's Evening Telegram, Jan. 28, 1897.
70.—Halifax Morning Chronicle, Aug. 7, 1897.
71.—Rejoinder to G. E. Weare—Notes and Queries, Aug. 14, 1897.
72.—(Page 183). Examen Critique, Vol. 5. p. 152.
73.—John Cabot, p. 88. Note.
74.—Cabot Controversies, p. 14.
75.—Divers Voyages. Quoted also in Harrisse, John Cabot, p. 373, and in Weare, Cabot's Discovery of North America, p. 251.
76.—Lecture. Page 11 for Puebla's theft, and p. 35 for Cortereal's.
77.—(Page 186). Lecture, p. 25.
78.—John Cabot, p. 281.
79.—(Page 187). Life of Columbus, p. 627.
80.—*Ib.* These statements are the veriest commonplaces, but they may be seen here at a glance.
81.—*Ib.*, p. 639.
82.—Facsimile Atlas, p. 68.
83.—Notes on the Verazzano Map. Journal of the New York Geographical Society, Vol. 4, p. 240.
84.—Facsimile Atlas, p. 51.
85.—Lecture on Mediæval Maps.
86.—Life of Columbus, p. 531.
87.—(Page 188). Discovery of America, p. 267.
88.—John Cabot, p. 86.
89.—*Ib.*, p. 80.
90.—(Page 189). *Ib.*, p. 16.
91.—(Page 190). Discovery of Maine, p. 193. (Vol. 1, Maine Hist. Soc.)
92.—*Ib.*, p. 193—Harrisse, Jean et Sébastien Cabot, pp. 266, 272, 274.
93.—John Cabot, p. 279.
94.—(Page 172.) *Ib.*, p. 112.
95.—(Page 193). Forum, June, 1897.
96.—Introduction to Journal of Columbus, p. XXI. (Hakluyt Soc., Vol. 86.)
97.—John and Sebastian Cabot, pp. 7, 51, English translation. Detroit, 1893.
98. Cabot Controversies, p. 13.
99.—Forum for June, 1897.
100.—(Page 194). Histoire du Canada, Vol. 1, p. 58.
101.—(Page 197). Arber's Three First Books on America, p. 350.
102.—(Page 201). St. Lawrence Pilot, Vol. 2, p. 304. One of the causes of these wrecks, before the lighthouse was built in 1839, is stated to be the prevailing current setting out of Cabot Strait upon the starboard bow of vessels on a westerly course. This was pointed out in my paper of 1894.
103.—Histoire de la Nouvelle France, Vol. 2, p. 409. Further particulars will be found in a Note to Charlevoix's Letters.
104.—Principal Navigations.
105.—*Ib.*
106.—(Page 202). Voyage par ordre du Roi, p. 41. Paris, 1753.
107.—Principal Navigations.
108.—Newfoundland and Labrador Pilot, p. 8.
109.—(Page 203). Life of Columbus, p. 342.
110.—Jean et Sébastien Cabot, p. 64.
111.—(Page 205). *Ib.*, p. 66.
112.—Lecture, p. 13.
113.—*Ib.*, p. 11.
114.—Geography of the Sea, by Lieut. Maury, U.S.N.
115.—(Page 206). Principal Navigations.

116.—(Page 207). Lecture, p. 15.
117.—(Page 208). Hakluyt Society, Vol. 86, p. 202.
118.—(Page 211). Letter to St. John's Evening Telegram, Jan. 27, 1897.
119.—Decades. (A.D. 1510.)
120. (Page 212). John Cabot, p. 77.
121.—(Page 214). Forum, June, 1897.
122.—(Page 215). *Ib.;* John Cabot, p. 63.
123.—John Cabot, p. 68.
124.—(Page 225). Examen Critique.
125.—(Page 229). St. Lawrence Pilot, Vol. 2, p. 302.
126.—(Page 233). Facsimile Atlas, p. 38.
127.—Page 238). Discovery of America, p. 407.
128.—(Page 241). Mr. Ganong's papers are: Jacques Cartier's First Voyage, R. S. C Trans., Vol. V., and Cartography of the Gulf of St. Lawrence, R. S. C. Trans., Vol. VII.
129.—(Page 247). St. Lawrence Pilot, Vol. 1, p. 51.
130.—(Page 258). The Discoveries of the World, by Antonio Galvano. Hakluyt Society, Volume for 1862.

The Magdalen Group.

As represented on the earliest maps.



1. Magdalen Island correctly drawn.
2. From the Henry II. or Dauphin map of 1540. Alezay is Deadman's island, les Isles aux Margaux are the two Birds, and Bryon island has retained its name until now. Entry island is shown. All are in their relative places and the concave shape of Magdalen island is clearly shown.
3. From Homem's map (Portuguese), 1558. The island is identified by its name. Ille de Sabloen—isle of sands, and by Bryon island close to it. The axis is right, but the concavity is turned the wrong way, as in many of the Portuguese maps.
4. From Mercator's map, 1569. Here it is identified by the three small islands on the north.

5. From the map of 1544. The three small islands on the north and Alezay) Deadman's island) on the west identify it as the Magdalen. The Prince Edward Island names are away on the main land.
6. From the Vallard map of 1543. This map is Portuguese. The Magdalen is shown by Alezay on the west and Bryon on the north. The concavity is reversed, as in No. 3.
7. From Rotz's Globe, 1543. The author was French and embodied Cartier's discoveries on his maps. The Magdalen is indicated by its shape, concave in the right direction, as in the other French map, No. 2.
8. From Hakluyt's map; the scarce map of 1600. Here the shape marks out the Magdalen and Deadman's island (Alezay), and Bryon island further identify it.

Various as the above are in shape, it will be seen that their axes are all in the same direction and are at right angles to the direction of the axis of Prince Edward Island, and their positions on their respective maps are the same—that is, in the fairway to the St. Lawrence river. The sequence may be continued by referring to Champlain's map of 1613, (see *ante* p. 254) where the Island of St. John (Prince Edward Island) begins to separate from the main land. At p. 256 will be found Champlain's map of 1632, where the island appears in its correct shape and position for the first time.

THE MAPS.

I. Map of Juan de La Cosa.

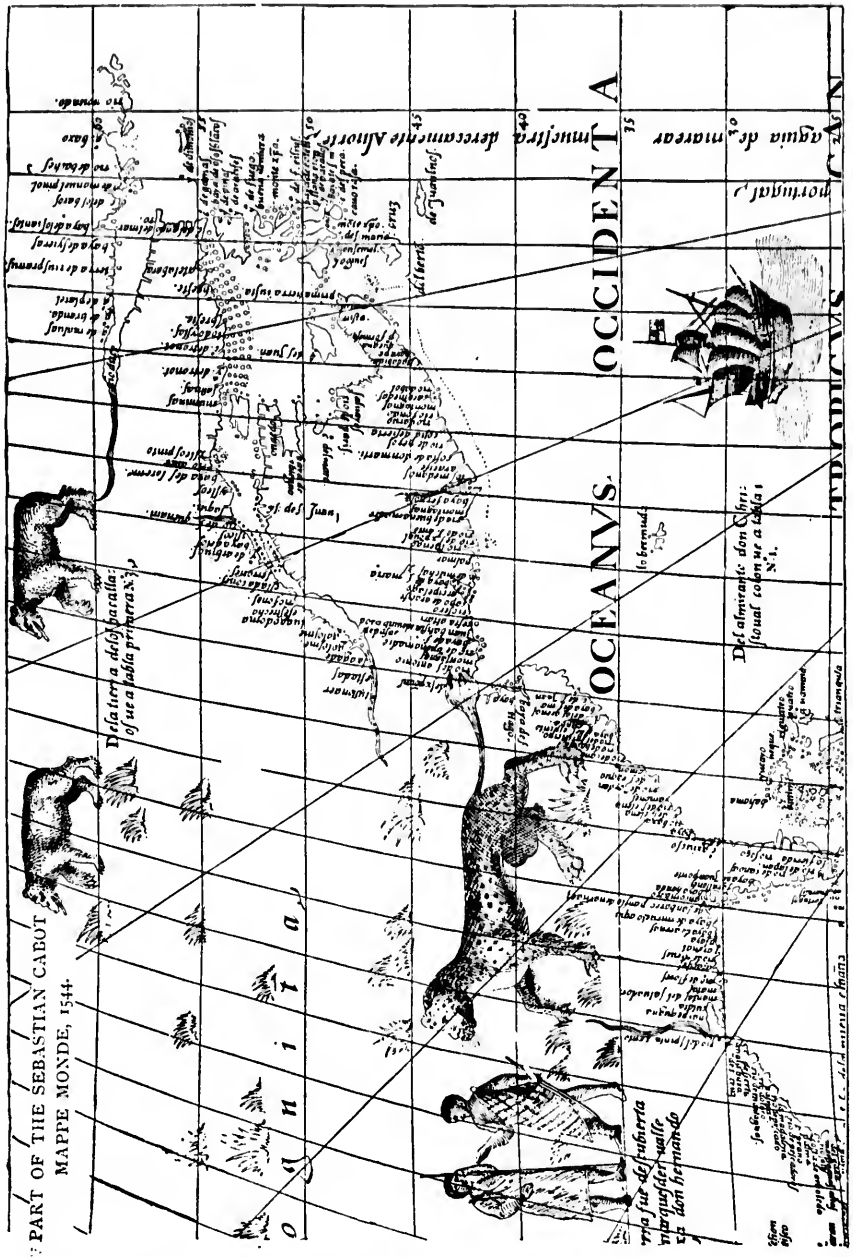
This has been reproduced from the facsimile in Jomard's "Monuments de la Géographie," because, being in black and white, it was less costly to reproduce than the facsimile in colours by Vallejo and Traynor published at Madrid in 1892. There have been many reproductions of the American portions of this map. That portion may be conveniently referred to in the following books—Kohl, History of Maine; Winsor, Narrative and Critical History; Harrisse, Discovery of America; Markham, Hakluyt Society, Vol. 86; Kretschmer, Atlas; and in two previous papers in Vol. 12, R. S. C., 1st series, and Vol. 2, R. S. C., 2nd series. Both Jomard's and Humboldt's copies have omitted the second island off Cavo de Ynglaterra. This has been inserted in its place, on the present copy, after the Madrid facsimile. It will be found, also, in Harrisse, Winsor and Markham.

The scale is a little less than half the size of the original. Those who may wish to see the American portion on a larger scale will find tracings elsewhere in the present volume.

II. The Map of 1544 (Cabot's).

There is a facsimile of this map in Jomard; but, inasmuch as a photograph of the original at Paris was available through the courtesy of the Minister of Agriculture, it has been possible to give the members of the society the privilege of studying this important document with as much certainty and more conveniently than if they were in Paris. The scale is a little less than one-half, but with a reading glass the lettering may easily be made out. Extracts of the American portion of this map are easily accessible, but in order to make the present volume as complete as possible one of these is reproduced here on a larger scale, and at p. 204 is a magnified outline of the region of the *prima vista*. The extract now given shows the names in the Gulf, and is taken from Vol. 3 of Winsor's Narrative and Critical History. The best reproduction of an extract on a large scale is in Harrisse's Jean et Sébastien Cabot. The present photographic reproduction is, however, the true image of the original, untouched by hand, and all these extracts may be taken as commentaries.

The legends are in Spanish and Latin. The student will see they are welded to the map by the numbered references. He will find No. 3 under the feet of the two bears, and be able to see for himself that the reference is to No. 8 on the margin, inasmuch as Bacallaos is the subject of both, and No. 3 refers to Central America, and he will also see that these legends cover widely extended regions. In order, however, to include in the present volume a complete *apparatus criticus* on the Cabot question, it has been thought desirable to give a translation of the legends, as an appendix to Section 2. In Volume 6 of the Proceedings of the Massachusetts Historical Society, Second Series, this work was done once for all and cannot be improved upon. The translations were made under the direction of the late Dr. Charles Deane, and formed part of a paper written by him. As the volume is not easily accessible, the reproduction of the translations will assist greatly in forming a reasoned opinion on this difficult question.



North American portion of the Cabot Map of 1544 (from Winsor, Narr. and Crit. Hist. Vol. 3, p. 22).

