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The Site of the Lost Colony of Greenland Determined, and Pre-Columbian Discoveries of America Confirmed

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for the Indian Ocean.' 1870. Donor A. G. Findlay, Esq. 'A Revised Catalogue of the Birds of China, &c.' By R. Swinhoe, 1871. Donor the author. Bronze Medallion of Captain Franklin, R.N., by David. 1820. Donor Dr. Gray.

ACCESSIONS TO THE MAP-ROOM SINCE THE LAST MEETING OF MAY 12TH, 1873.—Maps and Atlases of Russia in Europe and Asia, in Russian characters, viz. :—Map of Central Asia, on 4 sheets, published at St. Petersburg. Scale,  $\frac{1}{4200000}$ ; Topographical Map of the Mining Districts of the Altai, Central Asia, on 23 sheets. Scale,  $\frac{1}{4200000}$ ; Atlas of a part of the River Dnieper, from the Town of Kremenchuga to Limana, on 35 sheets; Atlas of part of the Northern Dvina River from Ustivgvel to Archangel, on 46 sheets; and same on larger scale. Part I., on 27 sheets, Atlas of the River Volga; various parts of ditto, on 50 sheets; the same on enlarged scale, on 26 sheets. By purchase. MS. Drawing of a Portion of the Runn of Cutch. Scale, 1 inch = 200 yards. Sketch-map of India, showing the Lines of Railway and Electric Telegraph, on 1 sheet. Scale, 1 inch = 70 miles. Through Mr. H. W. Bates. Wyld's Map of Khiva and the Surrounding Country, on 1 sheet. Scale, 1 inch = 50 miles. Presented by the author. Australia:—A Map of the Country west of the Telegraph-line, showing the newly-discovered Lake of Amadeus. By Mr. E. Giles; and his track to the same, in 1872. Presented by Baron F. von Mueller, M.D., F.R.S. Maps of Belgium, on 154 sheets; the Government Survey on various scales. By purchase. Australia.—Map of the Discoveries of E. Giles, Esq., showing Lake Amadeus, &c. Presented by Guido Cora, Esq. Map of Khiva, photo-zincographed under the superintendence of Lieutenant-Colonel Parsons, R.E. Office at Southampton. Presented through Captain C. W. Wilson, R.E.

The following paper was then read by the Author :—

*The Site of the Lost Colony of Greenland determined, and pre-Columbian Discoveries of America confirmed.* By R. H. MAJOR, Esq., Secretary R.G.S.

[ABSTRACT.]

In this paper Mr. Major vindicated the authenticity of the voyages of the two Venetian brothers Nicoló and Antonio Zeno to the Northern Seas at the close of the fourteenth century. About the year 1389, Nicoló Zeno, a member of one of the noblest and most ancient families of Venice, having ample means, went at his own expense on a voyage of curiosity to the North. He was wrecked on the Feroe Islands, but fortunately fell in with Henry Sinclair, Earl of Orkney and

Caithness, who took him into his service as pilot of his fleet. After a year or two, Nicoló Zeno sent a letter to his brother Antonio, inviting him to join him, which he did; and it is from that letter of Nicoló's, and subsequent letters from Antonio to a third brother Carlo, that the narrative of the movements of the two brothers is derived. The story, as we have it, comprises, in the first instance, some insignificant expeditions in the Feroe and Shetland groups; but fortunately treats more fully of two much more important subjects, viz., a visit by Nicoló Zeno to Greenland, and a communication by Antonio Zeno of the report of some fishermen who had discovered some populous countries in the west, which were beyond all question North America.

An account of these voyages had been written by Antonio, but a descendant of his, named Nicoló, had when a boy, from ignorance of its importance, torn it up. Fortunately some letters of the two brothers survived, and in later years Nicoló Zeno, junior, who by that time had become a member of the Council of Ten in the Venetian Republic, realising the mischief he had done in his youth, brought these letters together into a narrative and published it in Venice in 1558. He also found in the palace a map made by his ancestors, which had become rotten with age and damp, of which he made a copy, but unfortunately added to it his own geographical conclusions from the reading of the letters, and, in so doing, vitiated in a most deplorable manner a precious document, which, even at that comparatively late period, was far in advance of the existing state of geographical knowledge. So serious was the effect of his unfortunate mistake, that it misled geographers who had at that time no means of correcting the errors thus placed before them, and, when the knowledge of the geography of the North advanced, the map exhibited so many deviations from accuracy, that great discredit was thrown both upon it and upon the narrative. At length, in 1836, Captain Zahrtmann, the hydrographer of the Danish Navy, wrote a learned and elaborate paper to show that the whole story was a "tissue of fiction." This was printed in the fifth volume of the 'Journal of the Royal Geographical Society.' As, however, side by side with the gross errors of the map, there existed information of the most surprising kind in accordance with recent geographical discoveries, especially in the delineation of the continent of Greenland, there still remained some who held their judgment in suspense, and the document remained simply, as the learned John Pinkerton has described it, "one of the greatest puzzles in the whole circle of literature." The truth was, that no one had as yet realised what Mr. Major here called attention to, viz., the ignorant but per-

