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FROM THE TRANSACTIONS OF THE ROYAL SOCIETY OF CANADA
SECOND SERIES-1899-1900
VOLUME V
ENGEISH HISTORY, LITERATURE, ARCHAEOLOGY, ETC.

CABOT'S LANDFALL AND CHART

SOME CRITICISMS ANSWERED

By MOST REV. ARCHBISHOP O'BRIEN

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1899
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V.-Cabot's Landfall and Churt: Some Critivisme Ansucred.

By Most Rev. Archbishor OPbrian.

In the Presidential Address which I had the honour of delivering at the session of the Royal Society on June 21th, 189\%, and which is inserted in the Transactions of that year, I adranced a new argument for locating the landfall. and broached a new theory regarding Cabot's Chart. In hoth cases I submitted pronfs based on historic evidence as well as on recognized canons of interpretation.

Whilst some have found the proofs satisfactory, others have questioned their strength, and have refused to accept them as conclusive. This is not a cause for surprise or wonder. Minds are variously constituted: dearly hugged theories die hard: and certain, often unconscious, prejudices are difficult to shake off. When the calendar was reformed by Gregory XIII, some nations could see in it only a cruel device to cheat them out of ten days of life. There were men, too, who saw its reasonableness, but preferred astronomic darkness to light from such a source. Small wonder that a geographical conclusion of minc, at variance with received ideas, should be looked at askance. In the end, however, it will prevail.

The objections by Dr. S. E. Dawson in his paper printed in the same volume of the Transactions as the address, are the only ones I shall now consider. They are the strongest that have fallen under my notice ; to rebut them will therefore suffice. These objections, chiefly found in Appendices E and F, may be reduced to three heads, viz :-

1. That the argument from a passage in Da Soncino's letter is valueless.
2. That the Gulf of St. Lawrence was unkrown before Cartier's first voyage.
3. 'That Caro de Inglaterra on La Cosa's map is not Cape Chidley but Cape Race.

As briefly as possible each objection shall be answered, for notwithstanding Dr. Dawson's contention, I still maintain the question is to be decided by evidence, not by "conjectural lines" of variation of the compass, nor by loading the pages of the Transactions with maps and diagrams whicli have their use and value in many ways, but which, in deciding the site of the landfall, have only an "academic interest, and are not germane to the question." Evidence is to be sought in
authentic records : and as truth is always clear to those who seek it in an mbiassed frame of mind, long dissertations are not only unnecessary, they are wearisome,

The Address showed we had two undoubted facts regarding the Cabot voyage of 149\%, viz:-The course was west from England, and the Islands found were distant seven hundred leagues. Confined to these two facts the landfall might be on some part of the Labrador, or on the northeastern Coast of Newfoundland, or on some part of Cape Breton. Each locality had its champions: but as a third known quantity was requird to convince a reader of a logical turn of mind, theories more or less ingenicus, and, we shall say, more or less probable, were elaborated into facts, and each champion had his case proved -to his own satisfaction at least. Now the Address affirmed that Da Soneino's letter, the reliability of which is beyond question, supplied the third known quantity in a passage the value of which had been strangely overlooked. We have been gently reprimanded by Dr. Dawson for this assertion, yet, perforec we must repeat it.

When, however, we reflect that Mr. Harrisse asserts that Tanais whas a "well defined coast bordering the Eastern Seaboard of Asia," and Dr. Dawson took it as a vague expression for some castern lands, we must cease to marvel that others should pass it by unheeded.

The Address stated that Da Soncino gave us a clue to the latitude of the landfall by saying, "et andando verso el levante ha passato assai el passe del Tanais." ("And going towards the east he passed considerably beyond the Country of Tanais.") Dr. Dawson truly says that the translation of the passage "seems easy enough." Yet, strange to say, we have seen translations that are inaccurate and misleading. That of Mr. Harrisse is only slightly faulty: "considerably beyond," not "far beyond," is the correct rendering of "Passato assai" when written. In conversation, by tone and accent, assai could be made to signify far.

In the Address it was maintained that this passage indicated approximately the latitude of the landfall. Cabot sailed from Bristol and he "passed considerably beyond the country of Tanais" betore sighting land. As Bristol is north of Tanais the landfall should be considerably south of it. Thus Labrador and the Newfoundland Coast would be excluded, being too far north. The only land, 700 leagues west of Bristol and considerably south of Tanais is Cape Breton Island, on some part of which the landfall must be located.

Dr. Dawson still maintains that Tanais was an "indefinite region" not ir. "Europe but in Asia," and "not likely to be taken as a standard of location for newly discovered regions." Moreover, he asserts that

Cabot must have considered Tanais north of Bristol, as it is so given on Ptolemy's map. Hence, he concludes, the argument would tell against myself.

Dr. Dawson fears I underrate the general extent of knowledge of medirval cartography. Well, if the authorities he cites in Appendix E, and which he more than endorses, are specimen witnesses, his fears are groundless. We had thought the day was passed, and with it the strange hallucination that warped men's vision, when a writer could suggest that the human mind had been stagnant for long centuries. A noted English writer has tersely rebuked this mental attitude by saying:-"Those who speak of the ignorance of the Middle Ages only show their own ignorance of its achievements." I shall only add to this that it is incomprehensible how men can think that the Ages which studded Europe with the finest specimens of architeeture, filled them with the noblest works of sculpture and paintings, adorned them with exquisite taste and skill, both in mosaic and wood-carving, which produced the greatest poets, witness Dante, Petrarch, Tasso-the most profound philosophers and theologians, such as Albertns Magnus, Thomas Aquinas and a seore of other schoolmen, learned writers and historians, navigators like Columbus, the Cabots, Amerigo Vespucei,-were characterized by mental stagnation. Dr. Dawson wases mirthful over a certain Cosmas Indicopleustis. I fear he will be obliged to hold his sides (since he finds a case of not very inexcusable ignorance so amusing) when he reads that an enlightened Englishman wrote, and a first class English Quarterly published, a very few years before the introduction of railways, that the idea of travelling on an iron road, by steam, at the rate of ten miles an hour, was as absurd as the proposition to go from the arsenal to Woolwich on a Congreve rocket.

On account of the neglect of, or contempt for mediseval literature, human progress has lost at least a century. The solid foundations, and many feet of shapely walls, of the temple of human knowledge had been built by the Ancients and their successors of the Middle Ages. Instead of continuing the work, men of these latter centuries started to build anew. The many superficial, fanciful and shifting theories of our day prove that the foundations of the new temple have been laid on sand.

That vague ideas of the whereabouts of Tanais existed, and still exist, may be granted. But I shall prove that before, during and after Cabot's time, the Venetians, Genoese, Milanese and Italians in general, knew Tanais as a definitely located State or Country in Europe. Certainly as a distinet tribe the Tanaitr of Ptolemy did not exist, but the country remained and was known as Tana, though not always men-
tioned hy that name. As in many instances, ancient and modern, the city stood for the whole cometry. Tanais was a self-governing community in the fiftrenth century and ownel a portion of what was often called the "Plains of Tartary:" The Tartars roamed over all the territory between the Dnieper and Volga (formerly Edil), but they respected for a long time the state of Tanais. Jnst as the mame Acadia has chuncr to Nova scotia and is known in our day, so the name of Tamais or Tana, clang to a definite portion of the great plains of Tartary, until late in the sixteenth century. When the eity of Tanais hecame known as Azor, and the river's name was changed to Don, the location of the country was gradually forgotten. But this was after Cabot's day. The following reproduction from l'tolemy's eighth plate of Europe shows the location of the Tanaite and of the ancient city of Tonais: (Fig. 1).