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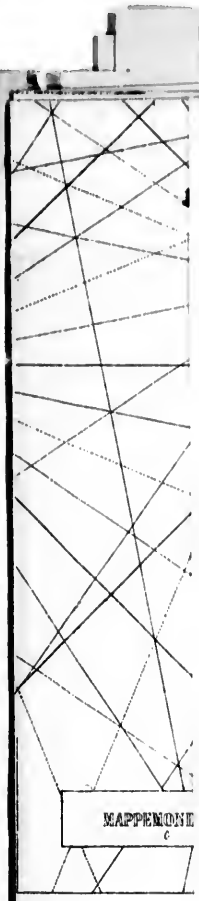
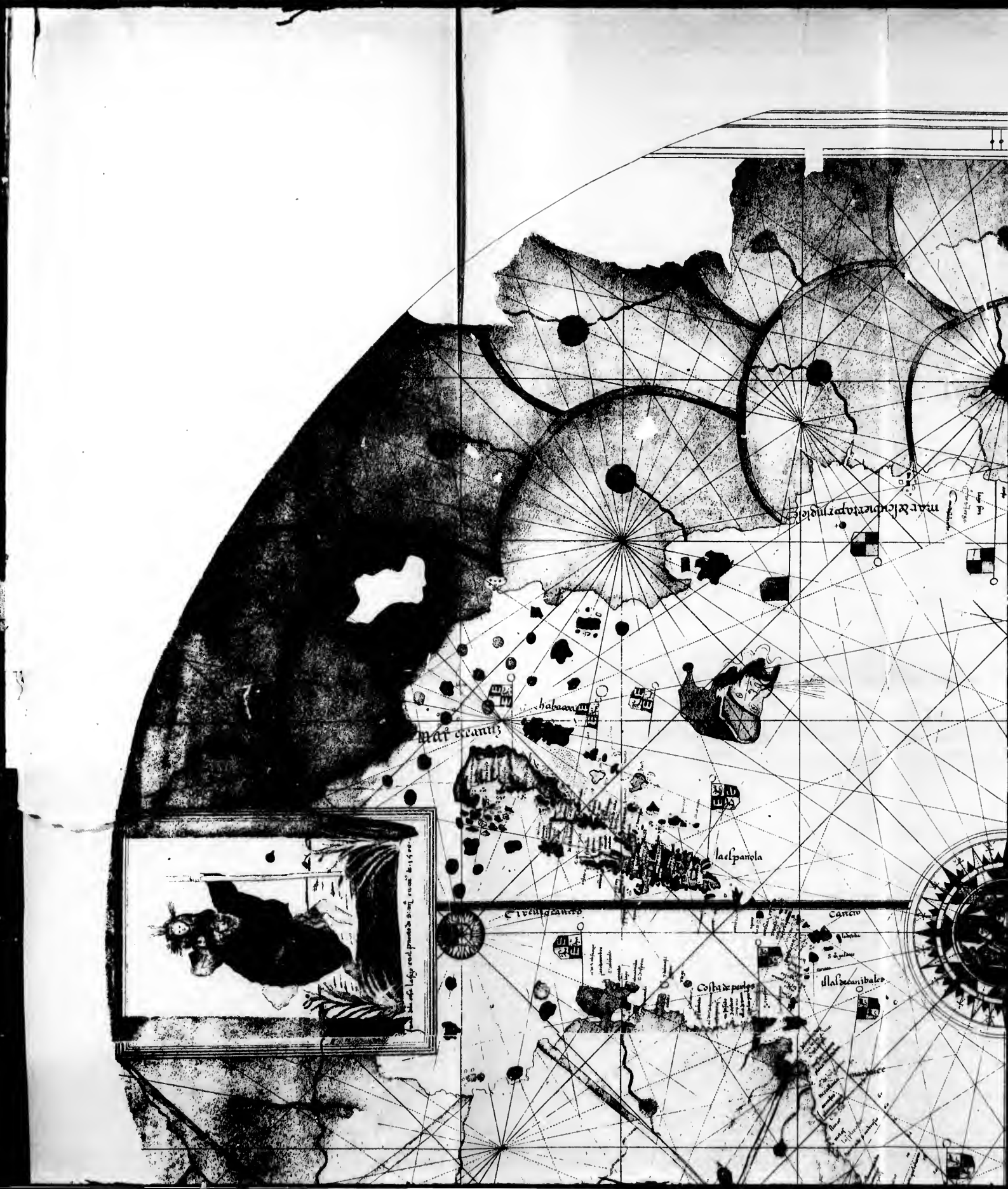
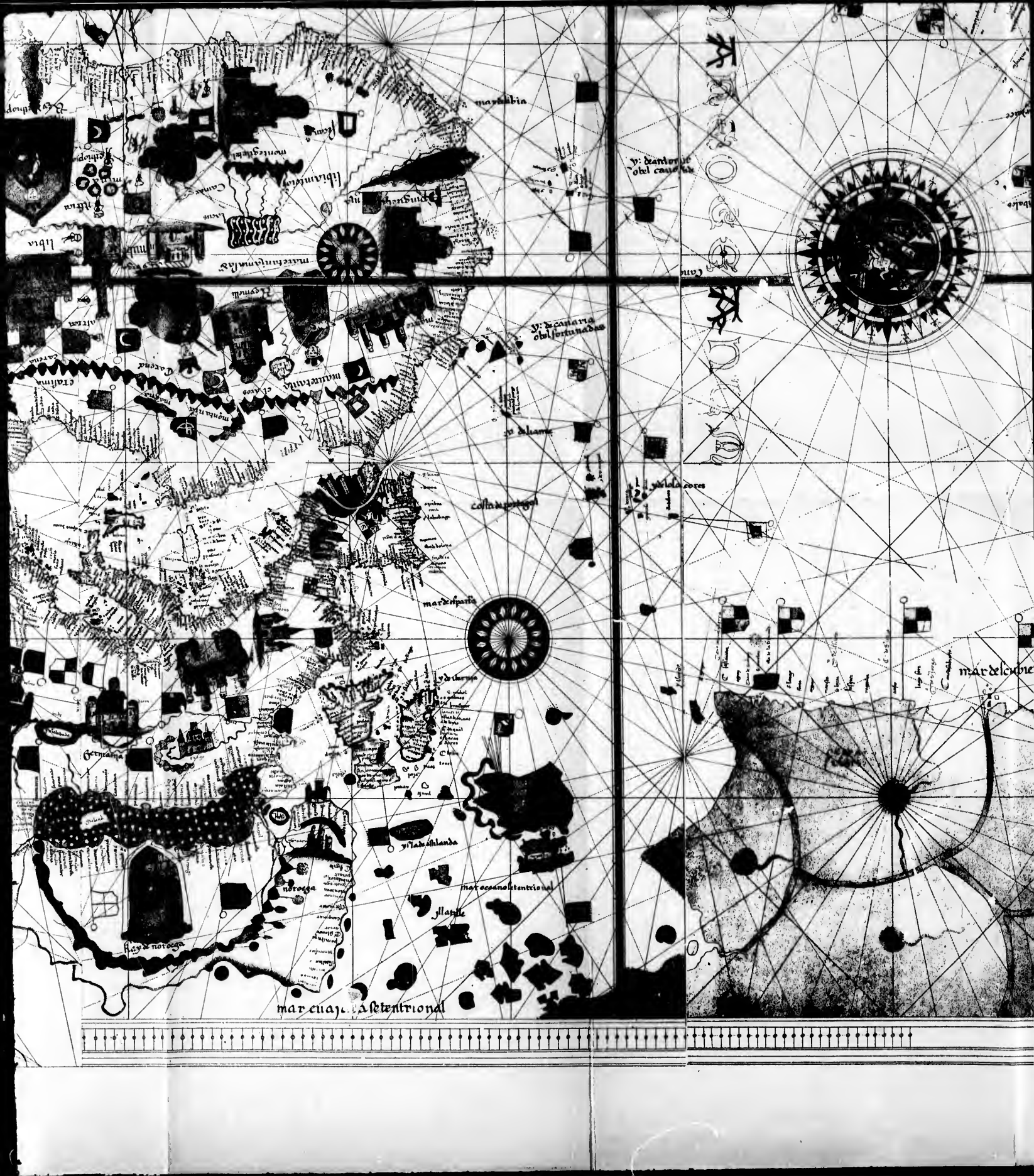
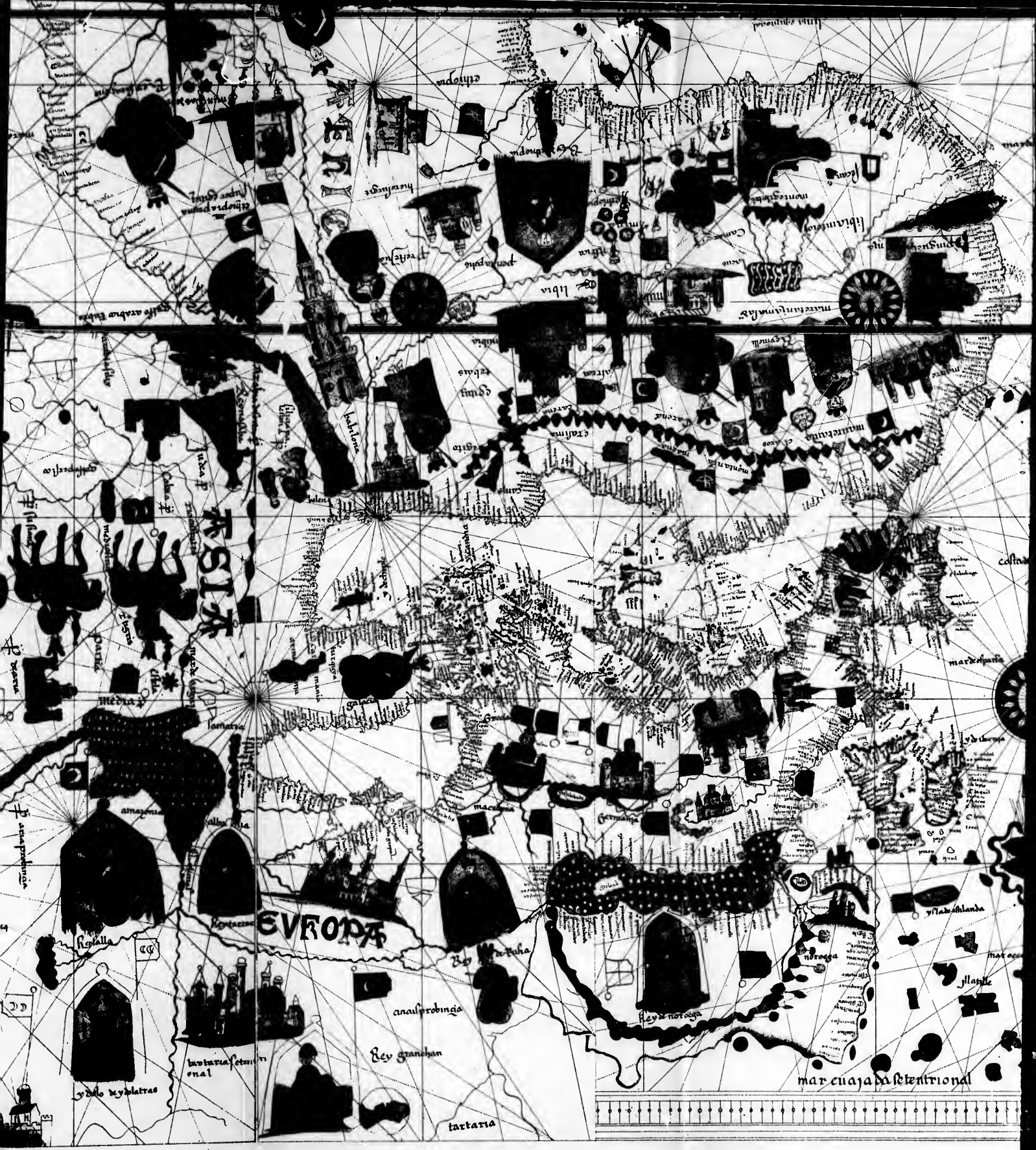



habana
la espanola
Cancer
Costa de perlas
Isla de canibales


mar de arabia
libia
y: de canaria o bel fortunadas
costa de portugal
mar de españa
y: de irlanda
y: de inglaterra
alemaña
y: de islanda
noroega
mar occeano setentrional
yslandia
mar occeano setentrional
mar de escocia


ASIA
EVROPA
mar cuajada septentrional
tartaria
Rey granchan
tartaria setentrional
ydolo de ydolatras
Reyalla
Rey de Rohia
anauf provincia
Rey de norouega
norouega
ysla de ythlanda
ysla de ylande
mar de sparia
Germania
Galacia
Lamatra
Media
amazonia
alba Rusia
Lydia
Libia
Libia interior
Libia montana
Arabia
Persia
Caldea
Egipto
Babilonia
Jherusalem
Jherico
Damasco
Tharsis
Cilicia
Capadocia
Ponto
Asia menor
Grecia
Italia
Roma
Venecia
Hungria
Polonia
Rusia
Dacia
Suecia
Gothia
Escocia
Yrlanda
Francia
Aragon
Castilla
Portugal
Granada
Fez
Marruecos
Tremecen
Tunez
Bugia
Argel
Constantina
Alexandria
Babilonia
Mar Roxo
Mar Caspio
Mar Negro
Mar Mediterraneo
Mar Oceano
Mar Bermejo
Mar de Arabia
Mar de Persia
Mar de Libia
Mar de Etiopia
Mar de Germania
Mar de Escocia
Mar de Yrlanda
Mar de Francia
Mar de Castilla
Mar de Portugal
Mar de Granada
Mar de Fez
Mar de Marruecos
Mar de Tremecen
Mar de Tunez
Mar de Bugia
Mar de Argel
Mar de Constantina
Mar de Alexandria
Mar de Babilonia
Mar de Roma
Mar de Venecia
Mar de Hungria
Mar de Polonia
Mar de Rusia
Mar de Dacia
Mar de Suecia
Mar de Gothia
Mar de Escocia
Mar de Yrlanda
Mar de Francia
Mar de Aragon
Mar de Castilla
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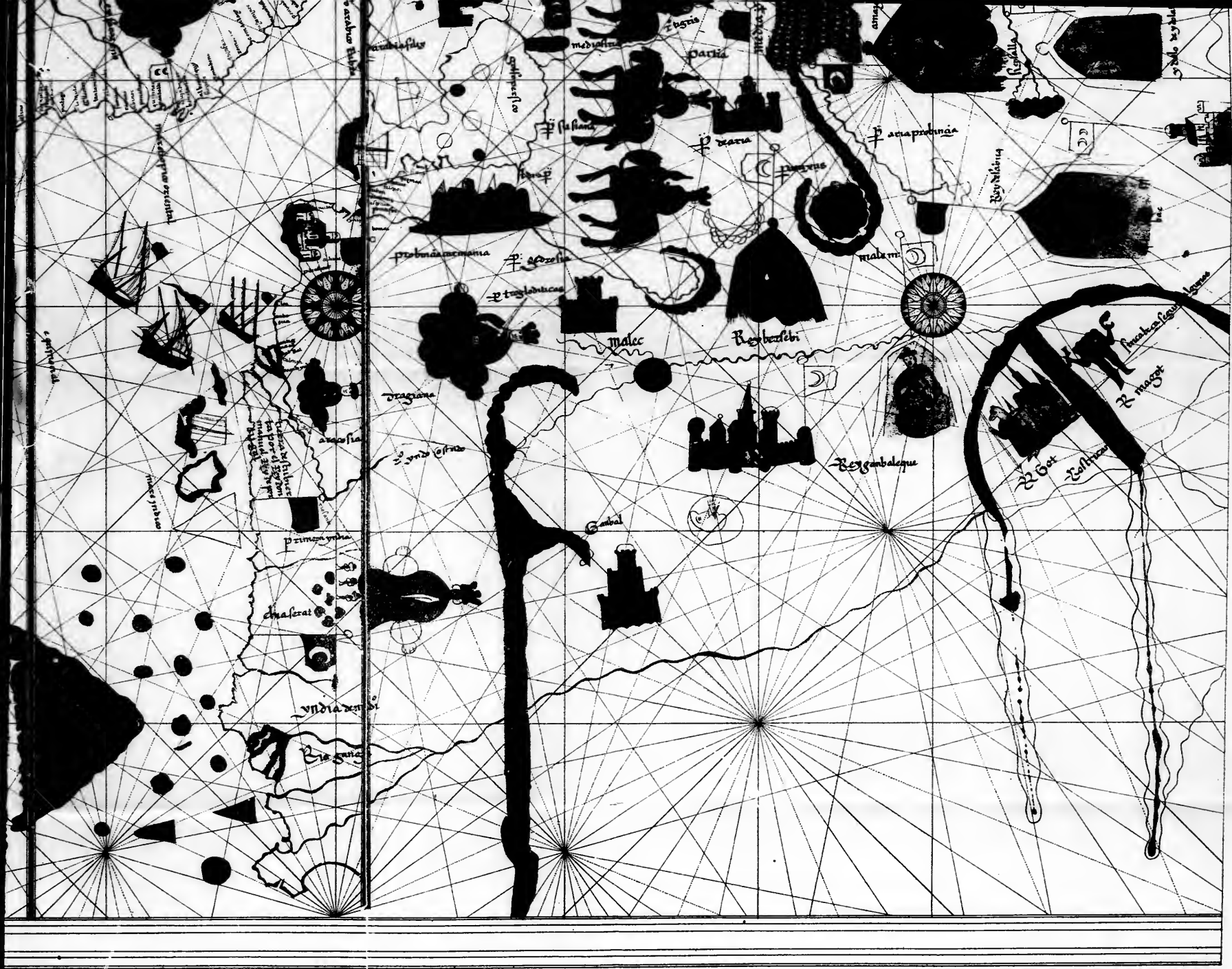
Mar de Alexandria
Mar de Babilonia