fectly honest intermeddling of Nicolás Zeno, the younger, with the valuable map which had come down to him from his ancestors. Mr. Major clears up this puzzle by new but very simple processes of reasoning, and converts the very faults of the map into an unanswerable proof of the authenticity of the old narrative. It seems never before to have struck any one that the names of places in the North were received by the old Venetian navigator from the lips of Northern men, and written down by him in such fashion as the sounds would suggest to his Southern ears and mode of writing. In endeavouring to fix the localities thus represented, commentators have fallen into the egregious blunder of taking the names *litteratim* as they were written down, and then searching in the Northern seas for places like them in their written form ; whereas the common-sense process is to follow strictly the narrative, and see what names of places on the route tally in *sound* with those which have been written down. By observing this rule Mr. Major has succeeded in tracing, in accordance with modern geography, all the places visited by the old traveller, in conformity with the bearings given in the narrative. This circumstance, combined with the fact that the map, reconstructed by Nicolás Zeno, junior, is often grossly at variance with the correct geography of the text, proves to demonstration that the narrative could not by any possibility have been a concoction of his own, but must have come into his hands from a true and genuine source ; for, as the narrative and the map were both first given to the world by him, and as the spelling of the names are alike in both, it is clear that the man who could so grossly misrepresent on a map the geography of the text could never have been the author of a narrative, the geographical accuracy of which bears the test of comparison with accurate maps of modern times. It is, on the same grounds, equally clear that the discrepancies have arisen from his own misreading of the narrative in an honest intention to make the map as useful as he could. The distorted spelling of the names is another proof that they were derived from personal intercourse with the Northerners ; for, if Nicolás Zeno had taken them from either MS. or printed Northern sources, the names would naturally have been copied by him in their Northern form. Mr. Major did not, however, content himself with vindicating the truth of these voyages by internal evidence alone. In Nicolás Zeno senior's visit to Greenland there is a very interesting description of a monastery dedicated to St. Thomas, the cells of which were heated from a natural spring of hot water, which was also used by the monks for dressing their meat and baking their bread. The monks had likewise gardens covered over in the winter time and warmed.

by the same means, so that they were able to produce flowers, and fruits and herbs, the same as if they lived in a temperate climate. Many other advantages are described as accruing to the monks from their judicious employment of this hot water. In corroboration of this fact, and its valuable bearing on that much-vexed question the site of the lost Scandinavian colony in Greenland, Mr. Major has adduced the testimony of a Greenlander, named Ivar Bardsen, who in the fourteenth century was steward to the Bishopric of Garda, in the East Bygd, that portion of the colony the site of which has been so much disputed. Ivar Bardsen has left sailing directions for reaching the colony from Iceland, and has also given us a detailed topography of the country. The credibility of this valuable document has also been impugned, and for the following reason. The sailing directions say that a course due west from Iceland will bring a ship to some large rocks, called Gunnbjorn's Skerries, which had become so clogged with the ice that had come down from the north, that the sailor must then take a south-west course to clear the ice, after which a tack to the north-west would bring him to the colony. As, however, no one of late years could find these rocks, discredit has been thrown upon the entire document. Mr. Major has reinstated the credit of Ivar Bardsen by a discovery of his own. In the 1507 edition of Ptolemy is a map by one Johann Ruysch, in which, lying midway between Iceland and Greenland, as indicated by Bardsen, is an island against which stands the following legend:—"Insula hæc anno Domini 1456 fuit totaliter combusta;" and, further, Mr. Major has found on Dutch maps, of about the year 1700, the reef produced by this volcanic upheaval, laid down as about 60 miles long by some 25 broad, and bearing the name of Gombar Scheer, a manifest synonym for Gunnbjorn's Skerries. There are soundings at 25 fathoms at the north and south ends of the reef, the nearest soundings further north being from 70 to 100 fathoms. The validity of Ivar Bardsen's sailing directions being thus re-established, Mr. Major proceeded to show the value of his chorography. By the sailing directions referred to, Bardsen brings us to a promontory called Hvarf, which means a "turning point." From this point eastward he leads us by three great leaps along vast ranges of uninhabited coast, until we come to a part where we can go no farther for the ice and snow. He then returns to Hvarf, and proceeds westwards to specify the various fjords and sites of churches in the East Bygd, the names of which are distinctly recognisable from the Sagas and the other chorographies; but, as he approaches the end of his enumeration of the localities, it is observable that he says "further north" is such a place, yet "further north" is such another