In the library of St. Mark, Venice, there is preservel the only known copy of a Book of Voyages printed at Venice in 154.5; one of these is a royage to Tanais, or as it is called, Tana. Through the courteons aid of His Worship the Sindaco (Lord Mayor) of Venice, I havo been enabled to procure a literal transeription of the title page, index of contents and publisher's preface of the volume, as well as the whole of the Voyage to Tanais. This and some of the other voyages had been previously printed. The publisher is Antonio Manuzio. The author of the royage to Tamais is tho "Magmificent Master Josaphat Barbaro, Ambassador of the Illusirions Republic of Venice to Tanais." The very title of the author, read in the original, should be sufficient to prove my contention,-Tiaggio del Magnifico messer Josaphat Barbaro, Ambasciatore della Illustrissima Republiea di Venetia alla Tana.

Tanais must have been a State or Country, not only because an Ambassador is accredited to it, but also becanse we read Alla Tana not a Tana: just as it is a Parigi, a Londra, not alla Parigi, ctc., on the other hand when a state is meant we say, Alla Francia, alla Spagna. This form of speech Alla Tana and della Tana is preserved throughout the narrative. After a short preamble in which the author tells us he did not wish to write, but had been induced to do so "by the solicitations of one who had the right to command," he says:-
"In 1436 I first undertook the voyage to Tanais where, now in one part now in another, I passed sixteen years, and I have gone around those parts both by sea and land carefully and with interest." (Del MCCCCXXXVI cominciai ad andare al viaggio della Tana: ove a parte a parte son stato per la somma di anni sedici $\mathfrak{\&}$ ho circondato quelle parti, si per mare, come per terra con diligentia, \& quasi curiosità.)



Fig. 1.-From Ptolemy.

We see here again that it was not merely to a city he was aceredited as Ambassador, but to a country or State, the various parts of which he visited. Whilst it is quite true that the vast tract of fertile land between the Volga on the east and the Dnieper on the west, and ruming north to Russia was practically in the hands of the Tartars, who roamed over it at pleasure, yet a portion of it was still known as Tanais. This is apmarent from the words of our anthor, not only in the passage just quote , nut in several others. Speaking of a horde of Thrtars who passed near the city, he twice uses the expression, "fume della Tana," which cannot be translated "the river Tanais," but "the river of the Country of Tanais." He says also this horde came "Jefore the plain, or country of Tanais," (avanti il Campo della Tana,") and "it went or passed before this plain in eight different groups." Again when the chizf of the horde had encamped near the city, our author was asked by the authorities to be the bearer of presents to him. We are told it was customary to give a novena of presents, or nine different articles. These were duly taken forth and presented to the chief by our author who "recommended to him the country together with the people," (li raccomandai la terra insieme col popolo"). The land of Tanais was still, in the estimation of its people, a distinct portion of the plains of Tartary.

The city was walled and had a beautiful tower over its gateway. Its civil head was styled, as in Rome of old, Consul. It was as it had long been, and as it continned to be for more than one hundred years, a busy mart, where buyers and sellers from Italy, the Grecian Islands, Russia, Persia and even Egypt met and exchanged commodities. The search for buried treasure is not peculiar to moderns. Our author tried his hand at it. A summary of his narrative on this point will reveal to us how thoroughly well known Tanais was to the Venetians and many others. He tells us there wore many sepulehral mounds around Tanais. In the time that Messer Pietro Lando (evidently an Italian) was Consul, a man named Gulbedin eame from Cairo where he had heard from a Tartar woman that a great treasure was buried in one of these mounds, the whereabouts of which she made known to him. For two years he dug, then died before he had reached the treasure. On the night of the feast of St. Catherine (25th Nov.) 143\%, seven merchants, Francisco Corharo, Cathariz Contarini, Giovan Barbarigo, Giovan da Valle, Moise Bon, Bartolomeo Rosso and our author, (several of whom were Venetians and all Italians), were together in the house of Bartolemeo Rosso, "a citizen of Venice," and talking over this incident of Gulbedin, they made an agreement to hire a hundred and
twenty men and make an attempt to find the treasire. This little episode throws a flood of light on the Tanais of that day. Thus, previous to 1437 an Italian, presumably a Venetion, for our author supposes his readers know all about the fact, had been its civic ruler : a man came hither from Cairo having met there a woman from Tanais: thus slowing the intercourse between these two places. Then, in the house of a Venctian citizen at Tanais, seven Italian merchants casually met on 25th Nov., $143 \%$.

There evidently was a Tanais at the mouth of the Don (or Tanais river) and also "a plain of Tanais" (il Campo della Tana), both well known to the Venctians and Genocse, and both in the Europe of that day. For Ptolemy, describing plate 8 of Europe gives both the western and castern mouths of the Tanais as the eastern boundary of "European Sarmatia." Since he elsewhere tells us that Tanais is between the "mouths of the river" (et inter ostia est Tanais Civitas) it was elcarly in Europe. "The plain of Tanais" was on the west of the western mouth.

There were many fishing establishments around Tanais; our author had two, one forty miles up the river at Bosfagaz, which must have employed many men, for we incidentally learn it had "three machines for grinding salt." Another Venetian, Da Valle, had an establishment on the same river at Tumen, and there were several others around about, but we are not told who owned them.

We can readily understand from these facts that a continuous and brisk trade was kept up between Tanais, Venice and Genoa. Wine, fruits and oil were brought from Italy, and fish, furs and other articles taken back. And the volume of commerce had been much greater previonsly. Our author speaking of Gitrachan (now Astrakan) on the Volga, tells us that before "its destruction by Tamerlan it had been great and famous, for all the spices and silks that now go to Soria came to Gitrachan and were sent over the plain of Tumen to Tanais, to which place the Venetians alone sent six or seven large galleys to carry oft the aforesaid spices and silks." He also adds that in those days neither the Venetians nor any other cis-marine nation traded at Soria. As a. commercial centre, therefore, Tanais had been frequented by Italian ships and traders for centuries.

A short description of the various places on each side of the sea of Azov, out to the Black Sea, is given. Finally he went to Venice overland, crossing from Tanais to Gitrachan (Astrakan) up the Volga through Russia to Moscow, on to Poland and Germany to Frankfort. This would be about 1452 . He narrates that, being in a shop on the

Rialto in 1455 , he saw two Tartars who were held as slaves by the owner of the shop. He complained to the authorities who, after investigation, set the men free. Our author took them to his house and kept them until "the ships were leaving for Tanais," when he sent them home. These were really the Tanais line of ships for the words are, "Col partir delle navi della Tana io li mandai a casa." Trade between Venice and Tanais was still brisk in 1455. At that time John Cabot was an able-bodied seaman, and it is more than probable he commanded a ship of the Tanaian line.

Some of the leading merchants of Venice were interested in the traffic, as the names of the "seven merchants" who met at Tanais in 1437 disclose. The trip therefore to that place was both profitable and adventurous. Who can doubt that Cabot made it more than once.

We may add that from the first ages of the Christian era Tanais was an Episcopal Sce. Although for centuries no Bishop has resided in it, it is still? Titular one. In 1827 Bishop Fraser was consecrated with the title of Bishop of Tanais, and appointed Vicar Apostolic of Nova Scotia.

Incidentally our author refers to a Friar of the Order of St. Francis, showing that a monastery of that Order existed at Tanais in 1438.