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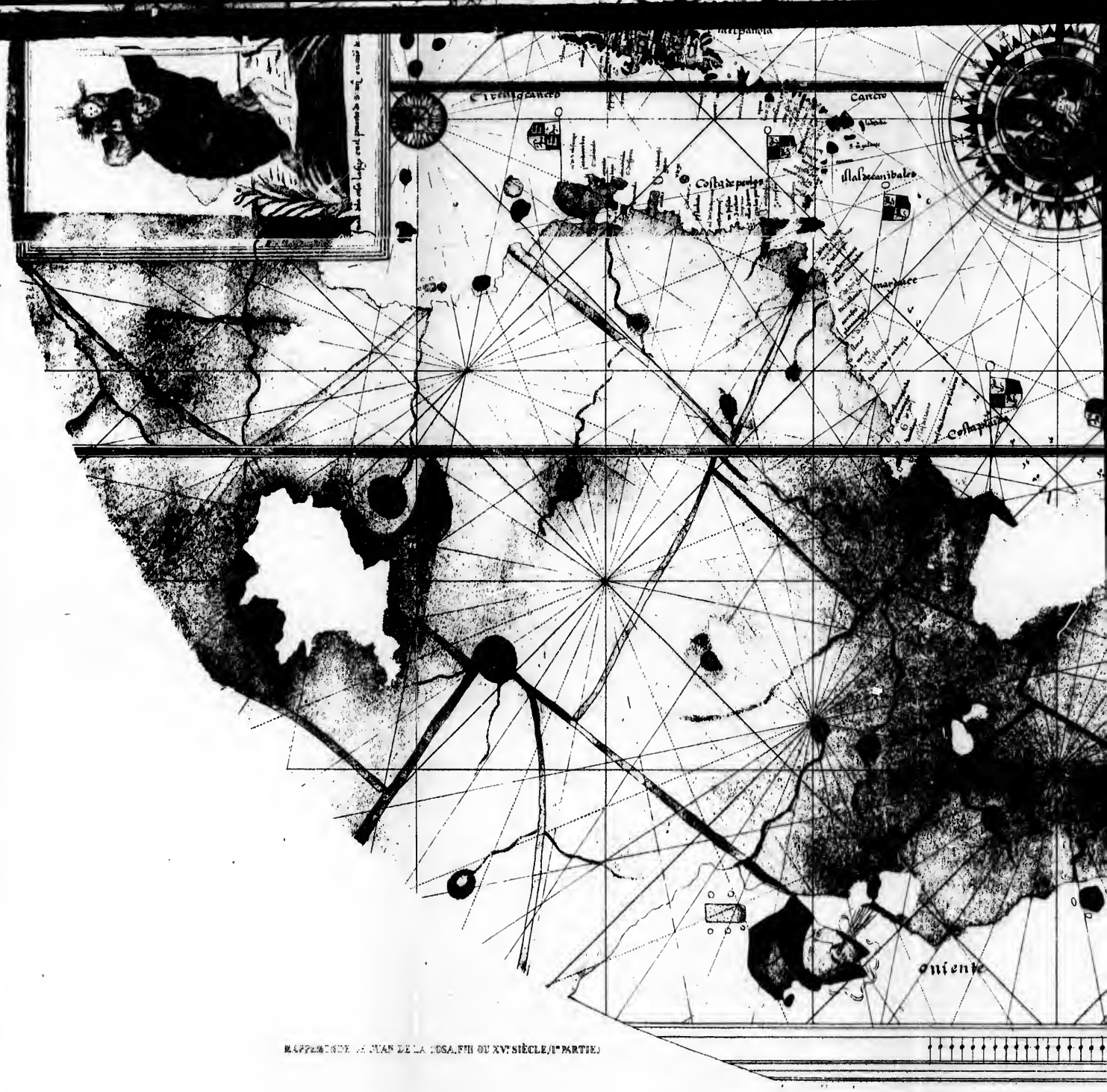
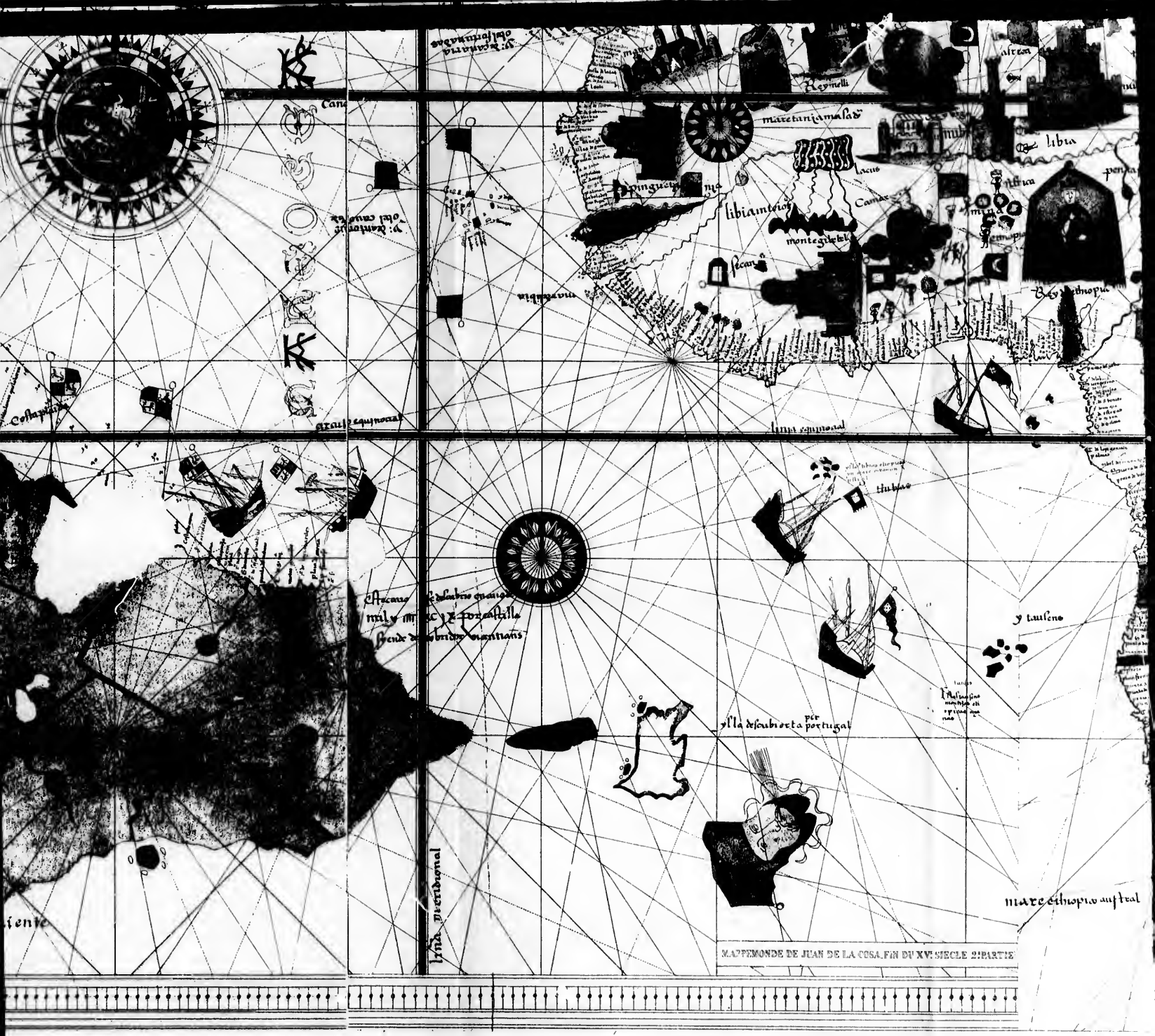
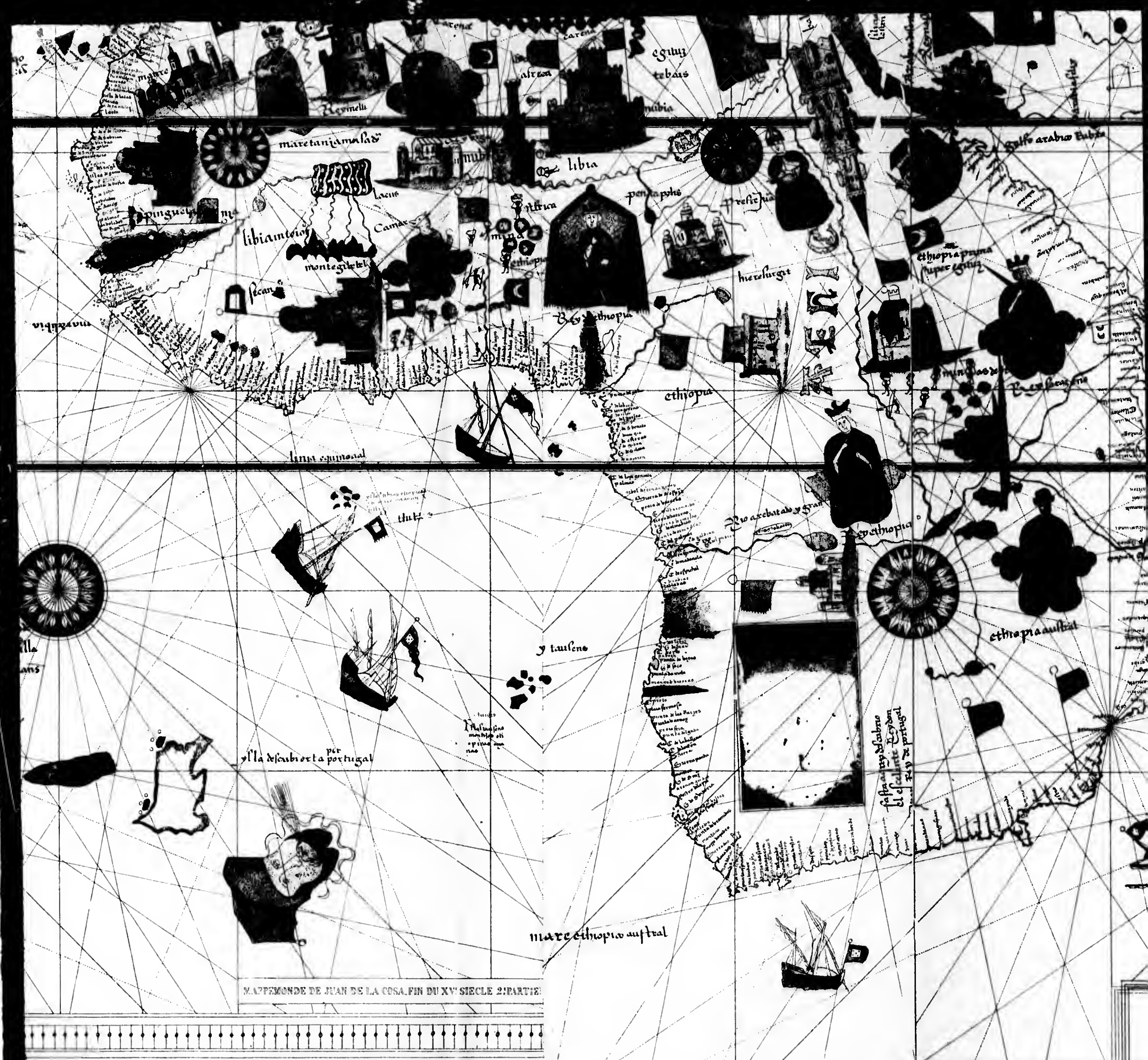


RAPPRESENTÉE AU JUAN DE LA COSA, FIN DU XVI^e SIÈCLE/I^re PARTIE)



WORLD MAP OF JUAN DE LA COSA, A. D. 1500.

Reduced by Photo-Lithography to a little less than half-size from the fac-simile in Jomard's Monuments de la



WORLD MAP OF JUAN DE LA COSA, A. D. 1500.

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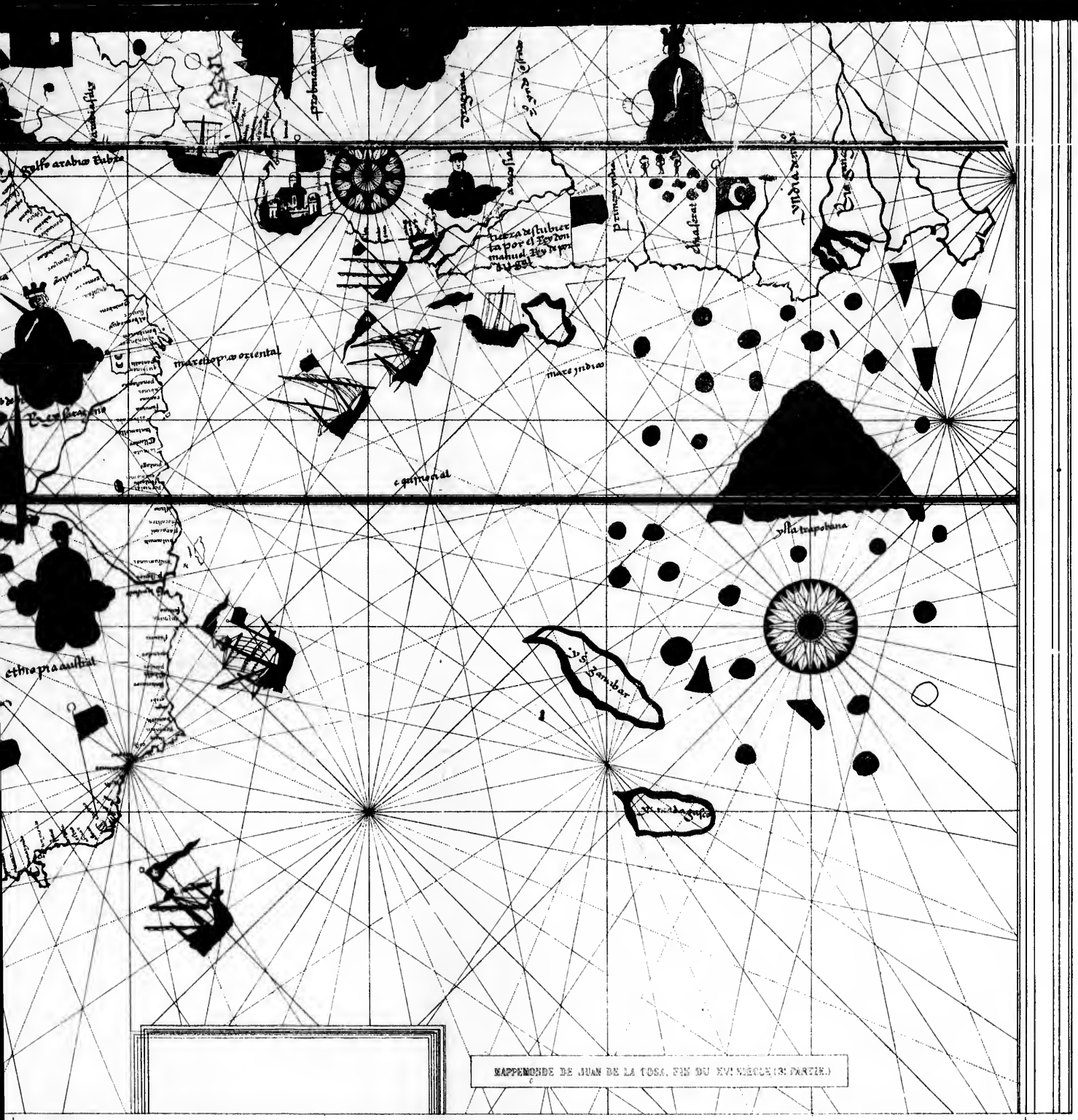


MAPPEMONDE DE JUAN DE LA COSA, FIN DU XVI^e SIÈCLE (3^e PARTIE.)

TABVLA PRIMA
DEL ALMIRANTE.

El almirante Don Christoual Colom de nacion ginoues, se ofrecio alos Catholicos Reyes, de gloriosa memoria, que dessubrie
ssen islas y tierra firme delas Indias, porel occidente, si para ella Indurien sufficiente armada, y fauor, y auiendole armado tres car
uelas el Año de 1492 passo a descubrir las, y dende en adelante tuuo muchas personas en prosiguido, elcielo desfauorablemente,
si bien quepor la prudencia del se recibio se manifiesta.

Archetabula Dominus Christophorus Columnanone Ligur, aperiorum se occidentales Indorum Insulas & continentem Regis
Sup Catholici felicis memoriæ pollicitus est, si ad hanc prouinciam experiendam, necessaria sibi abunde impenderent, quippe qui
rationem eluerum, regio apparatu, & copijs omnibus, instructum emisserunt. Anno ab orbe redempto 1492. post eam plurimi succedere
ne has prouincias nobis claues aperuerint, prout ut præsenti declaratio patet.

N.2 Esta ila Española ay mucho Oro de nasçimiento y assi muy fino, y mucho azucar, y cañafistola, E infinito ganado de toda suerte
Los puercos della, ylla dan alos desterrados, como aca en nuestras partes cameiro. Tiene ella dha ila muchos puertos, y muy buenos, y el
principal dellos es la ciudad de Sant Domingo, que es una ciudad muy buena, y de mucho trafico, y todos los otros son lugares cel
ebres dos, y pueblados por los Españoles, y en la dha de Cuba, y de sant Ioan, y en todas las otras islas A tierra firme se halla mucho Oro
de nasçimiento, y esta ciudad de Sant Domingo tiene la magestad su chancelleria Real, y en todas los otros pueblos, y prouincias go
bernadores, y Regidores que los gobiernan y rigen, don mucha Justicia, y cada dia se van descubriendo nuenas tierras y prouincias
muy ricas por donde nuestra santa fee catholica, es tierra muy aumentada, y estos Reynos de Castilla han grandesimos de muy glo
riosa fama y riquezas.

N.3 Hispania hæc Insula innumeris præditur preconia & armamentum est. Plinimo inde extracto obundat auro, Saccaro & Cassia fistula
per multæ unarum flationes, ac ingressus in sanæ portus. Præterea autem omnium est sanctæ Dominus, quæ nunca infignis esse perhi
betur, multæq; commercij, ethiquæ in pandigit Colonus duxtæ ab Hispanis & conductæ sunt. Cubæ ac dua Ioannæ ceterum q; omnibus los
luis, meenon continent, auri fodinæ innumeræ, passim effodiuntur. Hæc loca omnia frequentibus incolis habiantur. Celebri quæ Do
mus urbe, regium forum præest, Imperatoris edicto, in alias vero oppidis, nullis & insulis, eius gubernatores & populos regiunt, ra
tione & legum fuit creuate potius quam aliqui affectibus. Incognitæ feu ignotæ nobis hutiansen regionis indies aperiuntur, expugnan
tur, atque fides catholica facile, ac fastidium sapit incrementum. Hispania vero congeries undiq; opibus dutior exadet.

N.1 Esta tierra firme que los Españoles llaman la nueua España, conquistola el muy Illustre Caualliero don Fernando Cortes Mar
ques del Valle de Guaxaca. Ay en ella tierra prouincias y ciudades innumerables, la principal dellas es la ciudad de Mexico, la qual
tiene mas de cinquenta mil vezinos, esta ensima laguna salada, y cogese quatro lepuas de ay en dha ciudad y en todas las otras prouincias
mucho oro, plata, de nasçimiento, y de todas generos de piedras preciosas, y en esta dha tierra y prouincias ay dha seda y muy buena
y algodon, y alhanbre, orchilla y pastel, grana y acaiaras y azucar y de todo lo suso dicho mucha cantidad, delaqual muchas naos cien
tas cargadas astilos Reynos de spaña, los naturales della tierra son muy auisados en todo trasto de mercaderia, usan en lugar de mo
neda unas almendras partidas por medio, aquellas llaman cacao, o cacanghuate, barbara dicion. Tienen mucho trigo y cenada, y o
tras muchas semillas y uñas, y muchas fructas de diuersas fuentes. Es tierra de muchos animales Ciervos, puercos monteses, leones,
patdos, tygres y otra mucha caça, assi de aues como de quatro alas terrestres. Es gente muy abil en contrahazer al natural qualquier figu
ra de bulto, y entodo usan pinturas. Las mugeres comunmente se adornan con piedras preciosas, y perlas de valor, Y los otros indios
os cierta especie de papel, en el qual deshuzan con figuras, todo lo que quieren dezir en. Ilgar de letras. Nunca nuieron pez entre ellos
tes, antes los unos perseguauan alos otros todos en batallas crueldisas, en las quales los que eran presos de una parte y de otra, los enemi
gos los sacrificauan dos dellos cuyos estomagos muertos estan mantenimiento publico alas huestes. Estan ydolatras y adoran lo que se
les antoiaua, eran muy amigos de comer carne humana puer, segun al presente se despouaron de aquella fiereza y crueldes conformandose y
se sufberon de ser Christos creyendo de buen coraçon nuestra santa fe y Euangelica, y obedeciendo ala santa madre yglesia y alos
mandamientos santissimos.