place, and so on till you come to the end of the East Bygd. Mr. Major here pointed out for the first time, that, in this case, we have an unanswerable demonstration of the true site of the long lost East Bygd; for, since eastwards from Hvarf leads to the north, where you can go no further for the ice and snow, and westwards from Hvarf leads to places which are yet "more north," and still "more north," it follows of necessity that Hvarf must be a point in the south of Greenland, and that the East Bygd lies immediately to the west of it—*i. e.* on the south-west coast of Greenland. This result being gained, Mr. Major showed how Ivar Bardsen corroborated Zeno. After mentioning a monastery dedicated to St. Olaus, he says that in a neighbouring fjord are some small islands abounding in hot water. These are, no doubt, the hot springs of Ounartok, near which some remains of the buildings of the old colonists have been found, and Mr. Major has ascertained from Dr. Rink, the late Inspector of South Greenland, that there are no other hot springs, to his knowledge, in the district of Julianashaab, which is now definitely proved to be the site of the ancient colony. The position of Ounartok coincides admirably with the site of the monastery in Ivar Bardsen's chorography, and this point being established may serve as a basis for tracing the topography of the entire colony. The difference between the names of St. Olaus and St. Thomas given by Zeno and Ivar Bardsen to the same monastery is easily explainable, for the strange northern name of St. Olaus would sound to the southern ear of the Venetian very like St. Thomas. But not only does Bardsen corroborate Zeno, but Zeno corroborates Bardsen. On the remarkable delineation of Greenland in the Zeno map we find laid down, in the position corresponding with Bardsen's Hvarf, the promontory of "Avorf," which is, doubtless, the Southerner's mode of rendering the Northern word. Antonio Zeno remained in the service of Earl Sinclair ten years after the death of his brother Nicoló, and the most interesting fact which survives to us, as coming from him, is the report of some fishermen who had discovered some populous countries to the west, which were, beyond all question, North America. They found Latin books in the possession of one of the chiefs; but these were no longer understood. The people made beer, which was "a kind of drink that North people take as we do wine." Their foreign intercourse was with Greenland, whence they imported furs, brimstone, and pitch. All this is in harmony with what we know of the Scandinavian settlements in North America in pre-Columbian times, and the fishermen's report is a simple résumé of the knowledge acquired by the Northmen in their expeditions to the west and south-west.

It was in the year 1001 that North America was discovered by Lief, son of Eric the Red. The tracts of country then discovered were called Helluland, *i. e.* Slate Land, supposed to be Newfoundland; Markland, *i. e.* Woodland, supposed to be Nova Scotia; and Vinland or Vineland. There is much uncertainty about the two former, but the site of Vinland is less problematical; for, as we learn from one of the old writers that the length of the day was nine hours, it gives us the latitude of  $41^{\circ}$ ; and whereas the name was given by the old discoverers from finding the vine growing wild there, the more recent English discoverers, for the same reason, but quite independently, gave the name of Martha's Vineyard to the large island close off the coast, in lat.  $41^{\circ} 23'$ .

There is one locality on the Zeno map which has given rise to great perplexity. It is a large island called Icaria, lying where certainly no island exists, at an equal distance between Iceland, Frisland, or the Feroe Islands, and Estotiland, supposed to be Newfoundland. Many writers have imagined it to be some part of America, but Johann Reinhold Forster was the first to suggest that it meant Kerry, and Mr. Major proved that he was right, although by reasonings that Forster had not adduced.

