

## II.

NOTES ON A FINNISH BOAT PRESERVED IN EDINBURGH.  
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Two writers of the latter part of the seventeenth century, in describing the Orkney and Shetland Islands, make certain statements relative to "Finnmen," who were seen among those northern groups. The first of these writers was Mr James Wallace, minister of Kirkwall, whose *Description of the Isles of Orkney* was written "about the year 1688," and printed at Edinburgh in 1693.<sup>1</sup> In this work the minister of Kirkwall refers to these Finnmen in the following terms<sup>2</sup> :—

"Sometime about this Country are seen these Men which are called *Finnmen* ; In the year 1682, one was seen sometime sailing, sometime Rowing up and down in his little Boat at the south end of the Isle of Eda, most of the people of the Isle flocked to see him, and when they adventured to put out a Boat with men to see if they could apprehend him, he presently fled away most swiftly : And in the Year 1684, another was seen from *Westra*, and for a while after they got few or no Fishes ; for they have this Remark here, that these *Finnmen* drive away the fishes from the place to which they come.

"These *Finnmen* seem to be some of these people that dwell about the *Fretum Davis* [Davis Straits], a full account of whom may be seen in the *Natural and Moral History of the Antilles*, chap. 18. One of their Boats sent from *Orkney* to *Edinburgh* is to be seen in the Physitians hall, with the Oar and the Dart he makes use of for killing Fish."

This is all we learn from Wallace with regard to those Finnmen. But his remarks are supplemented by those of the Rev. John Brand (also a minister of the Scottish Church), whose *Description of Orkney* was published in 1701.<sup>3</sup> Mr Brand's statements are as follows<sup>4</sup> :—

"There are frequently *Finn-men* seen here upon the Coasts, as one about a year ago on *Stronsa*, and another within these few Months on *Westra*, a

<sup>1</sup> The modern reprint of 1883, edited by the late Mr John Small, and enriched with many notes, is well known to all who are interested in the antiquities of Orkney and Shetland.

<sup>2</sup> Pages 33-34 of the reprint of 1883.

<sup>3</sup> This book was also re-printed in 1883, by Mr William Brown, of Edinburgh.

<sup>4</sup> Pages 76-77 of the edition of 1883.

Gentleman with many others in the Isle looking on him nigh to the shore, but when any endeavour to apprehend them, they flee away most swiftly ; Which is very strange, that one Man sitting in his little Boat, should come some hundred of Leagues, from their own Coasts, as they reckon *Finland* to be from *Orkney* ; It may be thought wonderfull how they live all that time, and are able to keep the Sea so long. His Boat is made of Seal skins, or some kind of leather, he also hath a Coat of Leather upon him, and he sitteth in the middle of his Boat, with a little Oar in his hand, Fishing with his Lines : And when in a storm he seeth the high surge of a wave approaching, he hath a way of sinking his Boat, till the wave pass over, least thereby he should be overturned. The Fishers here observe that these *Finnen* or *Finland-Men*, by their coming drive away the Fishes from the Coasts. One of their Boats is kept as a Rarity in the *Physicians Hall at Edinburgh*."

This, then, is Brand's account of the Finnmen. It will be noticed that he gives us some additional information.<sup>1</sup> Thus he tells us that the "little Boat" of the Finnman was "made of Seal skins, or some kind of leather," and that the skin-clad rower sat in the middle of the boat "with a little Oar in his hand." Moreover, while the previous writer had assumed that Western Greenland was the home of those people, Brand believes them to have come from Finland.

Brand's opinion was also held by an eighteenth-century annotator of Wallace's book, who explains<sup>2</sup> that the "Finnen" spoken of in the text were "the Finns, or inhabitants of Finland, part of the kingdom of Sweden." But another note, apparently by Dr Wallace, the minister of Kirkwall's son, is to this effect<sup>3</sup> :—

"I must acknowledge it seems a little unaccountable how these *Finnen* should come on this coast, but they must probably be driven by storms from home, and cannot tell, when they are any way at sea, how to make their way home again ; they have this advantage, that be the Seas never so boisterous, their boats, being made of Fish Skins, are so contrived that he can never sink, but is like a Sea-gull swimming on the top of the water. His shirt he has is so fastned to the Boat that no water can come into his Boat to do him damage, except when he pleases to untye it, which he never does but to ease nature, or when he comes ashore."