I do not know when this interesting booklet first appeared. There is positive internal evidence that it was not written until, at least, thirty-five years after an event which took place in 143s. As our author returned from a long sojourn in Persia, an account of which is also published, in the year 1473, and as he must then have been verging on $\% 0$, it is probable the story of his voyages appeared in $14 \% 4$ or $14 \% 5$.

Notwithstanding the blighting influence of Turkish rule which destroyed the trade of Capha and other ports, Tanais remained a great commercial centre for at least one hundred years after its capture. The Venetians and Turks frequently fought, but they exchanged commodities more frequently. Gerardus Mercator in his description of "Taurica Chersonesus," written before 1569 for his great Atlas, speaking of Tanais, which the "Ruthenians call Azae," says :-" It is a noble emporium to which merchants from various parts of the world sail, where there is free access for everyone, free permission to buy and sell." "Estque nobile emporium, ad quod mercatores ex diversis Orbis partibus commeant, ubi cinque liber patet accessus, libera emendendi et vendendi facultas." Evidently it was the real "open door" of which we have lately heard so much.

The Tartars and Turks, as Mercator insinuates, had a superabundance of fish of which they rarely partook, and were very well pleased
to trado them off with the Latins. Hé also tells us that the Palus Maeotus of Ptolemy was called by various names by different nations; by the Italians it was named "The Sea of Tanais," (Italis, mar della Tana).

In view of all these facts it is not rash to conelude that before, during and after Cabot's time, the city, river and country of Tanais were wall known, to Italians at least, as definite localitics in Europe, bordering on what was then called Asia. Also, that it was most natural a Venctian captain, speaking to an Italian about his discovery, should take that great trading centre so well known to both, as a standard of latitude.

Now, as to the latitude of Tanais, and the blunder into which Dr. Dawson thinks I fell, the blame for which he kindly throws upon the person who consulted Ptolemy for me, a few words must be said. I fell into no blunder, and I consulted Ptolemy myself, not in a hurry, net with noisy surroundings, but in the quiet of my study. Among many treasures St. Mary's College Library, Malifax, has a Ptolemy, Mereator's great atlas, Jodocus Hondius' edition, and Bleau's rery rare and beautiful works.

In the Address, it was, I thought, made clec $r$ that I used Ptolemy only for the purpose of showing the location, of the Tanaite. After having done this the Address said :-"If now we look on the map," viz :-the map anyone might have before him, not Ptolemy's, "we shall see that the Don begins its great bend at the fiftieth degree." The latitude of Bristol too is given as it appears on modern maps. I did this because I knew the human mind had not been inactive during the Middle Ages, and that Ptolemy's latitude's had been frequently corrected, and that places in America would be as much too high as were those in Europe in Cabot's time.

Dr. Dawson assu. that Cabot could have consulted only two editions of Ptolemy, that of 1478 and another of 1490 . Why might he not have had a copy of the Latin version by Boc ${ }^{+1}$ lius, although several centuries old? Or why might he not have had a copy of that of Nicholas Cardinal de Cusa (Cusanus) of about 1464? Mercator had one, as he testifies in the preface to his corrections of Ptolemy. There were other sources of information open to Cabot, but before considering them let us argue from Ptolemy. The latitude of the country of Tanais was, of course, for seamen and practically for all others, that of its port. In those days the city was everything, the country a mere aujunct. The latitude of the "Country of Venice" would be that of the city. The latitude of the mouth of its harbour is, for seamen, the
latitude of a city. The course is steered to that point. Now Ptolemy gives the latitude of the western mouth of the Tanais, the one nearer Venice, as 54.10, and that of the mouth of the Bristol Channel as 54.30 . Hence, Bristol was above Tanais, and part of the country of Tanais was still lower.

But Cabot was not confined to Ptolemy for a knowledge of the latitude of Tanais. We must bear in mind the editions of Ptolemy sought to give a faithful copy of the original, and carefully excluded corrections. They were not used as manuals of instruction, but only as now for reference in regard to early geography. Bertius' edition of 1618 is a proof of this. No one, I take it, will maintain that the latitude of a place so well known and frequented yearly by so many ships as we have seen Tanais was, could have been unknown, especially to the Venetians. Skilful navigators visited these waters and certainly took observations. For some reason the latitude of the time was about two degrees too high, but it was not six. They soon ascertained that Ptolemy was four degrees astray.

We are not left to conjecture merely on this point, we have positive proof that in the great schools of Italy, the study of eartography was ardently pursued. We shall confine our remarks to the fourteenth and fifteenth centurics. We shall quote largely from Tiraboschi. ${ }^{1}$

In the Imperial Library of Vienna there were preserved in Tira. boschi's time, "nine nautical charts," the work of Peter Vesconte in 1318, and in the Royal library at Parma a cosmographical map six feet square, done in parchment, by "Francisco Pingano, a Venetian, 1368." On it are numbers which seem to indicate the degrees of latitude: cities, harbours, anchcrage and rocks are marked.

In 145\%, Alfonso V. of Portugal, gave an order to Fra Mauro, of the Monastery of Murano, near Venice, for a planisphere for the use of sailors. This monk had already made one on which the Portugnese discoveries were marked. The new one was completed in 1459 and sent to Lisbon. A gold medal was struck in the monk's honour, on which he was designated as "Cosmographus incomparabilis." In 1471, Grazioso Benecasa published six maritime charts, and in 1479 , Antonio Leonardi gave to the world two geographical maps. In 1480, a complete treatise of geography by Berlinghieri appeared. Tiraboschi says it was not a mere translation of Ptolemy, although use bod been made of his work, the style was better and the edition more correct.

Seven other nautical maps published shortly after 1459 were also in the Imperial Library of Vienna. We could easily add to this list but

[^0]it would surely be superfluous. The study of astronomy was ardently pursued, too, at the time of which we speak. True, some indulged in the foolish attempt to read the future by the stars. Really this is not more silly than the efforts, in our day, of professors of physical branches of study (for they are not sciences) to decide questions of revelation, or to evolve a system of ethics from biology, geology or anatomy. But even in the writings of those who practised astrology, many great astronomical truths were taught which helped to render more accurate solar and sidereal observations. In 1480 a book of astronomic tables for Constanzi Sfiporza was written by Lorenzo Bunnicontri and Camillo Lunardo. For a number of years previous to that date, the former had been professor of astronomy, both in Naples and Florence.

A great astronomer, as well as a learned linguist, was Paolo Toscanelli, born at Florence in 139\%. His biographers attest that he was assiduous in lis observations of the heavenly bodies, and that he ccrrected the astronomic tables of King Alphonso and those of the Arabs. And Cristoforo Landino relates that he himself often heard him questioning minutely those who came from the countries bordering on the Tanais.

One other celebrated astronomer of the time may be mentioned,Mulles of Konigsberg, known as Regiomontanus. He came to Italy in 1463, under the auspices of Cardinal Bessarion, through whose influence he was appointed professor of astronomy at Padua. After a time he went to Venice, later on he returned to Germany. In 1475 Sixtus IV., wishing to reform the calendar, called him to Rome, where he died before beginning the task assigned him. His attainments in astronomy were evidently held in the highest esteem.