N.7 Hanc conuenit Hispani a suo nomine nouam Hispaniam denominauerit, quam illustria. dominus Fernandus Corteßius, Vallis
& Guaxace Marchio expugnauit, cuus plurimæ insunt, prouinciæ, urbesq; innumeræ habeuntur, quarum insignior Mexicum nonca
patur, Indorum nomine. Hæc siquidem numero, quinquenta in colorum insula excedit, eamq; Lacus quidam salsus circuit, quadraginta
parasangis, inde extracta maxima auri & argenti copia, ac preciosa lapilla, cum reliquæ huic huius prouinciæ urbes, tum ipsa Mexi
cum præcipue abundat, plurimus hic bombix & gossipium, alumen, crocum, glastum, aliq; ad infuendum colores producuntur.
Præterea factarum, seu arundineus faccus, ad q; passim prodit, at omnes Hispanorum naues, annuatim ad Berthicam Hispalim one
rantur, judicio ad omnes prouincias, huius insulæ id commandas omnes das mexicas ciuilisimus sunt. Pro mensis quadragesimo medio
amigdalus venatur, quod numerum genus Cacao, seu Cacanguate barbaro Indorū nomine appellā, prisco, perdeo, aliq; seminibus
uus & ceteris fructibus plurimum abundat, innumera terrestrium animalium genera, præcipue Ceruorum, Aprorum, Leonum, Par
dorum, Tigridum passim ingaitur, autumq; vocabilium meathausta prupemodum multitudo, quæ quidem loca omnia terra nonsola
plena. Ea Gens docilissima & apprimè studiosa est, tam ad formandas quale cumq; res sculpendi arte, quam ad effigiendas quasius cun
cte figuras graphice. Eorum insuper ea gemmis, adornibus & preciosis lapillis adornantur. Papyri quodam genere lodi utuntur, in quo
figuris quibusdam delinant, quæ cunq; quidem ferni pro literis. Nunquam mutuo pacem inierunt concordi fœdere, quinimo se inuicem
inscquebantur bellis assiduis ac detestandis. Qui vero ex ea capacie uchi capiebantur, hi ceu victimæ dijs parcos pro victoria sacrabatur,
quorum caduera pro publicas dapibus ea erant, apparabantur. Ea gens idolorum cultrix erat, carnis humanum auidissima, adoras
bat q; omnia quibus animus eius questus & affectabatur. Et si tempestate nostra ferarum illa antiquas morbus exura & Christum Dom
num nostrum se indurent, cum hilo coeli propagatur, generetur, & colat Euangelicæ hdei, Christo celæq; religioni firmiter credens, fi
ere sanctæq; Catholicæ orthodoxorum Ecclesiæ symeris morum diuinisq; præceptis obtemperans.

N.4 Este estrecho de todos sanctos descubrio Hernando de Magallanes, Capitan de una armada que mando hazar la S. c. e. m. del Em
perator Don Carlos y Rey nuestro señor para el descubrimiento delas islas Maluco. Ay en este estrecho hombres de tan grande
estatura que parecen Gigantes, es tierra muy desierta, y usan la de pieles de animales.

N.4 Fretum hoc Omnium Sanctorum Fernandus Magallanus aperuit, quem claßis regiæ Hispanorum ad aperiendum expugnan
dumq; Malvacarum Insulas S. c. r. Maiestas Caroli Imperatoris, inuictissimæ Regis Domini nostri, huius nominis quinti, fauctem
præfecerat. Quo hoc tetro degunt, Gigantes potius terrigenæ nescj hominis esse traduntur, horum regio amplissima, usta la lolandiæ,
raro habitatore colitur, hi hominum fobis animalium pellibus indumntur.

N.5 Estas islas de Maluco fueron descubiertas por Fernando de Magallanes, Capitan de una armada que su magestad mando hazer p
ra el descubrimiento delas dichas islas, y por le auer Sebastian del Canno, es alabar que el dicho Fernando de Magallanes descubrio el
estrecho de todos sanctos, el qual esta en xxi. grados y medio hazia el polo Antarnico, y despues de auer passado el dicho yslo descubr
sin grande dissmo trabajo y peligro, prosiguio su viage hazia las dichas yslas, por espacio de muchos dias llego a unas yslas deserta
les la meridional dellas esta en xi. grados, y por ser hagente della tan bulta esta y por que les hurtaron el batel de una nao, la pusieron
nombre la ila de los ladrones, yde ay prosiguiendo su viage, dono descubrio una ila quele pusieron nombre la Aguada, q
que ay toparon agua, y de ay adelante descubrieron otra que se dize Bunham, y Acelaqui, y otra que se dize Cubu, en la qual ysla
tio el dicho Capitan Hernando de Magallanes, en una ela ramua que uno con los naturales della, y la gente que quedo de la d
armada eligieron Ioan Sebastian del Cano por Capitan della el qual despues descubrio la ysla de Bendanao, en la qual y
oro de nasçimiento, y canela muy fina, es assy mismo descubrio ala ysla de Poloan, y ala de Bruna, y ala de Cibolo, y ala ysla de
doci, y ala de Terenan, y Monil, y otras muchas en las quales ay mucho oro y clauo y nuez moscada y otro genero de especeria y
guerta Cargo el dicho Sebastian del Canno dos naos que se auia quedado de cinco que
por que en el
moscada, y viendo se bien de todo de todo la buena esperança por el mar Indico adelante,
ernbar y tornar ala ysla de todori de donde se partio por la mucha agua que hazia y el dicho Capitan Ioan Sebastian del Canno
funao, nombrada San ta Maria dela victoria uno a estos Reynos de Castilla ala ciudad de Seuilla. Anno de M. D. XXII. por
de buena espas ana de nauera que claramente parefce auer dado el dho Ioan Sebastian del Canno una buena agudo uniuerso por
quanto fue tanto por occidente a un que no por un par allcio, que boluio por el oriente a llegar occidental de donde se partio.

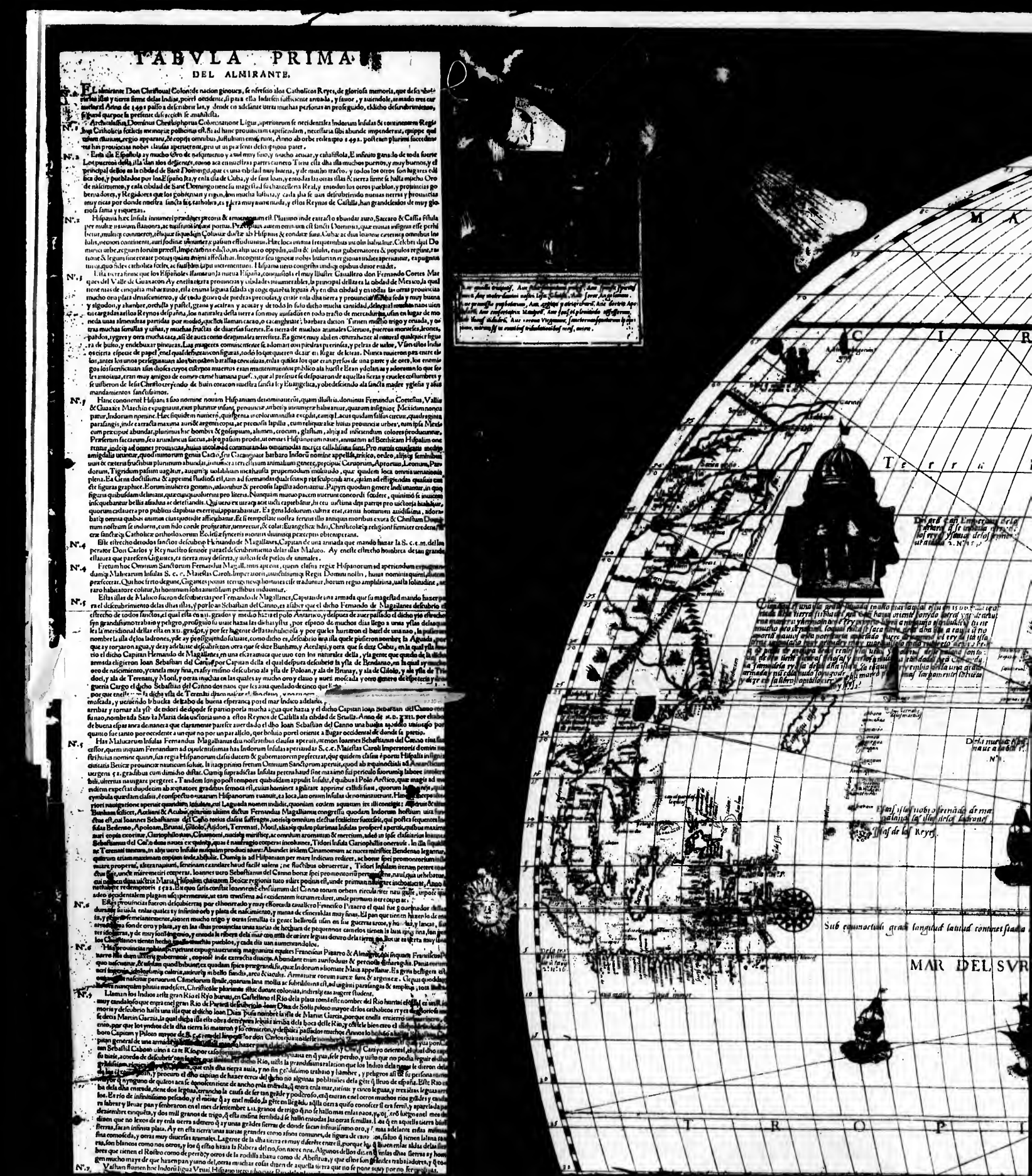
N.5 Has Malucarum Insulas Fernandus Magallanus diu nostra tibus claufas aperuit, utenon Ioannes Sebastianus del Canno eius fla
ceffor, quem inquam Fernandum ad opulentissimas has Indorum Insulas aperiendas S. c. e. Maiestas Caroli Imperatoris & omnia
fribus sua nomine quinti, fus regia Hispanorum classis ductem & gubernatorem præfecerat, que quidem classis è porta Hispalis in fl
cuntaris Beticæ prouinciæ nauticum fulcit. Ita ea primus fretum Omnium Sanctorum aperuit, quod ab equinoctiali ad Antarcticum
uergens 52. gradibus cum dimidio distat. Cumq; ingradistas Insulas pertenhaud sine maximo fui periculo fuorumq; labore
bus, uterus nauigare pergeret. Tandem longo post tempore quibus dam appulit Insulis, è quibus à Polo Arctico, quæ magis ad m
ridiem exp cfat duodecim ab æquatore gradibus remota est, cuius hominez agilitate apprime cellidi fuit, quorum la
cymbula quædam clafsis, è compectu o uarum Hispanorum euasit, ea loca, las omnes Insulas de nominauerunt. Has
riori nauigatione aperuit quarndam, Insulam, cui Leguada nomen indidit, quoniam eadem aquarum ire illi contigit; Adeunt
Burbam fcilicet, Aczlani & Acubar, quarum ultima dictus Fernandus Magallanus congressu quodam Indorum hostium uita fun
dus est, cui Ioannes Sebastianus del Caño totius classis suffragijs, uotisq; omnium electus fcliciter succeßit, qui postea sequentes In
sulas Bedenao, Apolosan, Brunai, Gilolo, Aiidori, Terrenati, Motil, aliasq; quas plurimas Insulas prosperè aperuit, quibus maxim
auri copia exorirur, Clariophilorum, Clouorum, nucis q; moschatæ, ac omnium aromatum & mercium, aded ut ipse dictarum Insura
Sebastianus del Caño domus naues ex quibus, quas sibi nauigatio reliquerat fuerat, Tidori Insula Clariophilis onerauit. In ea siquidem
ne Terenati nascuntur, in aliis uero Insulis nusquam produci aiunt: Abundet inidem Cinamomum ac nuces mirifice Bendenao legantur,
quarum arum maximam copiam inde absoluit. Dumq; is ad Hispanien per mare Indicum rediret, ac bonæ spei promontorium in
uare properet, aduersa nauigari, feruisnam e candare haud facile valens, ne fluctibus obruertur, Tidori Insulam iterum petere co
dus fuit, unde mare meridiei copperat. Ioannes uero Sebastianus del Canno bonæ spei promontorium peruenit, nauiq; ubi rebus
qui nondum ejus ukrix Maria, Hispalim quatuem Beticæ regionis tuto subire potius est, unde primum nauigare inchoauerat, Anno
nationis re redemptoris 1522. Et quo satis confat Ioannes de Sebastianus del Canno totum orbem circulariter nauigasse, utpote
adeo q; quidem eadem plagam ubi q; peruenerat, ut eam cruentus ad eodem rem reduret, unde primum iter coepe rat.

N.6 Estas prouincias fueron descubiertas por el buen orde y muy esforcado cauallero Francisco Pizarro el qual fue gouernador de
durante su vida, estas cosas y infinito oro y plata de nasçimiento, y mutas de esmeraldas muy finas. El pan que tienen hazen le de mu
tas, y de que se mantienen, son en mucho trigo y otras semillas es gente belicosa usan en sus guerras arcos, y hondas, y lanças, y
arrodelas, y son de oro y plata, ay en las dhas prouincias unas sucias de hechura de pequennos carneros tienen la lana muy fina, son pa
ra cargueras, y de muy sustengero, y estendida la ribera dela mar con mas de un mes de andar leguas dentro dela tierra en llegar en la tierra muy lla
los Christianos tienen hechas muchas pueblos, y cada dia van aumentando dello.

N.6 Has prouincias nobis detexerunt expugnauerunt magnanimi equites Franciscus Pizarro & Almagrus, qui inquam Francisci Pi
narro filij duo uterq; gubernarunt, copiosi inde extrema diuicijs. Abundant enim auri fodinas & preciosis lapidibus. Pauci eorum
quo tuo cunctur, & ritum quod bubuntes quadam fpecies pregrandis, quæ Indorum idiomate Maiz appellatur. Ea gens belligera est
nari ingenio, ideo bellumq; calleris, asciaris q; in bello fundis, arcu & iaculis. Armaturæ eorum aureæ sunt & argenteæ. Quas quoddam
nascitur peruarum Camelorum simile, quarum lana mollis ac fabrilissima est, ad usum paratingas & amplius, tota
nunquam pluuis madescet, Christicolæ plurimi illuc ducunt colonias, indeq; eas augere studeat.