<sup>1</sup> It has to be remembered that neither Wallace nor Brand professes to describe the Finnman or his boat from personal observation. Their statements are not those of eye-witnesses.

<sup>2</sup> *Op. cit.*, p. 33, note.

<sup>3</sup> *Ibid.*

It will be seen from these remarks that there was a considerable difference of opinion among those writers of the seventeenth and eighteenth centuries as to the whereabouts of the home of those *Finnmen*. A modern writer, Mr John R. Tudor, in *The Orkneys and Shetland*,<sup>1</sup> after quoting the accounts here given, expresses himself thus :—

“What can these Finn Men have been? Is it possible Eskimo can have been driven over from Greenland? Or can there have been a substantial basis of actual fact for the traditional Shetland Finns that ‘came ow’r fra Norra-way’? The Burray<sup>2</sup> and Stronsay instances all point to the *kayaks*, or whatever they were, being driven from the east, and the ones seen off Eday and Westray may, with equal probability, have come from that quarter. Besides, Cape Farewell, the nearest point of Greenland to the Orkneys, is 1180 nautical miles from the Noup Head of Westray, whilst the Norwegian coast at the southern end of Finmarken is 750, and at the nearest point only 240 miles.”

Professor Kaarle Krohn, of Helsingfors, with whom I have exchanged letters on this subject, and who had previously known nothing of the recorded appearance of Finnmen or Finns in British waters, writes—

“It is not quite clear to me how the Finns should come to Scotland. Of course the accounts do not relate to our Finns of Finland, and as little can they relate to the East-sea Provincials [the dwellers on the shores of the White Sea]. And the Lapps of Norway live in the far north, and only visit Bergen for purposes of business. . . . I must also observe that the name Finn appears to be of Scandinavian origin; its meaning is very much obscured. Finally, may these Finns of Scotland not have been Norwegians?”

With regard to these various opinions, it may be pointed out, first of all, that Davis Straits, or any part of Greenland, cannot have been the home of those Finnmen of two centuries ago. It is perhaps quite possible for an Eskimo in his kayak to make the voyage from Cape Farewell to Westray, but it is certain that no Eskimo would willingly make the attempt. Nor can it be supposed that during the last twenty years of the seventeenth century a succession of disastrous storms drifted a succession of Eskimo castaways to the Orkney islands, assuming that an Eskimo kayak could outlive a storm in the North Atlantic. But the Greenland theory must plainly be dismissed as untenable.

<sup>1</sup> London, 1883, p. 342.

<sup>2</sup> Mr Tudor here refers to a statement by Dr Wallace, that one of the Finnmen's boats was preserved in the church in the Island of Burray.

It is not intended in this paper to enter into a full discussion as to the most probable *habitat* of the seventeenth-century Finnman. But the objections of Brand and Professor Krohn to modern Finland as being too remote to be seriously considered will no doubt meet with general approval. However, the suggestion made by the latter, that those "Finns of Scotland" may have been "Norwegians" is supported both by history and tradition, the word "Norwegian" being taken to denote any inhabitant of Norway. The present inhabitants of the Lofoten Islands, for example, are of mixed Finnish and Scandinavian descent; and we read in the *Heimskringla* (Saga xiv.) that certain Norsemen spent the winter of 1139-40 with the Finns of that neighbourhood, at which period one is led to infer that that district was peculiarly Finnish. The same record tells us how, two centuries earlier, Harold Haarfagr had married a Finn woman, and how three of her sons became Norwegian *jarls*, while a fourth (Halfdan Haaleg) seized the lordship of Orkney and held it for a whole summer.<sup>1</sup>

References such as these show, therefore, that the Norwegian Finns were once more closely connected with Orkney, by residence and by association, than are the natives of modern Finland, or even of modern Finmark.

At this point local tradition steps in to strengthen the belief that some part of Norway was the home of the people described by Brand and Wallace. Mr Tudor's allusion to "the traditional Finns that 'came ow'r fra Norraway'" is based upon a very full account of these traditions given by Dr Karl Blind in the *Contemporary Review* of 1881 and the *Gentleman's Magazine* of 1882. These traditions, with which Shetland teems, describe those Finns as coming over to Shetland from Norway (especially from Bergen<sup>2</sup>), sometimes in the character of

<sup>1</sup> *Harald Haarfagr's Saga*, chap. xxv., &c. *Orkneyinga Saga*, p. 1, and Appendix pp. 205-6.