The study of astronomy was, therefore, assiduously prosecuted, the observations taken became more accurate, astronomical tables were published, treatises on geography correcting the errors of Ptolemy appeared, maps, local and general were multiplied, and most significant of all, charts showing the harbours, rocks and location of towns were issued. In the great nautical schools of Venice and Genoa these, and not Ptolemy, were the text books. In them was found the latest information. The best navigators of the Mediterrancan had been going for long years to Tanais, had been taking, of course, observations with improved instruments, and making their calculations by corrected tables. Can we doubt they did not discover the error of Ptolemy, or that, haring discovered, they did not report it, or that the correction was not made on the charts? Venice lived and flourished and waxed powertul by reason of her commerce, her sailors were the most skilful in Europe,
her schools of navigation the most renowned. As we have seen, her commereial relations with Tanais were extensive and continuous. A thorough knowledge of this port and its approaches would be one of the first, requisites for a captain seeking luerative employment. Of this fi.ies can no longer be any doubt. Why this uninterrupted issuing of maps and charts, this correcting of tables of calculation, and this perfecting of nautical instruments, if they were not being applicd to practical uses?

We are not sure John Cabot visited Tanais, few, however, will now look upon it as anything little less than certain. Even if he did not make the voyage to Tanais, he knew its latitude as well as he knew that of Bristol, for he was learned in all the knowledge of the Venetians. When he discovered Cape Breton he may, indeed, have thought he had struck the eastern seaboard of Asia, but he was perfectly well aware that it was no part of Tanais. Even the most unlettered of his sailors knew that east of Tanais there stretehed away the vast plains of Tartary, and beyond them "far Cathay." What he did, for a time, think, was that he had touched the shores of Asia lower down on its eastern side than Tanais was on its western border. Hence he concluded its climate should be more genial, and its resourees more abundant. Da Soncino, like all learned Italians of his day, knew the position and commercial importance of Tanais. It was therefore most natural that Cabot, when giving him an account of his discovery, should make a comparison between their respective latitudes. That he made the comparison the clear words of Da Soncino's letter show. What prerented many from realizing this was the idea that Tanais was an indefinite region somewhere in the East. As we have produced the testimony of an ambassador of the Republic of Venice to the State of Tanais (Ambasitore alla T'ana) who dwelt in those parts for sixteen, years, from 1436, which shows the city to have been a great and well known emporium with some territory, at least (la terra and again il campo della Tana), all in Europe, that idea, together with the objection founded on it, is no longer tenable. Hence the Presidential Address proves from the writings of unimpeachable contemporary authorities, that Cabot's landfall was on Cape Breton Island.

All the authorities cited by Dr. Dawson to prove the lack of geographical knowledge in the Middle Ages have sounded the shoals, but not the depths of the medirval mind. This is the casier process of the two. A short line and a light plummet will find the sandbanks, but depths are only sounded by measures of equal depth. Hence we need not be surprised that their idea of the dip of the mediaval mind, which
was eminently profound, is quite incommensurate. We take faets, not names, as our loasis of reasoning,-and facts show that the river Tanais was held by the men of Cabot's day to be the line of division between Europe and Asia. Hence for them all of Asia was east of Tanais.
'Thirty years ago, we in Cantada, called all the country from Lake Superior to the Pacific Ocean, the Northwest, and very vague ideas of its extent prevailed. In the same way a certain vagueness of ecnception regarding the extent of Asia obtained in the Middle Ages, but this no more argues the ignorance of the people, or the lack of interest in geography in the one ease than in the other. The study of geography was never neglected. It was prosecuted in the schools of Rome during the Empire, when maps were painted on the walls of school rooms and corridors, on which could be scen amongst other things "the rivers of Persia and the arid fields of Lybia, and the united horn-like branches of the Rhine, and the many mouths of the Nile." So speaks Eumenius Rhetor when addressing the Prefeet of Gaul. Thero were portable maps, also, and in the reign of Valentinian generals were to provide themselves with detailed maps of the region in which war was to be carried on. The Church suceeeded as heir to the knowledge of the Roman sehools, and we find Boethius, a most learned mathematician and friend of St. Benedict, eultivating the study of geography with assiduity. Cassiodorus, who founded a monastery in Calabria, urged the monks under him to study geography so that they might know where the places of which they read were situated. Ho recommends the writings of Julius Orator and Marcellinus, and the table or map of Dionysius, so that "the eyes might see what the ears had heard.' Ptolemy is also recommended.

We learn from Eginhard's Life of Charlemagne that, amongst the "treasures of that Monarch were many books and four plates or maps, three of silver, and one of gold. The most eostly one had three orbs (presumably the three Continents) joined together, on which was a fine. and minute delineation of the whole world."

In the annals of the Order of St. Dominie at Colmar, under the year 1265, we read:-"I have depieted a map of the world (mappam mundi) on twelve sheets of parchment."

There are many facts in Eeclesiastical History which prove that the knowledge of geography was not so very vague. Not only throughout Europe, but also thronghout Asia and Northern Africa, the gospel had been preached during the first few centuries of the Christian era. Bishops were everywhere, and missionaries were going to and fro. Provincial, national and general councils were held. In these latter,



Bishops from all parts were assembled. Communication was frequent between the Pope and the various places where Christianity existed. In the Presidential Address it was pointed out how well known Greenland had been from the eleventh century, that a Papal Legate had probably gone thither in the twelfth. In 1177, Alexander III. sent a legate to the Grand Khan; in 1245, Innocent IV. sent two missionaries to the Tartars. In 1271, Gregory X. sent missionaries to Chi Tsou, Emperor of China, by whom they were well received. In 1257, missionaries of the Order of St. Dominic were sent to Thibet and others to northern China or Cathay. In 1314, Clement V. appointed a Franciscan Father, Archbishop of Pekin. Another Franciscan succeeded him in 1330. In 1314, Friar Odoric started on a missionary tour. Having embarked on the Black Sea, he sailed for Trebizond, thence overland he passed through grand Armenia, and on to Tauris and Sultania. He pushed on towards India and reached Ormus. He then went by ship to Malabar, Cape Comorin, the islands Java and Ceylon. Had he been a nineteenth century Philistinc instead of a zealous fourteenth century Friar, the story of his travels and adventures would, no doubt, have been fully blazoned abroad. In 1330, John XXII. sent the Pallium to John de Core, Arehbishop of Sultania (the seat of the Emperor of Persia) by the Bishop of Colombo, Ceylon, and Thomas, Bishop of Seniscentia. Both were suffragans of the Archbishop of Sultania. Many similar facts might be mentioned ; but these, I think, will suffice to show that notwithstanding Dr. Dawson's high opinion of his authorities, "the attentive reader" is not likely to be as much "impressed" by the profundity of their research as he imagines. The "attentive reader" will realize the need of a safer guide in threading the mazes of past history, and will doubtless conclude that since so much intercourse was kept up between nations far apart, the general knowledge of geography could not have been so very vague and childlike.

The second objection to be answered is that the Gulf of St. Lawrence was not opened up until 1534, and I am challenged to produce a map prior to that date on which it is shown. I might say Dr. Dawson has saved me the trouble, he himself has produced two, Verazzano's and Maggiolo's. Mr. Beazley, in his "John and Sebastian Cabot," referred to a portolano of 1508, lately aequired by the British Museum, which showed the Gulf of St. Lawrence as a great inland sea. I have secured a photographic copy of the part which shows the new world, and as can be seen at a glance, all Dr. Dawson's maps and contentions based thereon, are not merely "waived aside," they are very effectively confuted. The map is reproduced herewith. (Fig. 2.) The Gulf is very
accurately placed, and some bold navigator must have gone far into its recesses. A comparison of its size with that of the Mediterranean will make this evident.