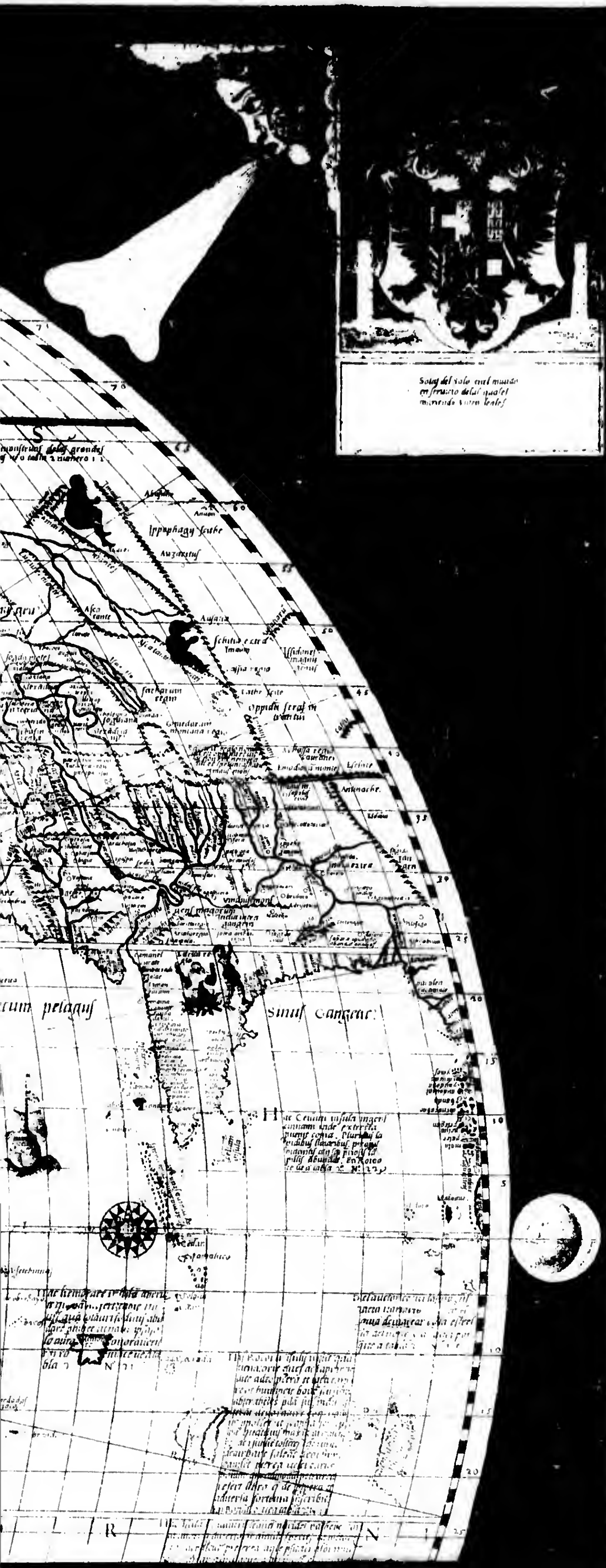
N.9 Llaman los Indios este gran Rio el Rio hurasi, en Castellano el Rio dela plata tomo este nombre del Rio hasta este
muy caudaloso que era el gran Rio de Parana de Sulis q le nombre el Rio hasta este
morir y descubrio hasta una isla que el dicho Ioan Dias de Solis puso nombre la ysla de Marian Garcia, porque estuuo
se dezia Martin Garcia, la qual dicha ysla el dho otro dezen que le quiso arriba dela boca delle Rio, y estuuo bien cerca el
rnio, por que los vyndos de la dha tierra les mataron y los comieron, y despues passados muchos Annos lo hallo
boro Capitan y Piloto mayor de S. M. el grande Emperador don Carlos que nuestro señor
pitan general de una armada
san Sebastian Cabono uino a este Rio por caso
su tiasi, acorde de descubrir por tierra, que llaman el dicho Rio, uisto la grandissima relacion que los Indios dela tierra le dieron de
de las riquezas, y procuro el dho capitan de hazer cerca del dicho no algunas poblaciones dela gente q llego de españa. Este Rio
ba dela dha entrada, tiene dos leguas, estrancha la causa de ser tan grade y poderoso, es q entran en el otros muchos rios grades y caud
los. Es rio de infinitissimo pescado, y el mas q ay en el mudo, la gente en llegado, ay la otra q quiso conocer si era fertil, y aparte la pa
ra labrar y lleuar pan y sembracon en el mes de setiembre xxi. granos de trigo q no se hallo mas enlas naos, y q. cogio en el mes de
dezisiete enquetas, y dos mill granos de trigo, q esta misma fertilidad se halla en todas las otras semillas. Las q en aquella tierra bie
dizen que no lexos de ay en la otra tierra adentro q ay unas grades sierras de donde sacan infinissimo oro, y mas adelante estas mismas
sierras, sacan infinita plata. Ay en esta tierra unas suertes grandes como a rnos comunes, de figura de camello, salvo q tienen lalana co
rna comocida, y otras muy diuersas animales. La gente de la dha tierra es muy diferente entre si, porque los q viuen en las alturas de las sier
ras, son blancos como nos otros, y los q estan hazia la Ribera del no, son mas negros. Algunos dellos traen en las orejas unas ruedas de oro
bre que tienen el Rostro como de perro, y otros de la rodilla abaxo como de Abestruz, y que ellos son grandes trabajadores, y q co
gen mucho mays de que hazen pan y uino del, otras muchas cosas dizen de aquella tierra que no se pone aqui por no ser

N.7 Vastum flumen hoc Indorū figua Veruz Hispano terra ubi ouare Brasilet




MAXIMVS HIC DIES VI MENSIVM EST
MARE CONGELATVM PER
I R C V L V S A R T
Terra incognita
OCEANVS OCCIDENTALIS
TROPICVS CANCRI
OCEANVS OCCIDENTALIS
MAR DEL SVR
P I C V S A P R


S HIC DIES VI MENSIVM EST
E L A T V M P E R T O T V M
NVS OCCIDENTALIS
TROPICVS CANCRI
OCEANVS OCCIDENTALIS
Pont Euxinus
Mare rubrum
Indicum pelagus
Libya deserta
Aethiopia
Parthi
Hircanum mare
Caspium mare
Mare Caspium
Mare Persicum
Mare Arabicum
Mare Erythraeum
Mare Mediterraneum
Mare Atlanticum
Aequinoctialis
Tropicus Capricorni
Tropicus Cancri
Aequinoctialis
A P R I
O L R



TABVLA SECVNDA.

N°.11 [illegible] enesta Region algunos adoran el Sol otros la primera cosa que veen por la mañana quando se levantan [illegible] un [illegible] de paño colorado que ponen encima de una lança y asy cada uno adora lo que se le antoja estan de baxo del poder del gran Can [illegible] emperador delos Tartaros.

N°.11 [illegible] qui hac regione degunt, quidam Solem adorant; Aliquero exurgentes [illegible] quicquid primum [illegible] Alij [illegible] rubri hastae affigentes uenerantur numinis instar.

N°.12 Aqui ay monstruos semeiantes a hombres q̃ tienen las orejas tan grandes que les cubre todo el cuerpo y mas de ste hazia oriente [illegible] se que ay unos hombres que no tienen coyontura ninguna hazia las Rodillas y en los pies estan debaxo del poder del gran Can. En la prouinçia de Basor laqual tiene çinquenta dias de andadura son hombres silvestres habitan enlos montes y florestas.

N°.12 Sunt hic monstra hominibus similia, quae adeo demissas praegrãdesq habẽt aures, ut his totũ corpus operiãt. Ulterius q orientẽ uersus quosdã homines inesse perhibẽtur, quorũ genua & pedes [illegible] degunt sub ditione magni Canis, in illa prouincia quae Basor eorum nomine dicitur, haec quinquaginta dierũ iter continet. Hi homines sylvestres omnino sunt, montiũ nemorumq [illegible].

N°.13 Aqui habita aquel poderoso Rey de Azumba a Auxama que algunos llamã preste Ioan al qual sesenta Reyes le dã obediençia es abundantissimo de toda riqueza y nunca se halla que fuese vençido en batalla alguna mas muchas vezes boluio del medio dia delos pueblos Throglodiitas gente nuda y negra con gloriosa victoria [illegible] llega hasta el cabo de buena esperança. Entre la qual gente ay [illegible] naçion que no hablan mas [illegible] y [illegible] Ioan por que el preste Ioan tenia la señoria enla yndia oriental y meridional [illegible] que chenchis primero Rey delos Tartaros [illegible] en [illegible] muy cruel batalla en laqual murio, y el dicho chenchis le tomo todos sus Reynos y senorios y dexo biuir los Christianos en su ley y les dio Rey Christiano que los regiese y [illegible] el qual Rey se llamaua Iorge y despues [illegible] los reyes que suçeden se llaman Iorge como lo dize Marco Polo mas largamente alos xlii [illegible] capitulos de su libro.

N°.13 Hic potentissimus ille regum degit, Azumba Auxam [illegible] imperans, quem uulgus Preste Ioannem appellant, cui nimirum [illegible] sexaginta Reges uectantur, quorum [illegible] Regum foelicissimam sortem diuitijs suis exuperans, quippe qui nunquam bello in ullis praelijs uictus recessit, sed saepe Throglodiitis nudo nigroq corpore populis meridiei maxima cum uictoria triumphans rediit, qui [illegible] promontorio bonae spei [illegible] continuat, inter quos genus quoddam horum hominum non loquuntur [illegible] tantum [illegible] percipere solent. Hunc itaq [illegible] Preste Ioannem illum esse, facile constat, cum is Eois, ac meridionalibus Indis imperaret, donec Chenchis primus Tartarorum rex [illegible] bellico congressu quodam eum superans foeliciter prostrauit, eiusq imperium armata manu usurpauit, Christicolis [illegible] impune religione sua uti clemens concessit, ipsisq Regem statuit eiusdem fidei, qui [illegible] eos regeret, ac benigne [illegible] gubernaret, Georgius nomine, cuius deinceps successores idem nomen sibi uendicabant, quemadmodum Marcus Polus libro [illegible] quadragesimo, secundo & tertio capite copiosius refert.

N°.14 El Rey desta prouinçia y Reyno de Bengala es muy poderoso señor y tiene debaxo de su señoria muchas çibdades y muy grandes y de mucho trato, ay en este prouinçia y Reyno mucha canela clauo gengibre pimienta sandalos lacar y seda en mucha cantidad, tienen por costumbre eneste Reyno y prouinçia despues que mueren de quemar los cuerpos y quando el marido muere primero que la muger, quemase la muger biua con el marido diziendo, que va agozar con el en el otro mundo y es desta manera que muriendo el marido la muger haze un grand combite y [illegible] delos mas [illegible] vestidos que tiene al qual combite vienen todos sus parientes y del marido y despues de auer comido va ella con toda la gente a un lugar donde esta hecho un grandissimo fuego cantando y baylando fasta llegar al dicho fuego y despues hechan el cuerpo muerto del marido dentro y luego ella se despide delos parientes y amigos y se lança enel fuego [illegible] aquella que mas liberalmente se hecha enel fuego aquella da honera a su linage, mas ya esta costumbre no se usa como solia, despues [illegible] los portugueses trataron con ellos y les dieron a entender que Dios nuestro señor no era seruido de tal cosa.

N°.14 Huius prouinciae regniq Bengalae potentissimus rex est, pluribus ingentibus ac insignibus & maximi commercij ciuitatibus [illegible] est incredibili propemodum coniunctus necessitudine cum inuictissimo Lusitaniae Rege, quo cum perpetuo foedere [illegible] unde ingens eiusdem copia prouenit Cinamomi, Gariophilorum, Zinziberis, Piperisq, Sandalorum & Bombicis. Horum [illegible] cadauera cremare, & si uxoratus aliquis ex uiuis decessisset, cum eo unà uiuentem coniugem in rogo mariti comburere [illegible] ad alium orbem migrantem eo ipso usque frui, cũ quo hic unà egerat. Cum res huiusmodi erat, coniuge mortuo, uxor eius conuiuium [illegible] solẽne parabat, desumptoq parentalia, induebaturq auro & peplo preciosissimo, omnium quae possidebat, & ad lautas epulas illa omnes confestim tam sui quam mariti affines & amici properanter conuiuabantur, quibus postq̃ exempta fames epulis, mensaeq remotae, tunc illa conuiuis omnibus & funerali pompa stipata ad pyram accedebat, exultansq canebat & tripudiabat, quo ubi peruenerat, mariti cadauera in ignem deiecta, ipsa deinceps in rogum desiliebat, extremum uale omnibus dicens, & quae hilariori uultu in flammas se proijcebat, maiori se suosq omnes honore afficiebat. Enimuero uanus ille ritus & detestãda religio [illegible] commercio uiuunt, quippe quae diu eos admonẽs, pessimũ facinus illud dedocuit, [illegible].

N°.15 El gran Can Imperador delos Tartaros es muy grandissimo señor y muy poderoso [illegible] Rey de Reyes y señor delos señores tiene por costumbre de dar a sus Varones vestidos treze vezes en el anno, en treze grandissimas fiestas que haze en cada un anno, y estas vestiduras son de mayor o menor valor, segun la calidad delas personas, a quien se da y a cada uno dan, una çinta, y calças sombrero guarnesçido de oro y perlas y piedras preçiosas, segun la grandeza delas personas, y estas vestiduras que da el dicho gran Can en cada un anno son [illegible] y esto haze por engrandeçer [illegible] sus fiestas, y quando muere, lleuan lo a enterrar a un monte que se dize Alcay donde se entierran los gran Canes Imperadores delos Tartaros, y los que lo lleuan a enterrar matan a todos los que hallan diziendoles [illegible] a seruir a nuestro señor ene otro mundo, y asi mismo matan todos los cauallos, camellos, y azemilas que tienen, creyendo que van a seruir a su señor. Quando murio Mongu Can Imperador delos Tartaros, fueron muertos treçientos mill hombres que encontraron enel camino, aquellos que lo lleuauan a enterrar, segun dize Marco Polo en su libro, capitulo xlii. Pogio Florentino Secretario del Papa Eugenio quarto, açerca del fin de su segundo libro que escriuio dela variaçion y mudança de la fortuna haze mucho para la confirmaçion de lo que el dicho Marco Polo escriuio en su libro.

N°.15 Princeps ille Tartarorum, quem uulgo magnum Can nominant, locupletissimus potentissimusq esse perhibetur, iubetq superbiori nomenclatura se regem regum ac potentium dominum principem appellari. Huic morem esse aiunt, ijs uiris omnibus, qui in eius aula suo ministerio astricti uersantur, tredecim diebus festis, quos summo honore peculiari ritu quotannis celebrat, recentes preciosasq uestes pro cuiusq meritis dare, donatq his omnibus festis et in singulas annas singulis singulasq tibialia, caligulas, galerosq uel umbellas, auro, margaritis, ac preciosis gemmis circumsepta, [illegible] Uestium autẽ muneris quas singulis annis largitur, & nullum supra centum quinquaginta prodibat, qui [illegible] & sua festa colendi, ac extollendi, & proprij nominis celebrandi gratia diligentissime fieri curat. Qui mortuus in montem, cui Alcai nomen est, inhumandus effertur: porro efferẽtes quotquot inter eundum obuios habent pro uictimis occidunt. Aiunt siquidem, par esse, eos principem suum comitari, aut alio orbe debita seruitutis obsequia sibi praestanda: mactant etiam equos omnes, camelos ac mulos, quibus uiuens utebatur, persuasum habentes, ea omnia sibi Principi post mortem seruitura. Mortuo Mongu horum Tartarorum Principe, quem magnum Can appellari diximus, trecenta hominum millia in itinere, cum in montem ut diximus deferretur ab efferentibus reperta, auctore Marco Pollo libro quarto capite [illegible], asserit hoc idem Florentinus Pagius, qui à secretis fuit Eugenij Papae quarti libro secundo de fortunae mutatione, qui non dubia quae à Pollo scripta sunt, apertissime demonstrant.

N°.16 Diuersas opiniones ay qual sea la Trapouana, despues que los Españoles, y portugueses nauegaron el mar Indico dela manera que el Ptolemeo la tiene situada por grados de longitud y latitud, creo que algunos de los modernos descubradores tienen que la isla de çeilan es la trapouana otros tienen que es la isla de çamatra. Plinio escriue dela Trapouana en su sesto libro capitulo xxij. y dize que [illegible] tiempo que tuuieron opinion que la Trapouana fuese otro mundo, y que se llamaua Antichtono, y que Alexandro fue el primero que nos dio notiçia aquella tierra, y que [illegible] de su armada que enla dicha isla de Trapouana ay mayores elephantes, y mas bellicosos que enla India, y que Magasthenes pone la longura [illegible] mill estadios y de anchura çinco mill que no ay enella çiudad çercada [illegible] que enel prinçipio de Claudio uinieron embaxadores dela dicha isla a Roma, desta manera el liberto Dannio Plocamio el qual [illegible] dela republica la Renta del mar vermejo, y nauegando alrededor de Arabia, fue del viento setentrional transportado [illegible] quinzedecimo dia entro en un puerto dela dicha isla, el qual se dezia hippuro, y que fue del Rey liberalissimamente reçibido [illegible] que despues de auer estado enla dicha isla seis meses aprendio la lengua, y que un dia hablando con el Rey le dixo que los Romanos [illegible] Imperador, eran de mucha justiçia, y que el Rey mirando la moneda que el dicho liberto tenia eran de ygual peso [illegible] demonstrauan ser de diuersos Imperadores, mouido desto, embio embaxadores a Roma, el primero fue [illegible] con Claudio delos quales [illegible] que enla dicha isla auia [illegible] çiudades, y que [illegible] Vergilias [illegible] y a ellos [illegible] y que [illegible] dia hasta el quinzo deçimo, y maximamente se marauillauan [illegible] el sol saliese ala diestra, y se pusiese ala siniestra, por las quales [illegible] no pareçe la estrella de Norte, la qual pareçe enla Trapouana [illegible] el dicho liberto Dannio Proclamio [illegible] que podria hazer [illegible] la isla de sant Lorenço, y no la Trapobana, [illegible] Rey dela dicha isla es elegido por [illegible] y despues de elegido [illegible] luego lo [illegible] y quando lo eligen [illegible] Rey no puede [illegible] mayor parte delos dichos sus treynta consejeros [illegible] puede apelar para el pueblo, el qual luego eligen setenta Iuezes los quales [illegible] por libro, y aquellos consejeros que fueron en condenarlo, quedan priuados de [illegible].