<sup>2</sup> Since Bergen has thus been particularised, it may be pointed out that even at the present day the numerous islands lying off the Bergen coast contain a peculiar caste of people, whom the Norwegians proper regard as of a different race from their own, and in whose dialect they recognise traces of a Samoyed influence (see an article by Lieut. G. T. Temple, R.N., in *Good Words*, 1880, p. 767 *et seq.*). These people are known as *Strils*. The boats now used by them, however, do not appear to differ in

“medicine-men,” able to charm away the toothache and other complaints, and sometimes as the exactors of a money-tribute, which they demanded and received from the over-awed islanders, whose boats they pursued and easily overtook. (The wonderful fleetness of the boats of the Finns is particularly dwelt upon in Shetland tradition.)

Although the exaggerated accounts now current in Shetland folk-lore with regard to the amazing speed of the Finns' boats is entirely in consonance with the belief that these traditional accounts relate to such kayaks as those of the “Finnmen” described by Brand and Wallace in the end of the seventeenth century, I have not been able so far to obtain proof that the Norwegian Finns, like contemporary tribes in the British Isles, made use of skin-boats. Professor Kaarle Krohn informs me that the Lapps (a term which is used in Sweden to denote the Norwegian Finns) employ on their inland lakes a skiff so light that its owner can carry it on his head. In this respect, and in that it is propelled by a double-bladed paddle, it resembles the kayak. But since it is made of wood, and is not “decked,” the most important points of resemblance are lacking. Again, there is a reference in the *Heimskringla* (Saga xiv.), which, on reading Mr Laing's version, I had assumed to refer to the use of skin-boats among the Finns of the Lofoten Isles and neighbourhood. This relates to the temporary residence of Sigurd Slembe in that district, in the twelfth century, on which occasion the Finns made for him two boats. These are spoken of as “skin-sewed Fin-boats” by Mr Laing; and I had assumed they were not kayaks

any respect from those used by other Norwegians. The Finns of Norway are even yet regarded by the uneducated Norwegians as “uncauny,” and as possessed of attributes corresponding to those which Shetland tradition assigns to them. In the past, indeed, the word “Finn” was almost synonymous with “wizard.” Tenth-century illustrations of this will be seen in the case of a brother of the semi-Finnish Halfdan, referred to as a temporary lord of Orkney, who was famous as a wizard, and indeed was burned on this account, “along with eighty other warlocks,” by his own half-brother Eric (Bloody-axe) which seems a little inconsistent on the part of Eric, as his own wife was versed in the “magic” of the Finns. Thus although the Shetland traditions may relate to a period more recent than the tenth century, we see from Harald Haarfagr's Saga that as early as that date people of Finn blood “came ow'r fra Norraway” to the Orkneys, as exactors of tribute from the islanders, and that the race of the Finns was at the same time famous for its knowledge of “witchcraft.”

(for the context shows they were of larger size), but the open *umiak* or *curach* used by the contemporaneous tribes of the British Isles, and by modern Eskimos. Dr Joseph Anderson, however, pointed out to me that the words "skin-sewed" only related to the fact that in the construction of these boats, which were of fir, no nails were used at all, the various parts being united with "sen." Dr Anderson adds the explanation that "sen" may either denote "sen-grass" or "sinew." It is the latter rendering that is approved of by Dr Rasmus B. Anderson, in the latest addition of the *Heimskringla*, where it is even stated that the timbers "were fastened together with *deer* sinews." Whether a species of grass, or the sinews of an animal, it seems clear from the passage that the use of this material, and the total absence of nails, was regarded by the Norsemen as something that called for remark; and the inference is that this method of tying together, instead of nailing, the woodwork of the boat, was distinctive of the Finns. It is certainly distinctive of the other Mongoloid races of the extreme North. But although the passage referred to shows those twelfth-century Finns of the Lofoten neighbourhood as fastening the timbers of those boats after the fashion of the builders of kayaks, it does not make any statement which proves or disproves the hypothesis that those Finns made for themselves such kayaks as those employed by the Orkney "Finnmen" of the seventeenth century.