An expedition was organised by Earl Sinclair for the verification of the fishermen's story, but, after leaving the Feroe Islands for the west, and when well out at sea, they were driven they knew not whither, by a storm which lasted eight days. After the storm abated they discovered what is described in the original Italian as "da Ponente terra." Now this expression is susceptible of two renderings—either that they came "upon an island to the westward," or "upon an island on its western side;" but as, when repulsed by the natives, they sailed round about the island and came into a harbour on its eastern side, it is manifest that the harbour which they first entered was on the west, and in a position corresponding exactly with Kerry in Ireland. This peculiar point of arrival, and the name Icaria, which at that place they were told was the name of the country, the conduct of the natives, who would not allow them to land, and who, as the fleet made its way northwards along the east coast of the island, pursued it along the hill-tops and howled the strangers off the shore, all go to show that Kerry and Icaria are identical. After leaving the north point of the island the fleet sailed six days to the westward without seeing land—a fact which accords with the situation of Ireland, but not with any part of America, or any other country otherwise answering the conditions. The anomalous position of the island on the map, whether due to Antonio Zeno or to the handiwork of his descendant Nicolò

Zeno in touching up the map, is easily explained by the entire ignorance of the former as to where the fleet was after being beaten about for eight days by the storm. With this episode, and the return of the remnant of the fleet to Frisland, the Zeno narrative virtually concludes. The many riddles which it embodies have, at length, as Mr. Major claims, met with a complete solution; and if the realities which he has detected had been made clear to people's minds, as they easily might have been, three hundred years ago, Martin Frobisher would have avoided the blunder of taking Greenland for Zeno's Frisland, which meant the Feroe Islands; a host of learned commentators during that period would have been saved from confusing themselves and others by wild speculations; the site of the lost Greenland colony would have been established long ago on the highest possible authority; the kings of Denmark, from Frederic II. downwards, would have been spared the necessity of sending out a great number of unsuccessful expeditions; many an elaborate work, from the pens of some of the most illustrious literati in Europe, would have been rendered superfluous; and the name of a noble gentleman, occupying the exalted position of one of the Council of Ten in the Republic of Venice, would have been protected from the unwarrantable and infamous charge of being guilty of falsehood and forgery.

The paper will be published *in extenso* in the 'Journal' of the Society.

The PRESIDENT said the paper, notwithstanding its length, was only an abridgment of the results of very extensive and important geographical research. It required serious study to master all the details and facts connected with the discovery of Greenland, which linked itself to some of the most interesting pages of history. One of the principal reflections suggested by Mr. Major's paper was the important part which accident, blind chance, and circumstances of the most trivial and apparently most fortuitous kind, seemed to have played in the history of mankind in the discovery of unknown lands. It was now known that the discovery of North America was really made in the tenth century, by a Norwegian; but, to all intents, for the following six hundred years the knowledge of the continent, which has recently had such powerful influence on the destinies of Europe, was lost to the world. The discovery of Japan and other countries was also remarkable for the apparent insignificance of the facts which led to it. It was necessary, in historical investigations of this kind, to enter into many details; but they all had an important bearing upon the history of the human race. He trusted that some of the members present would be good enough to supply, from personal knowledge, valuable information concerning Greenland, Iceland, and those regions.

Admiral Sir GEORGE BACK said he was not prepared to speak on a subject, a thorough knowledge of which required such great research. The late Sir John Barrow (the very source of modern Polar discovery) had referred to the lost colonies of Greenland in an able work which he had published a long time ago. There were two colonies, and the western one indicated by Mr. Major was actually seen by that good man Hans Egede in 1721. The eastern one,



established by Eric Raude in 983, prospered so much as to include nine or ten parishes, a bishop's see, and two monasteries. According to the Icelandic records sixteen bishops succeeded each other, and when the seventeenth was sent out, the coast of Greenland was unapproachable, on account of the vast quantities of ice, and he was obliged to return to Norway. Several subsequent efforts had been made to reach the land, and lastly by the well-known scientific sailor Scoresby, who, however, was unable to accomplish his object. Geographers must thank Mr. Major for having finally settled a long-disputed point.

Mr. BRADFORD said he went some 200 miles out of his course to the locality which had been described by Mr. Major. If it had occurred to him sooner, he would have brought to the meeting some views illustrative of the various points, and giving a very correct idea of the ruin referred to. There was a cathedral, he thought, about 40 feet long and 25 to 30 feet wide, which was in a very good state of preservation. At the farther end the arch of the window was still very perfect. The door at the entrance was also perfect, and all the windows more or less so. There were some six dwelling-houses, and the whole was surrounded by a wall, which might be seen and traced at the present day. It was situated at the base of a cliff from 75 to 100 feet high. Above that there was a level plateau of 300 or 400 feet; and then mountains, some 2000 feet in height, rose abruptly. In reply to a question by a member of the Society as to whether there were any hot springs, the speaker said he had searched very carefully for hot springs, and sent some twenty or more men in all directions, but they could find nothing of the sort.