N°.16 Taprobanam [illegible] quo ab incolis Beticae regionis, necnon Lusitaniae mare Indicum nauigari expertum [illegible] Ptolemaeus [illegible] latitudinem graduũ ac longitudine eius describitur, ut omnem latere causeo. Nonnulla uero neotericorum [illegible] Ceilam insulã Taprobanam esse uno ore asserunt: Alij eam Camatram [illegible] Taprobana alter orbis esse, sententia omnium habebatur, unde Antichthon [illegible] primũ esse, quã insulã esse, nõ orbem indicauerit, utq Onesicritus classis eius Archinaualis [illegible] elephantes omnibus, quos tota India enutrit, cuius insulae Magasthenes [illegible] nulla q̃ ciuitas maenibus uallantur, septingenta tamen uillae eius prouinciae annumerantur. At bis sub diuo Claudio circa primam sui Imperij gubernationem huius Insulae oratores Romam uenere hac de causa & ratione, Libertus Damius Plocamius a Romanis uectigalia & prouentum maris rubri redemit, dumq Arabiam obnauigat, Septentrionalis uentus eum adeo procul abstecerat, ut quindecim elapsis diebus euidam huius Insulae portui appulerit, cui nomen Hippurus, à cuius rege benigno hospitio susceptus est. Postq sex menses, cum eius idioma satis apprime addidicisset, ac longo sermone regem alloqueretur, maximam Romanorum iustitiam, summamq eorum Imperatoris rectitudinem enarrabat, cumq Rex diuersum monetae genus Romanorum diu circumspiceret, quod Libertus [illegible] uaria Imperatorum imaginem impressos nummos. Pondus uero aeque omnium idem animaduertens, maxime admiratus est, unde confestim ad Romanorũ Imperatorem Oratores legauit, qui perpetuo cum eo pacis foedus inirent, cui [illegible] Rachias oratorum eius celeberrimus Claudium conciliauit, ex quibus Imperator quingentas huic insulae ciuitates inesse facile percepit. [illegible] sua coeli plaga Septentrionalem arctum & uergiliarũ ortum minime uideri, quibus [illegible] admirabantur, siquidem haec [illegible] & nunquã apparere asserebãt. Praeterea Lunam ab octauo ad quintumdecimum [illegible] tantum prospici [illegible] illud omnium maxime eos admiratione afficiebat, quod umbrae dextrorsum ad nostrum polum uergerent, cum sua ipsorum regione sinistras ire semper intuerentur, solemq dextra exoriri, leua uero occidi, quibus de causis & rationibus constat, arctum hac insula, cui Libertus appulit, nũquã uideri, quodq Libertus insulam sancti Laurentij, non autem Taprobanam adiit. Siquidem ex Liberti cursu & nauigatione, etiam [illegible] oratorum ad Tiberium, ut dictum est, insula, cui ipse Libertus Damius Plocamius appulit, haud Taprobana ipsa, sed potius insula diui Laurentij. Huic insulae moris esse aiunt, regem e senioribus eligere cõmunibus omniũ suffragijs, qui clementia, comitate, ac ingenui animi benignitate [illegible] omnes superaret, quiq sine liberis ac prole sit. Hic itaq [illegible] potiori, si interim liberos adeptus fuerit, cõfestim regia potestate priuari solet. Tempore autẽ quo [illegible] eligitur, triginta consiliarij, qui regi [illegible] decernuntur. Hic autẽ neminẽ morti adiudicare potestatẽ habet, ni prius maior eorum numerus ipsi suffragetur, ad haec uero reo permittitur, qui a rege & eius consiliarijs morti adiudicatus est, populum in sui defensionem prouocare, hic protinus septuaginta legit [illegible] ac iustissimos iudices deligit, qui eius causam diligenter examinant, hi si reum morti [illegible] consiliarios uero [illegible] regio priuant munere, ac perpetua ignominia afficiuntur.

¶ Retulo del auctor con [illegible] razones dela variaçion que haze el agua de marear con la estrella del Norte.

N°.17 Sebastian Caboto capitan, y piloto mayor dela S. c. c. m. del Imperador don Carlos quinto deste nombre, y Rey nuestro señor hizo esta figura extensa en plano, anno del nasçimi° de nrõ saluador Iesu Christo de M. D. XL. IIII. annos, tirada por grados de latitud y longitud con sus uientos como carta de marear, imitando en parte al Ptolomeo, y en parte alos modernos descobridores, asi Españoles como Portugueses, y parte por su padre, y por el descubierto, por donde podras nauegar como por carta de marear, teniendo respeto ala variaçion que haze el agua del marear, con la estrella del Norte, verbi graçia, tu te quieres partir del cabo de sant Vinçente, para yr a tomar el cabo de finis terra, mandaras gouernar tu nauio al Norte por el agua de marear y yras a dar dentro del dicho cabo, mas en verdad [illegible] camino que tu nauio hizo fue al Norte [illegible] del Nordeste por que tu agua demarear te Nordestea una quarta enel dicho ca-

... ctus est, cui Ioannes Sebastianus del Caño totius classis suffragio, uotisque omnium electus fere [illegible] successit, qui postea sequentes Insulas Bedenao, Apolom, Brunai, Gilolo, Atidori, Terrenati, Motil, aliasque quàm plurimas Insulas prosperè aperuit, quibus maxima auri copia exoritur, Gariophilorum, Cinamomi, nucisque muristicę, ac omnium aromatum & mercium, adeò in ipse classiarius Ioannes Sebastianus del Caño duas naues ex quinque, quas è naufragio coeperat incolumes, Tidori Insula Gariophillis onerauit. In illa [illegible] ac Terrenati tantum, in alijs uero Insulis nunquam produci aiunt: Abundat itidem Cinamomum ac nuce miristice Bendenao leguntur. [illegible] quarum etiam maximam copiam inde abstulit. Dumque ia ad Hispaniam per mare Indicum rediret, ac bonę spei promontorium [illegible] mare properat, altera nauium, sentinam exantlare haud facilè ualens, ne fluctibus obrueretur, Tidori Insulam iterum petere [illegible] ctus fuit, unde mare metiri coeperat. Ioannes uero Sebastianus del Canno bonæ spei promontoriũ pertransiens, naui, qua uehebatur, cui nomen diua uictrix Maria, Hispalim ciuitatem Beticæ regionis tuto adire potius est, unde primum nauigare inchoauerat, Anno [illegible] natiuitatis redemptoris 1522. Ex quo satis constat Ioannem Sebastianum del Canno totum orbem circulariter nauigasse, in posa [illegible] adeo occidentalem plagam usque permeauit, ut eam secundum ad occidentem iterum rediret, unde primum iter coeperat.

N.º6 Estas prouincias fueron descubiertas por el honrrado y muy esforçado cauallero Francisco Piçarro el qual fue gouernador [illegible] durante su uida en las quales ay infinito oro y plata de nascimiento, y minas de esmeraldas muy finas. El pan que tienen hazen lo de [illegible] tz, y [illegible] semejantemente, tienen mucho trigo y otras semillas es gente bellicosa usan en sus guerras arcos, y hondas, y lanças, [illegible] armaduras son de oro y plata, ay en las dhas prouincias unas aueias de hechura de pequennos camelos tienen la lana muy fina, son [illegible] tes idolatras, y de muy sotil ingenio, y en toda la ribera de la mar con mas de ueinte leguas dentro de la tierra no llueue en tierra muy [illegible] los Christianos tienen hecho [illegible] muchos pueblos, y cada dia uan aumentandolos.

N.º6 Has prouincias nobis aperuerunt expugnaueruntque magnanimi equites Franciscus Picarro & Almagro, qui sequuti Franciscus Pizarro has diu uiteru gubernauit, copiosè inde extractis diuitijs. Abundant enim auriferis & preciosis smaragdis. Panis eorum quo uescuntur, & ui[n]um quod bibunt, ex quadam spica pergrandi fit, quæ Indorum idiomate Maiz appellatur. Ea gens belligera est, acri ingenio, idolorumque cultrix, utiturque in bello fundis, arcu & iaculis. Armaturæ eorum aureæ sunt & argenteæ. Genus quoddam ouium [illegible] nascitur paruorum Camelorum simile, quarum lana mollis ac subtilissima est, ad uiginti parasangas & amplius, tota [illegible] litora nunquam pluuia madescit, Christicolæ plurimas illuc durant colonias, indiesque eas augere student.

N.º7 Llaman los Indios a este gran Rio el Ryo huruai, en Castellano el Rio de la plata tomó este nombre del Rio huruai el qual es un Rio muy caudaloso que entra en el gran Rio de Paraná descubriolo Ioan Dias de Solis piloto mayor de los catholicos reyes de gloriosa memoria y descubrio hasta una isla que el dicho Ioan Dias puso nombre la isla de Martin Garcia, porque en ella entierro un marinero, que se decia Martin Garzia, la qual dicha isla esta obra de treynta leguas arriba de la boca deste Rio, y costole bien caro el dicho descubrimiento, por que los yndios de la dha tierra lo mataron y lo comieron, y despues passados muchos Anos lo boluio a hallar Sebastian Caboto Capitan y Piloto mayor de S. c. c. m. del Imperador don Carlos quinto deste nombre y Rey [illegible] el qual yua por Capitan general de una armada [illegible] mando hazer para el descubrimiento de Tarsis, y Ofir, y Catayo oriental, el qual dho capitan Sebastian Caboto uino a este Rio por caso fortuito, porque [illegible] que yua, sele perdio, y uisto que no podia seguir el dho su uiaie, acordo de descubrir con la gente que lleuaua el dicho Rio, uista la grandissima ralacion que los Indios de la tierra le dieron de la grandissima riqueza [illegible], que en la dha tierra auia, y no sin grandissimo trabaio y hambre, y peligros asi de su persona como de los que consigo yuan, y procuro el dho capitan de hazer cerca del dicho rio algunas poblaciões de la gēte que lleuo de españa. Este Rio es mayor que ninguno de quatos aca se conoscen tiene de ancho en la entrada, que entra en la mar, ueinte y cinco leguas, y trezientas leguas arriba de la dha entrada, tiene dos leguas, y tancho la causa de ser tan grāde y poderoso, es que entran en el otros muchos rios grādes y caudalos. Es rio de infinitissimo pescado, y el meior que ay en el mūdo, la gēte en llegādo aquella tierra quiso conoscer si era fertil, y aparejada para labrar y lleuar pan y senbraron en el mes de setiembre LII. granos de trigo que no se hallaron mas en las naos, y cogieron luego en el mes de deziembre cinquēta, y dos mill granos de trigo, que esta misma fertilidad se hallo en todas las otras simillas. Los que en aquella tierra biuen dizen que no lexos de ay en la tierra adentro que ay unas grādes sierras de donde sacan infinitissimo oro, y mas adelante en las mismas sierras, sacan infinita plata. Ay en esta tierra unas aueias grandes como asnos comunes, de figura de camellos, saluo que tienen la lana tan fina como seda, y otras muy diuersas animales. La gente de la dha tierra es muy diferēte entre si, porque los que biuen en las aldas de las sierras, son blancos como nos otros, y los que estan hazia la Ribera del rio, son uerenos. Algunos dellos dizen que en las dhas sierras ay hombres que tienen el Rostro como de perro, y otros de la rodilla abaxo como de Abestrua, y que estos son grandes trabaiadores, y que cogen mucho mayz de que hazen pan y uino del, otras muchas cosas dizen de aquella tierra que no se pone aqui por no ser prolixas.

N.º7 Vastum flumen hoc Indorū lingua Vruai, Hispano uero idiomate Rio de la plata nūcupatur, cui affluit & alius fluuius Parana nomine, hoc aūt Ioannes Dias de Solis inuictissimorū catholicorūque regum Ferdinandi & Elizabeth archigubernus primus aperuit, Insulamtenus, quā à nomine cuiusdam nautæ suæ classis ibi sepulti, Insulam Martini Garsiæ denominauit, quæ immoratū intra flumen ab eius hostijs quadraginta parasangis distat. Hanc siquidē per uarios casus per tot discrimina rerū, dū clausam ius aperit, expugnatque, ab Indis oppressus occususque deuoratur. Elapsis autē postea multis annis Sebastianus Cabotus nauigandi arte astrorumque peritissimus, dux & archigubernus Caroli Imperatoris, huius nominis quinti regisque potentissimi, denuo nobis aperuit classe regia, cui ipse Imperator ducē præfecerat ad aperiendū insulas Tarsis, Ofir, Ciapangu & Eoicatai, qui inquā archigubernus obiter flumen hoc intrauit, in causa fuit, quia nauiū eius ductrix naufragiū fecerat, procellosis obruta fluctibus, quo cursum sibi destinatū cū socijs minimè continuare potuit, cumque his nauis, qui [illegible] recepti aderāt, flumen aperire aggressus est, haud sine magno sui periculo suorumque labore intolerabili, fame ac rerū omniū penuria, à nōnullis Indorū antea certior factus, regionē illā auro & argēto omniū opulentissimā esse, quo fortissimus dux & archigubernus motus ducere colonias cœpit, prope flumē nōnullos arces ac propugnacula condere diligēter curauit, quibus Hispani incolæ tuerentur, & uim hostiū Indorū inde propellerēt. Hoc flumen maius est omnibus nobis cognitis, cuius ostia mare affluentia latitudine uiginti quinque parasangis protendūtur. Reliquū huius supra trecētas ab ostijs latitudinē duobus parasangis dimetitur, cuius uasta profunditas causatur ex multorū confluxu ingentiū fluuiorū multis abundat, & optimis piscibus omnium quas mare nutrit. Gens nostra cū primū his appulit oris, an culta tellus illa fertilis esset & aptissima lætas ferre segetes periculum fecit, collectis quinquaginta duobus tritici granis, quæ in tota eorū classe inueniri potuerunt, mense Septembri terræ mandauit. Decembri uero duo millia supra quinquaginta messuit, aliorū seminū ac leguminum eadē est fertilitas. Huius regionis incolæ nō procul inde relatos quosdā montes inesse aiunt, è quibus ingentē auri copiam extrahere solent, nec multo longiori interuallo alios asserunt innumero abundare argēto, & alia cū uisu tū dictu innumerabilia enarrātur, quæ pro eorū prolixitate ne lectoribus animos silētio traduntur. Hi homines proni sunt ad laborem, ac terræ cultus studiosissimi, unde multum uini & panis cōficiunt ex ea spica, quam Indi Maiz appellāt. Quoddam genus ouium hic magno corpore adest paruorum camelorum instar, quarum uellera permollis ac tenuissima lana, ceu bombice exornantur, suntque alia quamplurima diuersorum animalium genera. Huius regionis homines, forma & colore inter se longe differunt, siquidem qui in montibus degunt, albi colore & nobis similes sunt; qui uero fluminis ripas incolunt, in fusco & tetro colore nigrent. Nonnulli eorum caninam faciem habere perhibentur, quidam autem pedes & tibias ad struthiocamelorum similitudinem habent.

Esta tierra fue descubierta por Ioan Caboto Veneciano, y Sebastian Caboto su hijo, anno del nascimiento de nuestro Saluador Iesu Christo de M.CCCC.XCIIII. a ueinte y quatro de Iunio por la manana, ala qual pusieron nōbre prima tierra uista, y a una isla grāde que esta par de la dha tierra, le pusieron nombre sant Ioan, por auer sido descubierta el mismo dia la gente della andan uestidos de pieles de animales, usan en sus guerras arcos, y flechas, lanças, y dardos, y unas porras de palo, y hondas. La tierra muy steril, ay en ella muchos ossos blancos, y cieruos muy grādes como cauallos, y otras muchas animales, y semeiantemēte ay pescado infinito, sollos salmões, lenguados muy grandes de nara en largo y otras muchas diuersidades de pescados, y la mayor multitud dellos se dizen baccallaos, y assi mismo ay en la dha tierra Halcones prietos como cueruos Aguillas, Perdices, Pardillas, y otras muchas aues de diuersas maneras.