Whatever may be the truth regarding the home of the Orkney Finnmen, it is evident that their skin-canoes constitute a detail of the greatest importance in determining the ethnical position of the people. For it is at once obvious to any one acquainted with the Eskimo kayak that the skiffs described by Brand and Wallace were nothing else than kayaks.<sup>1</sup> In several almost trifling particulars the descriptions of these writers might fitly apply to the Greenland division of that race. For example, Brand says of the Orkney Finnman that "when in a storm he seeth the high surge of a wave approaching, he hath a way of sinking

<sup>1</sup> Those who are not familiar with the appearance of a kayak will see from the Greenland model exhibited, which Sir Murdoch Smith has kindly lent from the Museum of Science and Art, that this is the kind of vessel described by those seventeenth-century writers.

his Boat, till the wave pass over, least thereby he should be overturned." It is clearly this usage that is referred to by Hans Egede, when he says, in describing the Eskimo kayakers of Greenland during the eighteenth century: "They do not fear venturing out to sea in these boats in the greatest storms; because they can swim as light upon the largest waves as a bird can fly: and when the waves come upon them with all their fury, they only turn the side of the boat towards them, to let them pass, without the least danger of being sunk."<sup>1</sup> Again, Dr Wallace states that the Orkney Finnmen "have this advantage, that be the Seas never so boisterous, their boats being made of fish skins, are so contrived that he can never sink, but is like a sea-gull swimming on the top of the water. His shirt he has is so fastened to the Boat, that no water can come into his Boat to do him damage, except when he pleases to untie it." The same feature is indicated by Brand when he says—"His Boat is made of Seal skins, or some kind of leather; he also hath a Coat of Leather upon him, and he sitteth in the middle of his Boat, with a little Oar in his hand." Dr Rink, referring to the kayaks of the Greenland Eskimos, uses similar terms:—"The deck alone was not sufficient; the sea washing over it would soon fill the kayak through the hole, in which its occupant is sitting, if his clothing did not at the same time close the opening around him. This adaptation of the clothing is tried by degrees in various ways throughout the Eskimo countries, but it does not attain its perfection except in Greenland, where it forms in connection with the kayak itself a watertight cover for the whole body excepting the face."<sup>2</sup> Dr Rink, of course, in making the last statement, did not know that this also was practised by Orkney kayakers in the seventeenth century. It is hardly necessary to add that the wonderful swiftness of the Finnmen's boats recorded by the Orkney writers and in the popular tradition of Shetland, is paralleled in the Greenland accounts. The superior fleetness of the kayak was very clearly demonstrated by a Greenland Eskimo who came to this country in 1816, in which year, as we learn from the *Scots Magazine*, he gave several exhibitions of his skill at the harbour of Leith. "He paddled his canoe from the inner

<sup>1</sup> (Quoted in the *Scots Magazine* of 1816, p. 654).

<sup>2</sup> *The Eskimo Tribes*, Copenhagen, 1887, p. 6.

harbour, round the Martello Tower and back in sixteen minutes, against a whale-boat with six stout rowers, and evidently showed his ability to outsail his opponents by the advantages he frequently gave them, and which he redeemed as often as he chose."<sup>1</sup>

The seal-skin boat of the Orkney Finnman, therefore, was indubitably the kayak of other divisions of the Mongoloid group. Is there any specimen of the Orkney kayak still in existence? Wallace states in 1688 that one such specimen "is to be seen in the Physicians Hall [Edinburgh], with the Oar and the Dart he makes use of for killing Fish." To this statement Wallace's son adds the remark:—"There is another of their boats in the Church of Burra in Orkney." But Mr J. R. Tudor, who appears to have made personal inquiry on the spot, informs us<sup>2</sup> that "no tradition even survives in Burray about the Finnman's boat, said by Wallace to have been preserved in the church there." We are therefore obliged to fall back upon the specimen which Wallace says was to be seen in our Edinburgh *Physicians Hall*, in or about the year 1688.

This statement of Wallace's is repeated by Brand, but the latter writer cannot have seen the boat in question, and must have simply echoed the statement of his predecessor, for the Finnman's boat had been removed from the Physicians Hall to the College of Edinburgh five years before the appearance of Brand's book. The way in which the Physicians College had obtained the boat was through its president, Sir Andrew Balfour, eminent as a physician, botanist, and naturalist, and a great collector of all sorts of curiosities. At his death, in 1694, his collection passed to the University of Edinburgh by bequest. But, for one reason or another, the Finnman's boat still remained in the Physicians Hall. This will be seen from the following extract from the Minute Book of that College, which records the transfer of the boat to the University of Edinburgh two years after Sir Andrew Balfour's death. The date of the Minute is 24th September 1696.