Admiral SHERARD OSBORN said he only professed to have seen the south coast about Cape Farewell at a distance, but, trending as it did for many miles in an east and west direction, it was natural for the old Norsemen to speak of the settlements as being respectively East Bygd and West Bygd. He believed Mr. Major had as near as possible solved the question regarding the position of the old colony. He should like to know whether Mr. Major had discovered references to the voyages made by the ancient voyagers as high as Upernavik in Baffin Bay. As high as  $74^{\circ}$  N., opposite the entrance of Barrow Straits, an old Runic stone was discovered, which was exhibited in Copenhagen at this day. It was a wonderful feat for those men to accomplish. He could not help being struck with the resemblance of the map exhibited on the wall—(the younger Zeno's map)—to the maps of the present day of Greenland. If the land and mountains were turned in the right direction the resemblance would be perfect. This showed that it could not have been drawn merely from his imagination, but that it must have been taken from an old map which he had in his possession. The members of the Society were deeply indebted, as geographers, to Mr. Major for his paper.

Dr. WALLICH said that Mr. Major had alluded to the Gunnbjorn's Skerries, and had stated that the position assigned to these rocks in Ivar Bardsen's 'Sailing Directions' (namely, to the south-westward and midway in navigating between Iceland and Greenland) was confirmed by the account of the two Zenos, and would show these Skerries to have been neither more nor less than the island which, according to Ruysch's map in the 1508 edition of Ptolemy, is denoted as having been totally destroyed by volcanic action in 1456. Now, as the correct determination of the position of these Skerries was of the highest importance, not only as regarded the confirmation or otherwise of the account of the Zenos, but also as bearing on the hydrography of this portion of the North Atlantic, he begged leave to offer a few remarks on the subject. In 1860 he had the honour of taking part in the expedition, on board H.M.S. *Bulldog*, under command of Sir Leopold McClintock, which was sent to take soundings across the North Atlantic. He could confidently affirm that no trace of shoal water occurred in the course that would be traversed by a vessel sailing direct

from Iceland to the south-east point of Greenland. On the contrary, the soundings, which were numerous and most accurately taken, proved the existence of deep water along the entire mid-route between Iceland and Greenland, varying in depth, in round numbers, from 1000 to 1500 fathoms, without a trace of volcanic matter so far to the westward. He would point out, however, that, in many of the older charts, a shoal or sunk land was laid down at a point considerably to the southward of the position which Mr. Major had assigned as the correct one for the Gunnbjorns Skerries, and that in these maps it had gone by the name of the "Sunken Land of Bus," and occasionally that of "West Friesland." He was well aware that the existence of this sunk land had been generally regarded as mythical, and would particularly observe that in the account he published in 1862 of the voyage of the *Bulldog*, whilst entering somewhat fully into all the older accounts of these regions, he neither conveyed nor intended to convey the idea that any island, or exposed surface of land, had, within the memory of man, been observed in the locality referred to, namely, about lat.  $58^{\circ}$  n. and long.  $29^{\circ}$  or  $30^{\circ}$  w. As none of the maps exhibited at the meeting had the latitudes and longitudes laid down, it was impossible to convey a proper idea of the points indicated. All he attempted to establish was, the existence, in the neighbourhood of this region, of comparatively shoal water, and that, too, precisely where it was to be expected that the greatest depths would show themselves. He would also notice, incidentally, that both Krantz and Graah (from whose works he quoted the statement in his volume) discredited the existence of the Gunnbjorns Skerries midway between Iceland and Greenland; and that Graah suggested that "Friesland" was identical with "Bus," and stated that, according to some persons, "this island was swallowed up by an earthquake." He would take the liberty of stating his own reasons why the sunk island of Bus was not so mythical as had been assumed. It was true that Capt. Sir John Ross, in proceeding to Baffin Bay in 1818, attempted to take soundings at the point where it was reported to exist in the older, and even in modern, English charts, up to that date. But inasmuch as Sir John Ross sounded with an ordinary deep-sea lead, and did not attempt (so far as appeared from the published account) to sound deeper than with 180-fathom line, it was not to be wondered at that he failed to strike bottom. It should be remembered, moreover, that it was not quite so easy a matter as some people might think to hit off a sunken reef of limited extent at sea. He would refer to a modern example of this difficulty well known to all hydrographers, but very instructive, inasmuch as it held out a warning that we should be more chary in ignoring observations made by prior navigators. In 1832 Lieut. Sainthill, on returning with his ship from Jamaica to England, suddenly came, in lat.  $42^{\circ}$  n. long.  $41^{\circ}$  w., or thereabouts, on discoloured water. He at once sounded, and, to his amazement, obtained bottom at 100 fathoms. In 1858, Commander Dayman, in attempting to verify this sounding, failed with 3000 fathoms of line; the result being that the correctness of Lieut. Sainthill's observation was disputed and attributed to some error. In 1864, Admiral Sir Alexander Milne had soundings taken in the same locality, and found, as Lieut. Sainthill had done, volcanic mud at 80 and 90 fathoms. As a climax, Commander Chimmie, in 1868, found no bottom at nearly 3000 fathoms, his observations being recorded in one of the numbers of the Society's 'Proceedings.' In the *Bulldog* expedition two lines of soundings were taken. The second line, on the return voyage, was carried from near Cape Farewell to near Rockall, chiefly between the 59th and 60th degrees of latitude. The depths indicated these remarkable variations, viz. 1620, 1168, 748, and 1260 fathoms; the last-named sounding being that in which 13 living starfish were brought up from the sea-bed, and the question of the existence of animal life at the greatest depths in the ocean was conclusively set at rest. There were two facts connected with