I'his map tends to confirm the contention of those who maintain the Portuguese entered the Gulf in 1500. Father Bressani, S.J., who came to Quebee in 1642, in an abridged relation of some Jesuit Missions in New France, says: "it is certain the French took possession of it (New France) in 1504. They made several voyages to it in 1508,1523 , 1524, 1534, etc." Father Martin, S.J., who translated this account into French, in an appendix says the Portuguese visited the River St. Lawrence in 1500 , and that in 1506 Jean Denis, of Honfleur, made a map of the Gulf of St. Lawrence. "1506, Jean Denis, habitant de IIonfleur, trace une Carte du Golfe St. Laurent"). True, we cannot produce that map, but who can tell how soon it may be unearthed? Bressani, in 1642, naturally had access to sources of information unknown to us, and he could not have had any wish to mislead those at whose instance he wrote. When therefore, he says, "it is certain the French took possession of New France in 1504," we have no reason to doubt his word. Equally when his translator asserts in a note that in a certain year a certain individual drew a map of the Gulf, we must suppose he had good authority for his statement.

We are now eertain the Gulf had been entered through the Straits of Belle Isle, which according to Dr. Dawson, are only twelve miles at their month, at least thirty-five years before Cartier's time. We can easily believe that Jean Denis entered by the wider straits (forty-two miles, to take Dr. Dawson's restricted measurement) a few years earlion

That Cabot entered the Gulf (unvittingent) a few years earlicr. placed beyond any reasonable doubt in the (ungly we grant) in 149\%, is refutation of the arguments therein in the Address. It is scareely a qualigo and $\mathrm{D}_{\mathrm{a}}$ Soncino, to reperat that the $\mathrm{G}_{\text {alf }}$ from the letters of PasCartier's time. The only proof attempted Gulf was not opened up until tion utterly incredible to one attempted of this assertion, an asserquented by Breton and Basque and Portughe the coast had been freings of men contemporary with and Portuguese, and who reads in writbay and river of the northern Cast that he searehed every inlet and cannot produce a map which shows the to find a passage across is, you Let us understond terms and the Gulf. that the Gulf was not accurately avoid equivocation. If it be meant rectly located, we may admit the surveyed, islands, rivers and bays corasserted the contrary. But anyt proposition. No one, I presume, ever into the maps of Maggiolo and Vone anxious to read his own view have opened up the Gulf very ext erazzano, will recognize that they have opened up the Gulf very extensively. (See figures 3 and 4.) In
to its 1 will

Fig. .-Vesconte de Maggiolo, A.D. 1527.


Fig. 4.-Verazzano, A.d. 1529.
the former, C. Grosso is Gaspé Head, as we shall show; the opening by it the St. Lawrence ; that to the right, the Straits of Belle Isle. Verazzano unmistakably gives P. E. Island, and calls it St. John, although unduly removed from the shore of Nova Scotia, and traces the lines of the Gulf almost up to Gaspé. To illustrate these more clearly let us consider two other mars given by Dr. Dawson in his paper of 1891, viz:-Gaspar Viegas (Fig. 5) and one from Kretschmer (Fig. 6). They are both fairly good maps of the Gulf, mueh more aceurate than several later ones. Dr. Dawson, who can find the "greater Magdalen" (it is only twenty miles long) no matter how far it may be out of its proper position, or howsoever orientated, will not surely exact absolute accuracy even when a map does not show his interesting big island. These maps are said to make the Gulf too small. That is only apparently true. Reduce an ordinary chart of the Gulf to the same size and their general accuracy will be made manifest.

Now let us examine Viegas' and the Kretschmer maps and we shall see how well known the Gulf must have been to sailors.

On both maps Cape Ray is most appropriately named C. da Volta, "the turning Cape," that is the point, where you turn into the Gulf. Following the north shore we see the outlines of St. George's Bay, then Bay of Islands called R. Hernoso, then the outlines of Bonne Bay. Continuing north we find an opening named on both maps $R$. da Traveca. This is as suggestive as C. da Volta, for it tells that this water or river leads across. Traveca, with C soft, now written Travessa, is a cross path, a traject, a laus. Hence R. da Traveca is a river path across. Across what? Or whither does it lead? It leads across to the ocean beyond, and is the first known name of the Straits of Belle Isle. The meaning is quite as clear as that of the Turning Cape, and proves that our eartographers were cognizant of the existence of an exit here from the Gulf.

The shore line is resumed on the north side of the Straits and we proceed around trending westward till we reach a river marked C. Coprido, that is Iong, or large river. This is either Esquimaux or St. Augustine's. Next we read on both maps Costacha. It is neither a river nor a cape, it means a level or smooth coast. Now there is a long streteh of level coast between the Esquimaux and little Mecattina rivers. Hence we are sure of our position, and we see how carefully the country had been examined. Pursuing our course we find Pegna or Small Bay. This is Wolf Bay where the Hudson Bay Company have a trading post. Then we reach R. Folhas, or Leafy River, the northern mouth, I think, of the St. Lawrence, as C. da Golfa, the
ng by Verrough lines y let 1891, They veral (it is coper tracy naps true. teral we


Fig. e.-Pomtegesba hiap from hretschmer.
"Head of the Gulf," is Table Head, 400 feet high on the Island of Anticosti. South of this we have Rio dos Fudos, the "River of the Bottom," or as we say, the head of the bay, viz., the St. Lawrence. Here again we are absolutely certain of our position, and we can realize how thoroughly the Gulf had been explored. How far the head waters had to ascertain that it was the ; but some one had gone up far enough point wo reach R. da Gente, River Fudos. Coming south from this many natives. Now we know that of the People, or where there are This is a well known fact, and our pos was around the Baie de Chaleur. we have R. S. Paulo. The only river is still certain. Continuing the Miramichi. Passing along we fiver worth noting on that shore is cating George's Bay. Finally we find S. Pedro, without doubt indias it often did, Cape North, for as reach C. Berta, clearly indicating, known. Compare these maps with yet the Straits of Canso were unthe shore line, and attend to the signichart of the Gulf whilst following of this reading will be apparent. Gulf had beris carefully explored. One will also be convincel that the Turning now to Maggiolo's map we find Rio de S. Paulo, and habited country. This, of course, corresponds to the Rio de Gente of Kretschmer's map. Hence whoever supplied to the Rio de Gente of Maggiolo's map must have gone up as supplied the information for. Dr. Dawson gives the gone up as far as Gaspé Head. Beazley says the date is 1516 . Iate of Maggiolo's map as 152\%. Mr. In either case the Gulf was well do not know which is the correct one. If we examine the well opened up before Cartier's time. shall find Conception Bay under its north of Cape Race (C. Rasso) we Bays are also given under other noper title. Trinity and Bona Vista draw the outlines of these bays, names. The cartographer does not Conception Bay," etc. Continuing leaves open lines and writes, "to Point. On Reinel's map, as well north we reach P. da Gama, Deer others of the same century, this $C$ on the so-called Cabot map, and on the entrance of the Straits of Belle Gama or P. da Gama, marks Bauld, at other times, it would appesle. Sometimes it is our Cape northern shore of the Straits. On Maggiolo's indicate the Cape on the Lewis and $P$. del Gado, which on Coggiolo's map it indicates Cape St. Maggiolo's is Cape Bauld. Between Cabot's map is Cape St. Lewis, on de Gama, Maggiolo leaves Between these names, $P$. del Gado and $P$.