"The qlk day y<sup>e</sup> colledge considering y<sup>t</sup> dr Balfours curiositys are all in y<sup>e</sup> Colledge of Ed<sup>r</sup> & amongst them y<sup>e</sup> oars of y<sup>e</sup> boat & y<sup>e</sup> shirt of y<sup>e</sup> barbarous man y<sup>t</sup> was in y<sup>e</sup> boat belonging to y<sup>e</sup> Colledge of Physitians &

<sup>1</sup> *Scots Magazine*, 1816, p. 656.

<sup>2</sup> *Op. cit.*, p. 341.



y<sup>t</sup> the same boat is likly to be lost they having noe convenient place to keep it in doe give the s<sup>d</sup> boat to y<sup>e</sup> colledge of Ed<sup>r</sup> ther to be preserved & y<sup>t</sup> it be insert there y<sup>t</sup> its gifted by y<sup>e</sup> royall Colledge.”<sup>1</sup>

This Minute shows us, then, that not only the boat of the Finnman, but also his “coat of leather,” or seal-skin “shirt,” had been preserved in the Physicians Hall at the time when Wallace wrote; and that all of these were transferred to the University of Edinburgh after the death of Sir Andrew Balfour.<sup>2</sup>

At this point, most unfortunately, the history of this Finn boat becomes involved in uncertainty. Although the Royal College of Physicians stipulated that their gift of the boat should be formally inserted in the records of the University, no such record is known to exist. At that time the affairs of the University were, somewhat incongruously, managed by the Town Council; but neither in their records nor in those of the University, is there any mention of the transference of the Finn boat in 1696. Some letter of acknowledgment there must have been, but either it is wholly lost, or else it is hidden among a mass of miscellaneous papers in the University, and is thus practically out of reach. Moreover, all memory of the Finn boat must have been lost also, for when the University Museum collection was transferred, in 1865, to the Museum of Science and Art, the very vague and meagre “List of Ethnographical Objects in the College Museum” of that date contains no mention of this or any other kayak; although, as a matter of fact, those “ethnographical objects” included two kayaks. Thus the aim of the Physicians in 1696 seems to have been signally defeated by the very means they employed for the preservation of their boat. The boat itself may not indeed be lost, but if its identity is lost the result is the same.

However, let us hope that it is not necessary to arrive at this regrettable conclusion. Documentary evidence may yet be forthcoming which

<sup>1</sup> This extract is obtained from the Minute Book through the courtesy of the President and Council of the Royal College of Physicians of Edinburgh.

<sup>2</sup> They had probably come into his possession through his friend and colleague, Sir Robert Sibbald, who is well known as the author, or rather the editor and publisher, of a “Description” of the Orkney and Shetland Isles. It is quite likely that Sibbald himself had brought the Finnman’s boat from Orkney to Edinburgh.

shall enable us to say definitely that one of the two kayaks transferred from the University to the Museum of Science and Art is the veritable "Finnman's boat" which the University received from the Royal College of Physicians in 1696. In the meantime, failing documentary evidence, an examination of the kayaks referred to may lead to conclusions which will practically settle the question.

At present there are three kayaks in the Museum of Science and Art. One of these was presented by a gentleman about eighteen years ago, and no uncertainty attaches to it. The other two formed part of the University collection, but were not specified in the brief list which accompanied that collection when it was transferred to the Museum of Science and Art, in 1865. These kayaks were seen to be of considerable age, and were assumed to have formed part of an Eskimo collection, obtained by the University from Parry's expedition. In the list referred to, however, there was no mention of kayaks or Eskimo boats. Thus nothing definite is known of the history of these two boats. But as they were in the possession of the University at the time of the transference in 1865, it is evident that if the University had not already lost the Finnman's kayak which the Royal College of Physicians had presented to it in 1696, that kayak must be one or other of these two.