these soundings on which he would lay stress. The second line of soundings was carried on between the 59th and 60th degree of latitude, according to orders. It formed no part of the scheme to search for any supposed shoal water, but simply to ascertain the true depth for telegraphic purposes, and he would undertake to say that no soundings could have been taken with greater care or accuracy. The hitting upon no less depth than 740 fathoms was not to be wondered at; but the soundings, he ventured to say, sufficiently indicated the extreme probability of shallower water in the neighbourhood. His own inference was that this comparatively shoal water, presenting itself as it did just where the "sunk land" of the old charts was indicated, was neither more nor less than the result of the general subsidence of the land and sea-bed in the direction of Greenland, which all geologists know to have been going on for centuries. The further investigation of these questions in the Northern Seas was of the highest importance in a scientific point of view, not only as regarded the evidence it would furnish as to the relative configuration of land and sea, prior to and at the close of the glacial epoch, when (as propounded by Edward Forbes) there probably existed a continuous continent or series of islands from the north-west Arctic regions to our own shores (thus favouring the distribution of both animal and plant-life), but also as bearing on the great question of oceanic circulation, and the direction taken by the deep-seated Arctic drift on its passage towards the equator. As the condition of the ice in approaching Greenland from Iceland had been referred to by Mr. Major, he would take the opportunity of observing that, in July 1860, when nearing the south-east coast of Greenland, the *Bulldog* was completely barred from proceeding nearer than 20 or 30 miles by the impenetrable mass of drift and berg ice.

Mr. MAJOR, in reply, explained that Gunnbjorn's Skerries did not lie, as Dr. Wallich assumed, in a tract *south-westward* and midway between Iceland and Greenland, but, by the concurrent testimony of Ivar Bardsen in the 14th century, of Johann Ruysch in 1507, and of Van Keulen in about 1700, due west of Iceland, rather nearer to Iceland than to Greenland. They consequently did not fall within the line of soundings described by Dr. Wallich; still less could their position be made in any possible way to coincide with that of the "Sunken Land of Bus." The perfect coincidence of the above authorities, at such widely distant periods and so completely independent of each other, proved not only the former existence but the real site of Gunnbjorn's Skerries, and as Captain Graah was quite unaware of either one of these facts it is obvious that his opinion on the subject could have no weight whatever. That Mr. Bradford should find no hot springs near the interesting ruin at Kakortok was only what might be expected. Dr. Rink, the late Inspector of South Greenland, distinctly informed him (Mr. Major) that there were not in the whole district of Julianashaab any hot springs but those of Ounartok, near which he (Mr. Major) accordingly placed the monastery of St. Olaus. The church at Kakortok was quite distinct from that monastery, being, in fact, some five-and-twenty miles distant from it.

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*Fourteenth Meeting, June 23rd, 1873.*

SIR H. BARTLE E. FRERE, K.C.B., G.C.S.I., PRESIDENT, in the Chair.

ELECTIONS.—*John Dixon Gibbs, Esq.*; *Hon. W. Nassau Jocelyn* (Secretary of Legation, Stockholm); *William F. Lawrence, Esq.*; *C. A. M'Vean, Esq.*; *Captain Rogers*; *Wentworth Sturgeon, Esq.*; *Malcolm Charles Wood, Esq.*