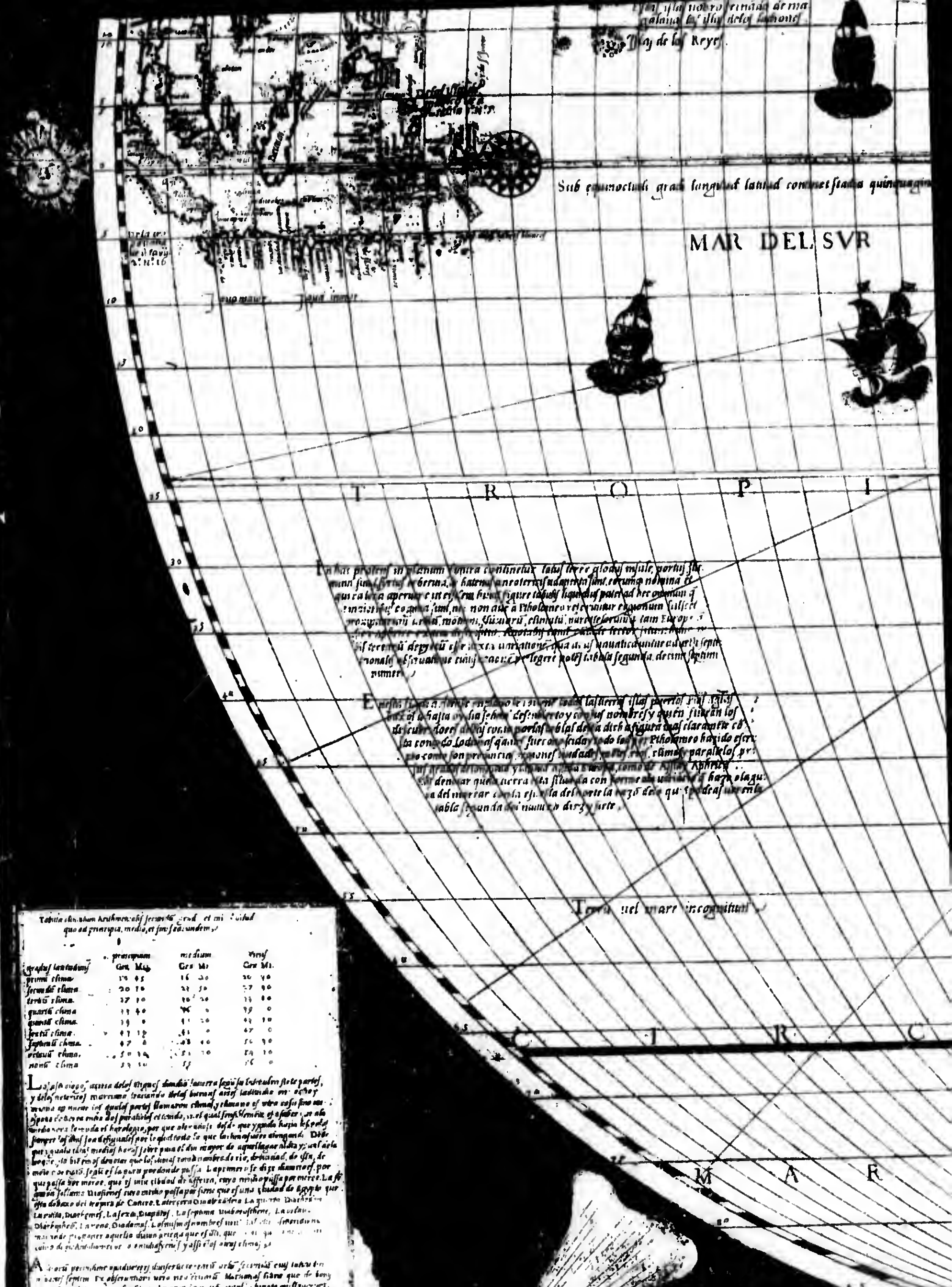
N.º8 Terram hanc olim nobis clausam, aperuit Ioannes Cabotus Venetus, necnō Sebastianus Cabotus eius filius, anno ab orbe redempto 1494. die uero 24. Iulij, hora 5. sub diluculo, quā terrā primū uisam appellarūt, & Insulā quandā magnā ei oppositā, Insulā diui Ioannis nominarūt, quippe quæ solenni die festo diui Ioannis aperta fuit. Huius terræ incolæ pellibus animaliū induūtur, arcū in bello, sagittis, hastis, spiculis, clauis ligneis, & fundis utūtur: sterilis incultaque tellus fuit, leonibus, ursis albis, procerisque ceruis, piscibus innumeris, lupis scilicet, salmonibus, & ingētibus soleis unius ulnę lōgitudine, alijsque diuersis piscium generibus abūdat, horū autē maxima copia est, quos uulgus Bacallios appellat, ad hęc insunt accipitres nigri coruorū similes, aquilæ, perdicesque fulua colore, aliæque diuersæ uolucres.

N.º9 En esta ysla de islanda ay grādissima multitud de pescado, tomalo en el yuierno, y secālo con el grā frio que haze alla, porque esta dicha isla esta dētro del circulo Artico, y en el uerano uā alla de muchas partes y mercan del dicho pescado assi seco a trueque de harina y ceruesa, y este dho pescado es tan seco y duro que para comello lo hazē cō unos martillos de hierro encima de unas piedras duras como marmol, y despues le ponē a remoiar un dia o dos y asylo comē despues cozido con manteca de uacas, y en toda esta mar setētrional ay grādissima multitud de pescado, y muchos dellos grādes, y de mōstruosa forma, anssi los que en esta mar nauegan, mirenos grādissimas que parescē grādes sierpes, y acometer alos nauios para comerse los nauegātes. Los naturales de la dha isla la mayor parte dellos hazen sus casas de baxo de tierra, y las paredes de huesos de pescados no tienen leña saluo unos pequenos arbolezitos y destos muy pocos, y en pocos lugares, mas el Proueedor de todas las cosas, lo prouee cada anno que uiene por la mar de hazia las partes setētrionales de la dha isla, muy grādissima multitud de arboles de diuersas suertes, y grādezas, como cosa de naufragio trasportados de furiosos uientos septentrionales ala costa de la dha isla, de los quales los naturales se prouee y gastā para todo lo a ellos necessario, y dizen que muchas uezes oyen hablar spiritus y llamar se por sus nombres, y parescer a personas uiuas, y dezen quien son, y en ciertas partes de la dha isla salē unos fuegos muy horribles, y otras muchas marauillas dizen los naturales de la dha isla que ay en ella.

N.º Hæc Insula innumera piscium multitudine abundat, quos eius incolæ hyeme capiunt, & Boreali horriferoque frigore desiccant, utpote insula sub Arctico circulo posita, ubi de frigus cōstringit desiccando. Iæiune autē uere Angli, Germani, aliæque diuersarum regionū incolæ huc adnauigant, pisces hos frigore desiccatos empturi, ceruisiæ & farinæ commutatione. Estque hoc piscium genus adeo durum, ut malleis ferreis super lapidē percutere necesse sit, postea uero aqua biduo molire, quo tandē butyro condientes comedant. Nec solū hæc Insula ingentem piscium copiam alit, sed etiam totum mare Scythicum, quorum nōnulli adeo uasto corpore emergunt, ut monstra potius marina quam pisces uideantur. Fertur à quibusdam hoc mare nauigantibus adeò hic ingentes murenas prospici, serpentibus similes ut naues ipsas inuadere audeant, quo nautas & uectores arripientes deuorent. Insulæ huius incolæ subterranea domicilia sibi construūt, quorum parietes piscium ossibus erigunt, lignorum autē penuria laborant, per exigua siquidem arbuscula raræque hic pullulant, sed summus ille gubernator his necessaria annuatim satis copiosè largitur ex Septentrionali plaga, quàm plurimæ uariæque ac proceræ arbores, turbine uentorū eradicatæ immaniqua agitatæ procella his litoribus, naufragij instar impellūtur, quibus incolæ abunde utuntur. Aiunt præterea persæpe hic audire spiritus se mutuo alloquēctes, propriisque nominibus se inuicem appellantes, & uiuis hominibus nonnunquā apparētes, quibus se ac sua nomina, quæ sint indicare perhibētur, & quibusdam eiusdē Insulæ locis, ignis, uisu horribilis per se cernitur & procul iactatur, rotaturque. Et plura alia cum uisatū auditu mirabilia huius Insulæ incolæ asserunt, quæ breuitatis causa omittuntur.

N.º10 Los hombres que habitan en esta region son saluaies cateres de pan y de uino, amāsan ciertos y caualgan en ellos, y pelean cō otra gēte que esta mas adelāte hazia el setētrion que los llamā nocturnos, por que uā de noche y hazen sus haziendas como aca de dia y esto porque los dias alla deste XIIII. de setiembre hasta X. de marco son tan pequenos, que nō ay una hora de claridad. Sōn muy malas gētes y salteadores. Roban a todos los que passan por ay, cerca nauiō ninguna no osa estar surto ala costa por miedo destos hombres nocturnos, por que matan, y Roban, a todos quātos pueden auer alas manos, y un poco adelante destos nocturnos, hazia el setentrion, dizen que ay unos monstruos que tienen todo el cuerpo como de persona humana, saluo la cabeça, que tienē como de puerco, y que gruñendo se entiēden como puercos.

N.º10 Huius regionis incolæ feris moribus imbuti, solitudinem incolunt, syluestresque omnino sunt, pane & uino penitus carent, ceruos cicures ac mites reddentes, horum dorsis uehuntur. Cumque his hominibus magis ad Septentrionem uergentibus bella semper ineunt, Nocturnis nomine appellatis, quia suas ipsorū res tam in publico, quā priuatas noctu, quemadmodum apud nos diu nostrates peragunt, eisque hoc euenit, quia à decimo quarto Septembris die, usque ad decimū Martij adeo breuiter dies eorum semper cunlat, ut ultra unius horæ spacium continuat, ea gens pessima est, cassatusque & [illegible] latrocinijs dedita ssima, adeo ut nullus uiator ea loca adeat, quin ab eisdem Nocturnis occidatur spolieturque. Paulò ante ulterius à Nocturnis Septentrionem uersus monstra quædam esse aiunt, quæ quidem toto corpore hominibus, capite uero porcis similia sunt, & grunnientes porcorum instar se mutuo intelligunt.

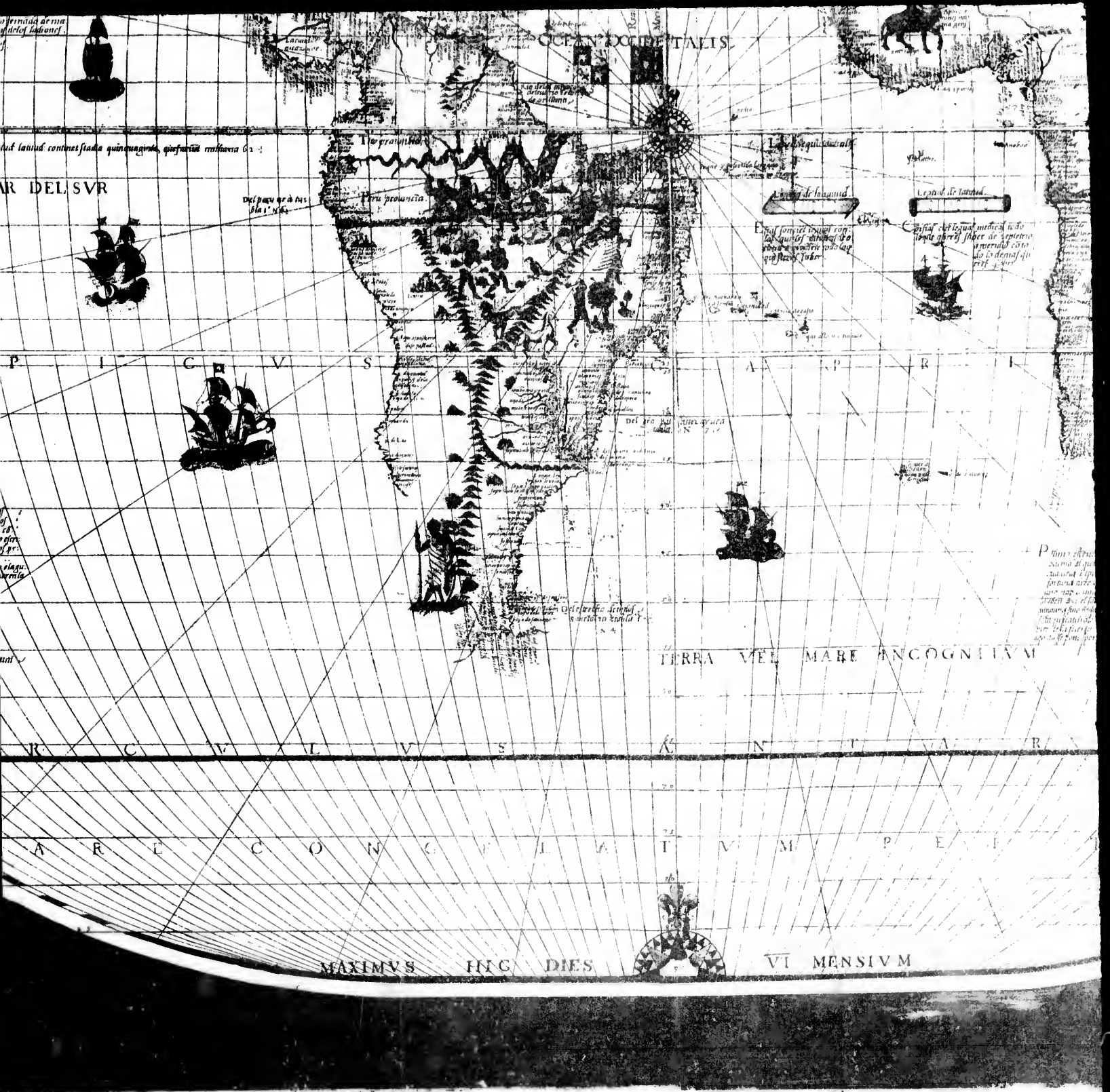


Tabula climatum Arithmetices [illegible] grad. et mi [illegible] quo ad principia, media, et fines eorundem.

gradus latitudinis	principium Gra	principium Mi	medium Gra	medium Mi	finis Gra	finis Mi
primi clima	12	45	16	30	20	40
secundi clima	20	10	24	10	27	40
tertiū clima	27	10	30	20	33	40
quartū clima	33	40	36	0	39	0
quintū clima	39	0	41	20	43	10
sextū clima	43	15	45	0	47	0
septimū clima	47	0	48	40	56	40
octauū clima	50	30	51	30	54	10
nonū clima	53	10	55	[illegible]	56	0

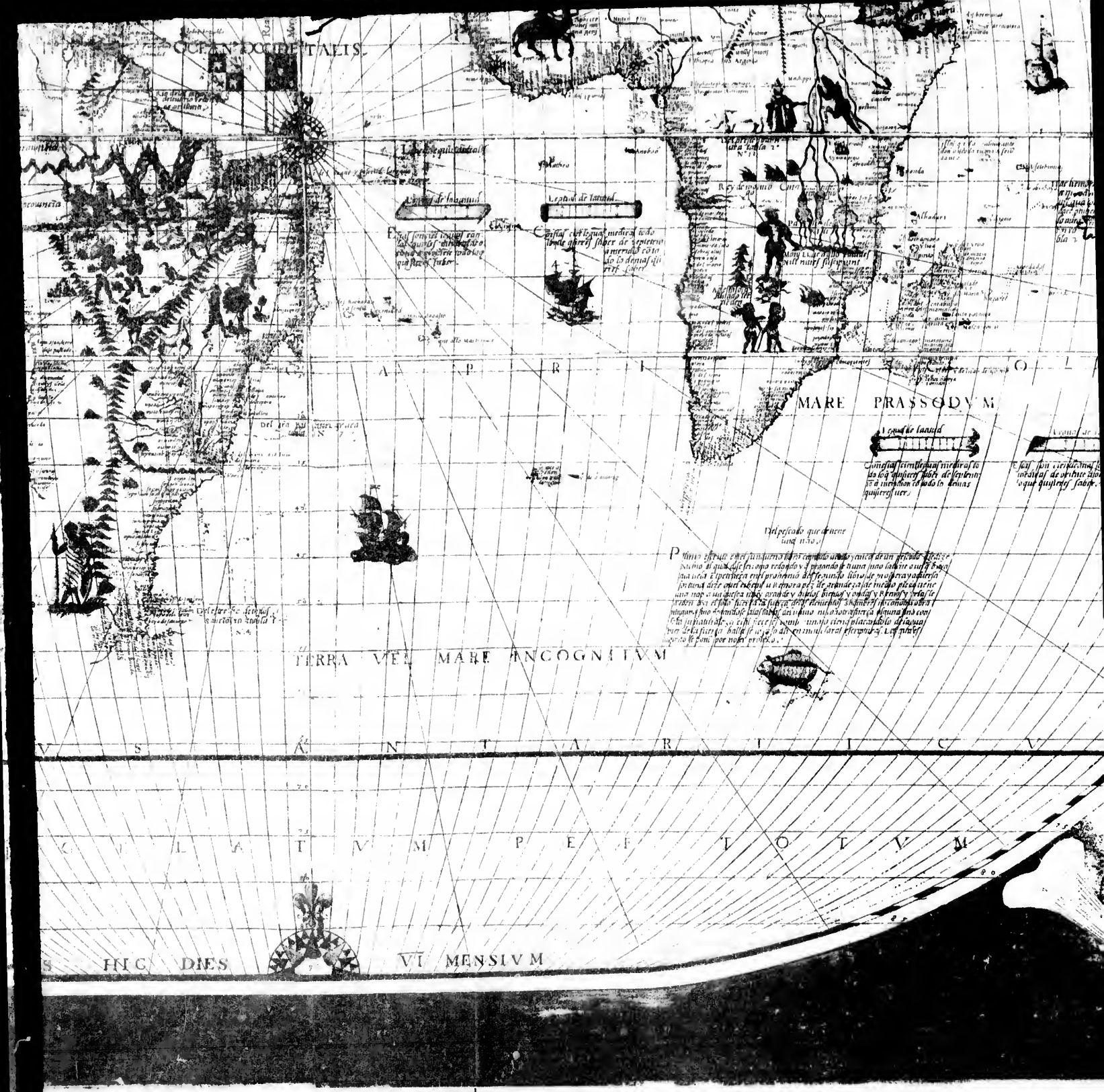
Los astrologos [illegible] acerca delos antiguos [illegible] la tierra segun su latitud en siete partes, y delos modernos [illegible] tratando delas [illegible] latitud [illegible] las quales partes llamaron climas [illegible] por el qual [illegible] el relox [illegible] La primera se dize diameroes, por que passa por meroe, que es una ciudad de Affrica [illegible] La segunda Diasienes [illegible] que es una ciudad de Egypto que esta debaxo del tropico de Cancro. La tercera Dialexandrias. La quarta Diarodon. La quinta, Diaromes. La sexta, Diaponto. La septima Diaborysthene. La octaua, Diarhipheos. La nona, Diadomus. [illegible]