[^1]levra de Pescarin," "To the Bay of Padian, ${ }^{1}$ the country of fisherics." He knew, therefore, the Straits of Belle Isle led into the great Gulf where so many fishermen plied their trade. Yet he has not traced the Gulf for us at its northern entrance. Whilst the lines of this map do not reveal his knowledge of the vast sea behind Newfoundland, his words proclaim it unmistakahly. Dr. Dawson cannot find any trace of P. E. Island, the St. John of Cabot, on any map prior to Champlain's second one. Two reasons may be assigned for this. First, he began his studies of the landfall with the intention of proving (as le lets us know in his paper of 1894) that P. E. Island was not Cabot's St. John. Secondly, whilst he can make all possible allowance for displacement both as regards latitude and longitude in the case of the Magdalen Islands, he insists on finding P. E. Island laid down with modern accuracy, or he will have none of it. This mental attitude is less than judicial. A glance at Verazzano's map, especially after reading what we have proved regarding the way it opens up the Gulf, will reveal beyond doubt P. E. Island called by its old name, St. John.

Viegas' and Kretschmer's maps give it more accurately located in many respects, yet brought too far out of the Gulf. This manner of displaeing islands is quite common on old maps. Kretschmer names it St. John. It is idle to pretend that this island is Cape Breton. We have in both instances Cape Breton marked on the mainland. For scores of years Cape Breton denoted now the whole island, now the northern part of it. On both maps under consideration it indicates Cape North unduly easted. This can be seen from its bearings to Cape Ray on the Newfoundland coast.

Again, consider the length of the Straits dividing this island from the mainland. Both in relative length and their crescent form, they agree exactly with the Straits of Northumberland, whilst by no stretch of the imagination can they be made to bear any resemblance to the Straits of Canso. The latter are only eighteen miles long, they begin and end in deep bays of which there is not the faintest indication on the maps. Moreover the northern end of San Joa will be seen to agree fairly well in its bearings to Rio de Gente (Baic de Chaleur).

The shape too, of San Joa resembles that of P. E. Island, especially as given on maps of the seventeenth eentury, whilst it bears no likeness to Cape Breton.

If San Joa be Cape Breton Island, we are asked to believe that the old name of the Breton's Cape seen on Verazzano's and Maggiolo's maps, and other early ones, was carried west to the shores of Nova Scotia. Neither Viegas nor Kretschmer was so ignorant as to be guilty
of this. Dr. Dawson's theories make too large a demand on our good opinion of the elementary knowledge of early cartographers. Even if we admit, and it is not a fact, that in those days Cape Breton marked the headland of that name and not the northern part of the island, still these careful map drawers must have carried the name more than seventy miles west to Cape Canso. This distance is of no account when one wishes to make a point. Dr. Dawson speaks of Cape Canso in relation to Cape Breton headland, as "the neighbouring point of Nova Scotia."

Again, if San Joa be Cape Breton, how were the Straits of Canso discovered? The map drawer scarcely entered by them, he must have gone out through them. As he made the circuit of the Gulf we must suppose he entered Cabot's Straits, and went along the north shore examining and naming rivers, he eventually found the St. Lawrence and ascerassures us of this, as does also the C. do golfa, "the head of the gulf." Coming down southward he saw Baie de Chaleur and named it gulf." of the People, and Miramichi which de Chaleur and named it Biver instead of following the coast of called St. Paul's River. Why for what he could not see, viz., New Brunswick he should strike out to East Point, and then instead of Cape, P. E. Island, and sail along entrance, should dash down south trending northward to his place of Miramiehi and Baie de Chaleur (fonly to find himself back between called Straits of Canso begin), is for on his map that is where the sowonder when he discovered thet is more than a Chinese puzzle. Small away from a certain point he watter having sailed two hundred miles crawling out by the smallest hole back to it again, he should feel like Straits of Canso. This is no fan possible, and thus come forth by the the experience of that adventurous sketch, this is what must have been Gulf, and out by Canso, as his map navigator when he sailed round the thlat San Joa is Cape Breton. On the Island everything is plain and inthe other hand, taking it for P. E. trend of the coast from Cape Gaspe North. In view of many similar to Shediac, is carried on to Cape erous early maps, this need

Finally, if we read the not excite our wonder. southeastern shore we find three on the Kretschmer map along the Bertoes, "Bay of the Bretons." We named, then we come to Bi dos we are, viz: at St. Peter's Bay. We now know with certainty where the southern mouth of the Straits of there can be no doubt. Now Consequently one map-drawer did not Canso is just west of this Bay.

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lad not sailed through the Straits, and most assuredly the name Cine Breton on the map does not mark any point in Nova Scotia, but is, where it always was, on the iskand of that name. Evidently then San Joa is P. E. Island. We can well understand why Mr. Harrisse should fail to recognize in San Joa, Cape Breton Island.
'Io still further illustrate these maps, and to show J. L. Island on two others, also Portuguese, of a later date, we reproduce here the map of Diego Homem, 153 , and that of Lazaro Luis, 1563. Although they both bear witness to a very considerable knowledge of the Gulf, neither shows the Straits of Canso, and both show P. E. Island; Homem places it ahnost in its true position, whilst Luis brings it too far north. But there can be no mistaking it in either ease. The shape of Kretschmers Sial Joa is retained by Lais thus showing the identity of the two. Homem gives the true shape much more accurately and calls it ille de Sabloes, a name which still lingers in the De Sable shore and river. The name, judging by any part of its shore, is most appropriate to P. E. Island. It is often spoken of as "a sand bank," by those who have seen ouly the beautiful sandy beaches which form an almost unbroken girdle for the rich loany soil of the island.

We do not thi $k$ any one will seriously attempt to dispute the clear reading of these maps; not only does the location proclaim the truth of our contention, but in both eases the Magdalen group is given, ns is also St. Paul Island. Luis does not name any of the islands, but he gives the larger Magdalen considerable prominence, and shows the smaller ones. Homem names the larger Magdalen Isla de fenefaus, and several small conventional ones Brion. To these shouk be added the Cabot map, 154t, which shows and names P. E. Island St. John. It would be the merest trifling to contend that it is the Magdalen group.

We ask any one sincerely interested in this question to sit down quietly and examine and collate the various maps to shich we have referred. We renture to request them to forget the opinions of men of great name, and to read and judge for themselves how far the explanations here offered are founded on solid reasons. Could the explorers have mistrken some little ereek or inlet on the shores of P. E. Island, or Southern New Brunswick for the head river of the great bay? What point on these shores did they dignify with the title of Big Cape, and Head of the Gulf? Bear in mind that we know as a matter of fact that the "place, or land, and river of the people," was around the Baic de Chaleur. Are we to suppose the map drawers glanced in at the Gulf and then drew a small circle to represent it, putting down mames at random? Surely not. A close study reveals that they prob-
ably entered by Cape Ray, coasted by St. Ceorge's Bay, Bay of Islands, Bonne Bay, went further north, then crossed the mouth of the Straits of Belle Isle and coasted around to the St. Lawrence, which they ascertained was the head of the bay and so named it. Continuing southward they investigated the two large inlets, Baic de Chaleur, where they saw the San Joa of Kretschmer's As we have proved conelusively that Island, the navigator passed down camnot possibly be Cape Breton out by Cape North.