A [illegible] autem septem. [illegible] Marinus [illegible] Quod [illegible] Secundū Diasienes, quia eius media [illegible] Tertiū [illegible]



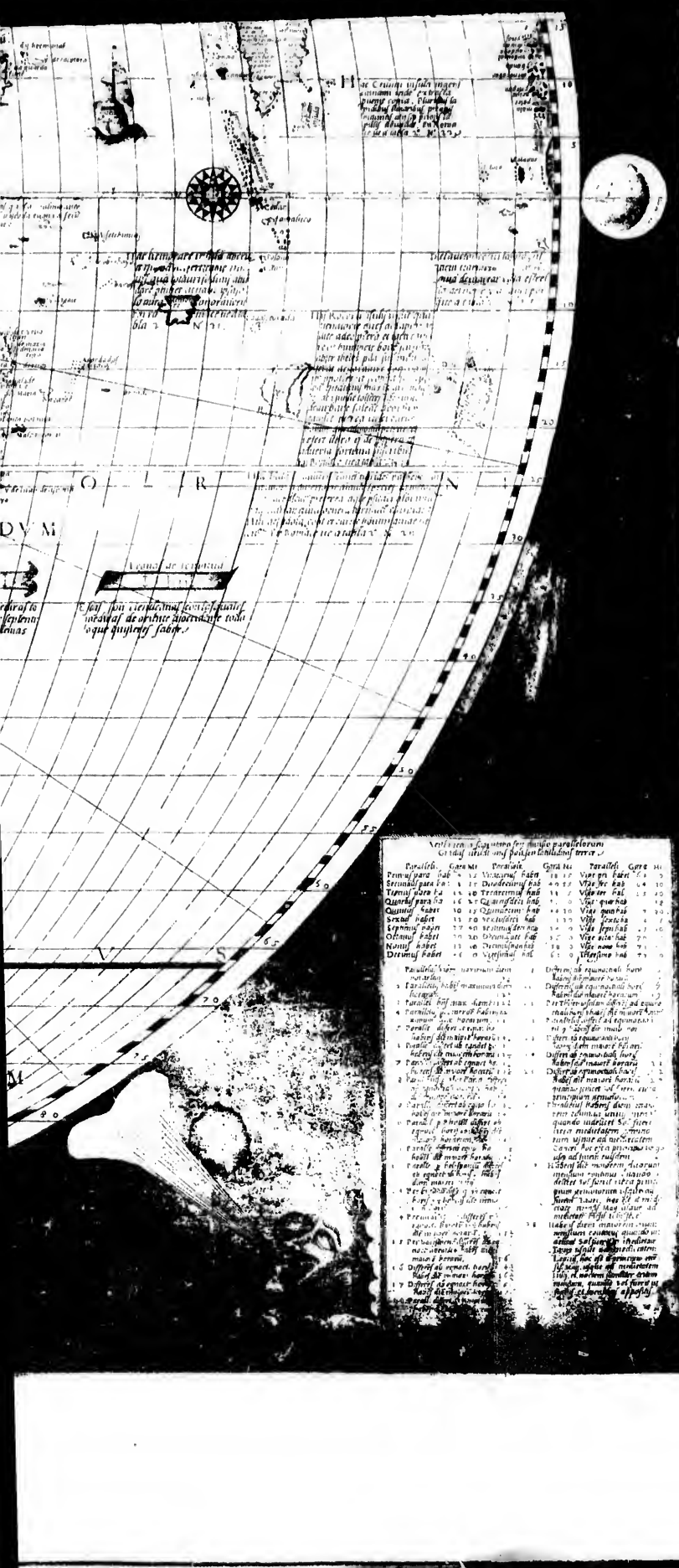
WORLD MAP OF A. D. 1544. (The Sebastian-Cabot Map.)

Reduced by Photography to a little less than half-size. From a negative taken from the original at Paris by order of the Minister of Agri



VORLD MAP OF A. D. 1544. (The Sebastian-Cabot Map.)

ttle less than half-size. From a negative taken from the original at Paris by order of the Minister of Agriculture and Statistics.



Nº.16 Tarpana maior insula, quæ olim Taprobana dicebatur, ab incolis Benua Territorium, nominata. Distat autem a Cori promontorio, quod est in India, ad meridiem versus, milliaria centum quinquaginta. Ab ea insula Taprobanam efficiebat ager Alitanus: Alii eam Camaram appellant, alii Pitundam. Ptolemæus autem Taprobanam esse ait insulam, quæ Simundu hodie dicitur. Ea insula, quæ Ceylon nunc appellatur, olim Serendib nominabatur, quod nomen ab Arabibus ei inditum fuisse videtur. Ptolemæus autem Taprobanam esse ait insulam, quæ Simundu hodie dicitur. Ea insula, quæ Ceylon nunc appellatur, olim Serendib nominabatur, quod nomen ab Arabibus ei inditum fuisse videtur. Ptolemæus autem Taprobanam esse ait insulam, quæ Simundu hodie dicitur. Ea insula, quæ Ceylon nunc appellatur, olim Serendib nominabatur, quod nomen ab Arabibus ei inditum fuisse videtur.

¶ Retulo del anchos canos q̃ ay en la nauegacion q̃ hazen los q̃ van de nombre, y Rey nuestro señor nos da esta figura extendida en plano, anno de la natiuidad de nr̃o saluador Iesu Christo de M.D.XXXIII. annos, sirada por grados de latitud y longitud con sus vientos como cada vno nauega, nauegando en parte al Poniente, y en parte alos mediodias, declarando, assi Españoles como Portugueses, y parte por la parte q̃ por la del Leuante, por donde podras nauegar como por carta de marear, teniendo respecto alamarag, segun hazelas figuras del marear, q̃ anda en la carta del Norte, segun q̃ te quisiere partir del cabo de sant Vincente, para yr a tomar el alua de sus tierra, mandaras gouernar mismas al Norte por magnas, de marear y yras alar dentro de dicho cabo, assi en verano como en inuierno, q̃ en todo tiempo podras nauegar, q̃ en ninguna manera no has de nauegar con la agua del Nordeste, y alli mismo partiendote de Salmedina, q̃ es vna baya al Leuante de la Isla de sant Lucar deberas mudar para yr alla punta de naga de la Isla de Tenerife, mandaras gouernar al Sudueste, por ninguna y yras vista, q̃ alla punta de naga porlo que ella fuuada en la carta de marear, mas te camino no sera al Sudueste, por quanto la agua de marear te Nordeste en Salmedina una quarta larga, mas sera tu camino al Sudueste quarta del leuante largo, q̃ que podras dezir que partiendote del cabo de sant Vincente al Norte, tu camino sera Nordeste quarta de Nordeste, y partiendote de Salmedina al Sudueste, tu camino sera al Sudueste, quarta del sur, y alli por cõsiguiente haras en todo otra parte desde vno en otro, segun la agua, que te hazes la dha agua de marear, conla estrella del Norte, por que la dha agua no se buelue ny ella entodo lugar al Norte, como el comun vulgo piensa, por que lapiedra yman segun paresce no tiene virtud para hazerla buelues al Norte en todo lugar, mas segun por experiencia fuere y alcançe tiene solamente virtud de hazerla q̃ buelua siempre en vn lugar, por donde a demonstrar forçado por linea recta por qualquier tiempo que fueres y no por circular, y assi la causa hase la dha variaçion, que la dha agua q̃ buelue se al Norte cada y quando y en todo lugar no haras variacion ninguna, por lue yras por linea circular, pues que siempre andaras en vn paralelo, lo qual no puede ser yendo por linea recta en vn redondo y assi de notar que quanto mayor aparatare del meridiano, que la agua se ella derechamente al Norte hazia el Occidente, o hazia el Oriente tanto mayor aparatara agua de Norte, es a saber la flor delis della, la qual ella fremalando por el Norte por donde parese claramente, que la dha agua morella por linea recta, y no por circular yas, de saber que el meridiano donde el flor de lis de la agua ella derechamente al Norte es obra de cien leguas y cinco leguas della al de Horn. La vltima isla delas Açores hazia el occidente segun la opinion de algunos expertos, por la mucha experiencia que dello tienen, a causa de la quon donna nauegacion, que hazen al Occidente, alas Indias de mar Oceano, por dho Sebastian Cabotto hauerse dha isla en el meridiano, de hallo en parte donde el Nordeste quarta del Norte le ellaua derechamente al Norte, por las quales sola dha experiencia parese claramente, ser verdad lo susdechos y variacion que la dicha agua de marear haze conla estrella del Norte.

¶ Epilogus, in quo Auctor huius Chartæ, reddit certas rationes, variationis acus buxulæ nauticæ ad stellam Polarem.

Nº.17 Sebastianus Caboto Dux & archigubernius S.C.C.M. domini Caroli Imperatoris, huius nominis quinti, & Regis Hispaniæ dominatoris nostri, summum mihi manum imposui, & ad formam hanc præsentem, planaq; figuram me delineaui, anno ab orbe redempto, nativitate Dominj nostri Iesu Christi, 1544. quinto mirâ gratiarum longitudinem aclamadinem, ventorumq; situm, cuiti docte nun fidelitter, navigationis Chartæ insitar descripsi, Geographi Ptolemæi, auctoritatem, aperientium, quotidianis nostri certorum loca clausa nobis aperientium tam Hispanorum quàm Lusitanorum eadem sequutus, necnon ex usu ac indultu longæ navigationis integerrimi virj Ioannis Caboti nationè Venetj, atq; Sebastiani ejus natu perinde navigandique arte omnium doctissimi, cujus filij auctoritatem, quæ aliquot annorbus partem diuinos tribus clausum aperuerit, qua propter me fidelissimum magistrum, ceu Hydrographicæ chartæ autem, quocunq; ejus animus mâxe meus poterit, tam nauticæ quàm orbem obsitarum, qua ad Arctum vertitur. Quiuere argumentum est: Sic exta eo promonitor, ex nauticum solacium, Cebreum promontorium primarium, nauem licet pronum ad Arctum dirigere ubras, Hydrographica ratione, quo curlu recto tramite Fauste tres aquidres fermo ostium, ac tamen quod ue cursus naturaperegrinatio recta ad Arctum, sed Arctum uersus ad quartam Circe tium. Nunquam via fiquidem ea recta linea est Sicco promontorio ad oram Finis terræ cursum demonstret, ad Arctum nihilominus tamen quarta parte ab Arcto ad Cæsarem distare certum est, Quapropter cum nauem ea nauta ad Arctum regere fuerit, erit navigatio tua per quartam Septentrionis Cæsarem versus. Eandem navigationis considerationem observeris, cum è Salmedinâ breui cæpido hodie mari, in cursu portus sancti Lucæ ad Nagaroram Tenerifæ Insulæ navigare decreueris, cum siquidem licet ad Libeu seu Aphricum nauem regere studeas Hydrographicæ chartæ obsequutus, rectus tamen illuteris cursus nauticæ artis probabiliore fide per Aphricum quàm per eius privatdubium erit, Salmedinæ nempe ad Nagam nauis gatio quarta longe minus quàm Hydrographica charta indicat, ovum a acus demobitur. Vnde pro compertò habebis, duas Cæsaris o pro uincias eam Libero Septentrionis portuum, quod inter eum tres per quartam Arctæ Cæsaream verfus. Eodem modo fit Limes ad Nagan Tenerifæ Insulæ adnauigauerit ad Aphricum, nauis, ut rursus cursus per quartam Austri. Eadem ratione significatur, qui portus fi quam huius dilercotionis partè acus magnetæ fuerit variationem obseruans, qua cum Arctæ fiderem uarié operatur, quippè quæ non absolue neq; ex omnibus locis Septentrionem expetat (uti plebi indocta credi et eum Magnes lapis fit (ut pater) nullam habet umbram gendæ nauigationis arcanum, omni parte ad Arctum, qui a ponitur experientia consilia, eadem vobis libere immotum reddere recta linea, non autem circulariter, quemuis ventorum Arctio proximum, & hac de causa acus nautica ubiquatuor, nam fi cadè acus absidue ex omnibus locis uertetur ne ad Arctum, nulla fieret cursus uia, ad ipsa, quæ per circulum ambitum semper uiam demonstrarent, ex quo sequeretur, eundem æque diffauem seu parallelum frequentare, quod inffis modo contingeret recta linea circularem formam adeuniri. Porrò unum hoc admonitio candido lectori, quo magis ad Solem ortum vel occasum Linea meridiem fit cedes, ubi acus nautica deprehendum Latium ad Arctum dirigit offurbit, eo magis ab Arctum distat, quo propiùs ad Cæsarem accesserit, ex Insulis, unde finis loquor, acus nautica recta non autem circulari ratione demonstrare. Ac nunc audiam igitur ei, quod linea meridionalis, quam nauiter acus libera restituit Septentrionem ostendit, distat a Pharum Insula insigni ua parasangis, qui quidem ab occipitum Insula est occidentem versus, urea pertinentem omnium nauium gubernatorum confortis, opinionem unquam ex eorum solem experientia, quam diuina absoluit navigatione hoc iure profitentur, siquidem Arctis nauticæ ex Indicum indices remotus affistemur. Ad hæc Sebastianus Caboto nostrus auctor, occidentalem Oceanum adnauigauit, ad 67. gradum fere decimi & plagam, ubi quarta pars Septentrionem inter a Cæsarem uentus acus nauigationis Labore illi reclinans, Arctum ostendet magnibus de causis & rationibus & rutilsima nauigandi experientia, per ipsum confiat delectus & variationis acus nauticæ ex eius mente cum Arctis obseruatione.

¶ Plano esel segund libro Capindo lexxix. eferiue.

Nº.18 Que dela ciudad de Cadiz y delas columnas de Hercules, con el canino dela Hespaña, y dela Gallia, fe nauego todo ponuente el Occeano Setentrional fe nauego la mayor parte en tiempo de augusto, y allando todo la Germania, hasta el cabo de Cimbri, y defde ayfa fla Scithia, y de, Oriente nauego por el mar Indico, hazia Setentrion halla tener el mar Caspio al fur la armada de Macedonj con el mismo que Seleuco, y Antiocho Reynauan y mandaron que aquella region llamasé Seleuchada, y Antiochida, y al Septentrion del mar Caspio muchas partes fe an nauegado, de manera que poco queda que todas (mar Septentrional no le ay nauegado y assi mismo dize en el mismo Capindo que Cornelio Nipote el mismo que a Quinto Metello Celro el qual fue conful en vn y entonces era Dereon fol en la Gallia, le fueron imbiados dos ricos Indios del Rey de aquellas Islas para quales partidos de mar Indico con fortuna trasportados en Germania.

Nº.19 Eneftas islas Reeos ay aues de tal grandeza segun dizen, y fuerça, que toman un hoy y lo traen notando para comer, y mas dizen que tomaron un batel por grande que fea y lo leuaran en grande altura, y defpues lo dexan caer, y comenzé los hombres, y el batel trerchafenslantemente lodixe en fu libro de prifperia, y aduerfa fortuna.

Nº.20 Ay en la yla delos de Calenguan Leones, Tigres, Honças, Ciervos y otras muchas diuerfidades de animales, assi mismo ay aguilas y Papagayos blancos, que hablan tan claro como perfonas, lo que arriba les es enfeñado, y otras muchas aues fyn numero, de diuerfas fayziones, la gente dela dicha isla fon ydolatras, comen carne humana.

Nº.21 Halla efta isla dicen q̃ ay vna nao de canbaya y dizen que fus fierro oro enella, fino cargaron, otra cofa, fegund dize los portuguese

Nº.22. Enefta isla de gellan ay canela de naçimiento y Rubies y fafiros y oro fino y otros generos de piedras preciofas.