I:c. 8.-Mat of Lazaro luis, A.d. 1563.
I trust no one will think it silly presumption on my part to differ from so many learned persons in the reading of these maps. A fairly intimate local knowledge, the careful gathering up of clews supplied by names on the maps, and many hours of patient study examining and collating should entitle one to speak. It is not improbable the course around the Gulf may have been the same as that of John Cabot, but that is not a question of mueh importance. The main fact is, we have produced six maps, the earliest at least one hund ed fact is, we have prolatest fifty-nine years, prior to Champlain's and and three years, the clearly show P. E. Island, three of whian's second map, all of which

St. John. If evidence can settle any question the existence of P. E. Island on early maps, has been put beyond controversy. We might add Mercator's and Hondius' maps to the foregoing.

The arguments in the Address which went to show how every fact related by Pasqualigo and Da Soncino proclaimed a landfall within the Gulf, need not be repeated. The criticism of Dr. Dawson does not refute them. He lias produced, as he tells us, a "catena" of authorities regarding the climate and soil of Cape Breton. Yes, but no chain is stronger than its weakest link. In this chain the weak link is where the strong one should be, if it is to be of service to his cause. We know that John Cabot could not have examined the ground to any extent, he only remained on shore a short time, as we are expressly told. Hence the coast on which he landed must have been good soil. This is not the case with the soil around about the headland Cape Breton, as Dr. Dawson admits. Hence it could not have been the landfall.

It is somewhat surprising that so keen on observer as Dr. Dawson should fall into the mistake of taking the words "upon the very Cape," in Hakluyt's account of the voyage of the "Marigold," as meaning the headland Cape Breton. (Trans. 1897, p. 201). It is safe to say it would be almost a physical impossibility to land on that point. Certainly no one except a drowning man would attempt it, and the crew of the "Marigold" were not in that extremity. The incident related is a strong confirmation of what was said in the Address abont Cabots experience. We must bear in mind that the restriction of the name Cape Breton to the headland so marked on modern maps, was not known in 1593, in fact it is not generally known to-day. Seventy-five per cent of the inhabitants of Nova Scotia will tell you there is no such Cape. Several well educated gentlemen who live on Cape Breton Island when questioned by me replied there was no Cape Breton except the Island. On early maps, and in the minds of early navigators, Cape Breton stood for all the northern part of the Island, or for Cape North, as seen on Viegas' and Kretschmer's maps. Like Cabot's ship, the "Marigold" had "wandered much," and finally made Cape Breton Island, evidently within the Gulf. Of this the description alone leaves no doubt. Some of the erew landed "on the very Cape," then they sailed four leagues to the west, and went ashore for water. Precisely, they landed in St. Lawrence Bay, about four leagues west of Cape North on the Gulf shore, where they found abundance of good water, and where they met Indians. The description, too, of the trees and berries is quite applicable to the comntry around this bay, but not to the land around the headland Cape Breton. Oaks never grew there as can be easily ascer-

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tained, but they did grow, and grow yet, on the gulf shore. Again, it is contrary to what is well known regarding the habits of the Indians to maintain that they dwelt on the ocean seaboard. They never did.

It is unnecessary to say more on this point. If the patient student will read the Address in conjunction with this paper, and carefully follow the explanation of the maps to which we refer, he will, I think, come to the conclusion that the Cabot landfall was within the Gulf, and named St. John.

The third objection to be met has reference to Cosa's map, on which Cabot's discoveries first appear. A careless expression of mine is made, in Dr. Dawson's pa er, the occasion of a passing criticism which is not altogether unstrained. The Address said the northern coast line alone was Cabot's, "the map is the offspring of Cosa's imacination." Perhaps I should have said, the map, or coloured posa's imaginaposedly representing the shore in the northern part oured portion supIt seemed, however, that the reader would understand North America. not made to the map in general, but only to understand reference was that enough.

The Address stated that Cosa had procured a copy of Cabot's chart, and joined it to his map making it run east and west, instead of north and south. Proofs which, so far as I have seen, no one has attempted to confute, based on reason and facts inherent in the chart were advanced. If the theory was novel, the arguments were not far-fetched. Dr. Dawson thinks no scale of the chart could be found, as, he stoutly maintains, no scale was employed. To defend his views of the map he is compelled to class the drawings of John Cabot with those, not of a school boy, but of a toddler in the mursery. We hold Cabot had some sense of proportion, else he never would have been a navigator. It is objected, too, that the basis on which the argument for the scale rests is arbitrary. Some might be entitled to make that or the scale rests Dr. Dawson. In his paper published to make that objection, but not locates the southernmost English flag in Transactions for i89t, he cally the same latitude as I do. Hag, and Cavo Descubierto in practithis nature one is justified in assumingart from that, in calculations of and which the conelusions assuming a seale as a working hypothesis, pothesis, but a fact. Nows afterwards prove to be no longer an hychart, as is mimutely demonstrated in the scale, and by orientating the reading it disappear, the whole and in the Address, all difficulties in ligible, and islands are found in thio proper parts are made intelin claiming that we have passed from thoper position, we are justified a passed from the stage of hypothesis to that of
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(0p. p. 451.)
Fig. 9.-From Ptolemy.
[o'brien]
Teans. R. S. C., 1899

(Op. p. 45t.)
actual proof. We ask those interested in the question to read carefully the arguments in the Address. It may appear at first sight arbitrary, to some, perhaps, reckless, to assert La Cosa tacked on Cabot's chart in a straight line, rather that at right angles to his own map. Dr. Dawsn thinks it the "quintessence of hypothetical geography." Scareely, since we have an exact counterpart of it in Ptolemy. In his day the British Islands were more familiar to him and the learned world, than North America was to scholars in 1500 . Yet he set Scotland at right angles to the north of England, instead of continuing it in a straight line. The reproduction from Tabula 8 of Europe (Fig. 9) proves this. It is not necessary to print a map of Great Britain for the purpose of comparison.

I do not undertake to explain why Ptolemy so placed Scotland. It may be, as Dr. Dawson argues in regard to La Cosa, due to an "exaggeration of the east and west coast lines," seen, as he says, on some carly charts. Whilst I do not know the cause, or reason, for this misplacement, I know the fact, that to make Ptolemy's map of Great Britain intelligible and in keeping with our ideas of geography, we must wheel Scotland up, placing it north and south. To do so will not be the essence, much less the "quintessence of hypothetical geography." Equally am I unable to explain why La Cosa misplaced Cabot's chart, but equally am I certain that we must treat it as we treat Ptolemy's Scotand. Then, and then only, does it become intelligible, and in keeping with what we know to have been Cabot's northward coasting on his second voyage.

In the Address unsuspected testimony from six different sources was adduced to show that Cabot had gone as far north as 67 or 67.30 , " in the reign of Henry VII." That was during the voyage of 1498. I am not aware whether Dr. Dawson admits these proofs or not. They are, however, proofs which cannot be gainsaid. As Cabot was avowedly secking an outlet to the northwest, and as he could not find one until he had reached Cape Chidley, he of course entered Ungara Bay. We need not, I take it, emphasize this. Keeping on his course he would be led into Hudson's Bay, and in seeking an outlet to the west he would encounter land at about 67.30 "trending to the east," where he turned back and ran down south to about 36.30. This is the story and the course of the second voyage handed down to us on authority that is not likely to be successfully confuted. Moreover, Francis Bacon tells us that not only did Cabot sail on the "other side of Terra de Labrador, until he came to the latitude of sixty-seven degrees and a half," but also he "made a card thereof." 1 This and the other testi-

[^2]monies addneed in the Address open up the whole of IIudson's Bay and Strait "one hundred and ten years hofore Henry Hudson," as effectively, and for some, perhaps, more conelusively, than does my orientation of C'abot's chart. So Dr. Dawson should chide them rather than me for publishing this item of geographical knowledge. I merely republished it, and it appears to have been not an unnecessary labour.

We do not wish to think Dr. Dawson desires the greater part of page 173 of his paper to be taken in a serious mood, when lie shows what dire consequences would follow to our Dominion were we to draw a straight line north from Cape Henry to Cape Chidley. Cabot was not concerned about longitudes, his object was to discover an outlet to Cipango, and he showed it was not to be found between an outlet 36.30 and 67.30 of latitude. was not to be found between the points The example of Ptolemy's misplacing of Scotland shows there is no antecedent impossibility that La Cosa did not place aright Cabot's chart. We will find Ptolemy's Scotland fairly accurate when we orientate it, therefore, he had much accurate information. Leave La Cosa's map as it is given, and no information, no sense, no indication of even an clementary idea of proportion can be found in it. Yea, more, well defined islands bearing names cannot by any possibility be

Treat it as we must treat Ptolemy's Scotlind, thet is, place it aright, and at once everything is intelligible. Proportion, the first element of map drawing, is made manifest; the various islands appear in almost their true latitudes, that peculiarly shaped and peculiarly placed one, La Trenidat, the counterpart of which one would seareh for in vain, falls into the position assigned it by our would search too, do those two small ones, mearigned it by our best charts. So, unusually distinctive, and can be cavo d'Inglaterra, which are also below Cape Chidley. be found nowhere else except a little Another and mos chart should rum north some of which had not been, so far taken from the names thereon, If my interpretation of those ar as I know, previously understood. will be increased, and importames is correct, our store of knowledge map, or rather Cabot's portant clue's will be supplied. All admit the thing which can throw limh it, to be obscure at least. Surely anyprove that some particular then it should be welcomed, even did it truth will be worth more to us in would be no longer tenable. The views at its expense. The to us in the end than any trimmph of our views at its expense. The Address quoted from an old log book to show
how it was customary to note any natural peculiarity of rock or headland, or hillock along the coast. The same custom prevails to-day as can be seen from reading the "Newfoundland and Labrador Pilot." If it can be shown that several of the words on Cabot's chart indicate striking natural peculiarities similar to those quoted in the Address from an old $\log$ book, or to those which can be cited from modern sail ag directions, no one will be disposed to make light of the value to be derived from their interpretation. The words are on the chart, placed there either by La Yosa or Cabot. They are more tangible than the rariations of unknown astrolabes, and their meaning of more service in tracing Cabot's course than surmises, based on conjectures, as to the probable effect of those variations. One short paragraph giving the truo meaning of those words would be productive of more accurate information, than pages innumerable of suppositions which never pass, frequently do not even reach the stage of hypothesis.

Owing to the similarity of carly Spanish to the Latin language, it was stated in Appendix $C$ of the Address that La Cosa adopted Spanish or Latin terms. In fact, I belicve now all the words were Spanish, but some of them could be called Latin also.

Illustrations of their meaning were quoted in Appendix C from cognate languages, a very natural and justifiable course. Now if the meaning, given in tho Address, of Agron, Argair and other words on the chart, be correct, we have eight remarkable features of the coast described for us. It was shown in the Address that by applying the scale which locates so well the islands, ete., these eight remarkable features would be approximately located in the vicinity of natural peculiaritics described in the "Newfoundland and Labrador Pilot," in words which ummistakably correspond. The force of this argument can be broken only by proving incorrect the meanings given, or by finding a succession of corresponding features clsewhere.

A scholar anxious to arrive at the truth should carcfully investigate every source of information. I do not regret the hours spent in endeavouring to open up this one. Dr. Dawson, however, does not look upon it as worthy of consideration. The procedure is, he avers, based on the hypothesis that La Cosa was a classic scholar. Now, whether La Cosa was, or was not, a classic scholar is scarcely to the point. The words are there on his map, they were meant to express something. What was it? To what language do they belong? English? German? Low Dutch? Spanish? Italian? Latin? Surely it is not un idle task to attempt to decipher them. To shirk this labour does not appear quite in line with the remarkable industry displayed by Dr.

Dawson in fields less profitable. I fear his excuse for inaction, viz., "It will be neeessary to cite some authority for La Cosa's classical attainments before discussing his etymologies," will be found disappointing. It might satisfy the galleries, but it will not convince the boxes. If a man makes use of compound words which express an intelligible idea, we have proof, at first hand, that he has a fair knowledge of their separate meanings, and a deftness in compounding them. In this way La Cosa has given testimony to his attainments. We know, moreover, that cartography did not come before "Humanities" in the schools frequented by La Cosa. It is scarcely necessary to add that the "Humanities" were thoroughly classical.

The method which I endeavoured to follow in the Address, and wheh I have continued in this paper, is based on the accepted canons of interpretation. The anthenticity and reliability of documents such as Pasqualigo's and Da Soncino's letters, as well as the various testimonies regarding the highest degree of latitude attained by Cabot on his second voyage, were established. From the two first, the landfall was shown to be on the gulf shore of Cape Breton, and P. E. Island the island seen on the same day, and named St. John. This was done by simply taking the words of the text in their plain meaning, down to the minutest detail. When Cabot says he sailed "three hundred leagues" along the coast newly discovered, we do not make it three hundred miles, nor do we accuse the writers of ragueness of meaning regarding well known localities. We show how every detail of these letters is verified in our account of the landfall. So far as I have seen, no one else has attempted to harmonize those unsuspected testimonies with their theory, no doubt for the very sufficient reason that it cannot be done. It can no longer be held that "the country of Tanais" was an indefinitely located district in Eastern Asia for such men as Cabot, Da Soncino and the Duke of Milan, or in fact for Itclians in general in the fifteenth century, neither can it be held that the Gulf of St. Lawrence was not opened up before Cartier's time. The proofs brought forward in this paper settle conelusively these points, and add, if it were needed, additional strength to the conelusions reached in the Address. By pursuing this course we have never found it necessary to make any accusations against either the competency or honesty of our authorities, in order to discount the foree of their testimony. By orientating Cabot's chart we do not imply, much less assert, that La Cosa was not a celebrated cartographer ; no one will deny the value of Ptolemy's maps, yet even sehool children will proclaim (I know it from laving shown them his Great Britain) that Scotland is misplaced.

Great Homer nods occasionally, but he remains Great Homer still. So it is with La Cosa. It is, however, to be borne in mind that his map of 1500 was never reproduced, and was quickly lost sight of in Spain.

The glory of having been the first to open up Hudson Straits and Bay belongs to John Cabot. The witnesses quoted in the Address were competent ones, they could not have had any sinister object in view in writing as they did. They set down as a well known fact, not as a surmise, or as a debatable question, that Cabot in his seareh for a northwest passage to the east, penetrated the frozen regions as far as the sixtyseventh degree and a half. The chart, read by the seale given in the Address, confirms their testimony. Indeed, it is quite probable that it was a copy of this very chart which "hung in the Queen's Majesty's Privie Gallerie at Whitehall," and which Sir Humphrey Gilbert saw, and to which Francis Bacon refers. Thus both by internal and external evidence we prove that our reading of Cabot's chart is correct, and the course of the second voyage is made to depend, like that of the first, on evidence, not conjecture.


[^0]:    ${ }^{1}$ Storia della Letteratura Italiana, Tom. VI.
    Sec. II., 1899. 28.

[^1]:    Gado is Seal Point.

[^2]:    ${ }^{1}$ History of the Reigne of King IIenry the Seventh, pp. I!6, 197.