As the smaller of these two boats does not appear to differ in any way from the modern Eskimo kayak, while the other presents more than one feature suggestive of an archaic character, it appeared to Mr Walter Clark, of the Ethnographical Department of the Museum, to whom I submitted the question, that the latter must be the Finnman's boat—if that boat was really preserved by the University. What at first sight appeared to be one of those distinguishing features was the use of whalebone, or more correctly of *baleen*, in the framework of the boat. Acting upon Mr Clark's suggestion, I applied to the Smithsonian Institution at Washington for further information on this point. The reply of Mr Brown Goode, Assistant Secretary in charge of the United States National Museum, is to this effect:—"I have consulted with Mr John Murdoch, of the Smithsonian Institution, and formerly stationed at Point Barrow in connection with the United States Signal Service, in regard to the question of Kyak frames. He informed me that he has

examined a large number of Kyaks, both in Alaska and elsewhere, and has read, as far as he knows, all published accounts relating to the Eskimo Kyaks, but that he has never heard of a Kyak having a frame of any substance other than wood." This statement receives tacit corroboration from Dr Rink, who describes the Eskimo kayak as consisting of "a framework of *wood*, joined together principally by strings, and provided with a cover of skins impenetrable to the water."<sup>1</sup> From this evidence, it would seem that the kayaks used by the Eskimos of North America lack the baleen, which forms so important a part of the framework of the Edinburgh specimen referred to. On the other hand, the kayaks used by the Chukches of Siberia, a branch of the same great Mongoloid family, consists of "a framework of wood *or bone*, covered with skin."<sup>2</sup> The kind of bone used by the Chukches is not specified, but it may reasonably be inferred that whalebone or baleen is largely used.

Judging from these statements, then, one would be disposed to say that the Edinburgh specimen, being largely constructed of baleen, was in this respect closely akin to the Siberian kayak, and proportionally dissimilar from those of North America; and this would strongly favour the assumption that this kayak was that of the Finnman of 1696, and had been constructed, not in the Western Hemisphere, but in the Eastern, and probably in Norway. Later statements,<sup>3</sup> however, have neutralised those made by Mr Murdoch and Dr Rink. Dr John Rae, whose opinion is beyond question, and Mr J. G. Wood,<sup>4</sup> agree in stating that whalebone is certainly used by the North American Eskimos in the construction of their kayaks. In the opinion of Dr Rae, the specimen under consideration is not a Greenland kayak (of this century, at any rate); but he recognises in it a likeness to those used between Hudson's Bay and the Mackenzie River. Thus it has ultimately become evident that the use of baleen, or other bone, is not peculiar to any one division of the kayak-builders of the Arctic Circle.

<sup>1</sup> *Tales and Traditions of the Eskimo*, 1875, p. 6.

<sup>2</sup> See a translation of Bahnsen's account of "Ethnographical Museums," *Archæological Review*, Dec. 1888, p. 227.

<sup>3</sup> Which I did not obtain until after the reading of this paper.

<sup>4</sup> *Natural History of Man*, ii. 712.

Although, so far, no feature of the doubtful specimen preserved in the Museum of Science and Art has helped to determine its history, a description of it may be of use in eventually settling the question.

The various features of this kayak will be better understood by an examination of the photographs executed in response to a request from the Smithsonian Institution, with copies of which I have been favoured.<sup>1</sup> In the first of these views the longitudinal outline of the kayak is given. The length of the boat is 17 feet 9½ inches. Its greatest breadth is 1 foot 11 inches, and its greatest girth is 4 feet 8 inches. Its weight is sixty pounds. The prow is on the right hand of the spectator in this view, and one can see that the seal-skin "deck" is elevated in front of the hole where the skiff-man sits, to allow room for his knees. This arch is sustained by a curved stick, shaped for that purpose. In the bird's-eye view of the boat, it will be noticed that the prow, which is so deep, heavy, and clumsy in profile, is very narrow and tapering when looked at from above, while the afterpart of the vessel, which is shallow and light in appearance, in the first picture, shows a very broad surface in the second. This breadth of beam, so near the extremity of the skiff, is regarded by Mr Clark as exceptional, if not unique. The appearance of the skin which covers the boat is something like a rough kind of parchment. It consists of several large irregular pieces, stitched so closely and finely together that the exact nature of the ligature cannot be ascertained. It has evidently been patched in one or two places. Behind the hole where the kayaker sits a seal-skin thong is fastened across the boat, and there is another immediately in front of the aperture, while a third line stretches across nearer the prow. This line, however, is of baleen. (There are traces of a fourth line behind it, presumably also of baleen.) These were intended for the spears or darts used by those people; and this kayak has, in addition, a small piece of bone, about 2 inches long, curving up at the end, which is fastened by a thong to the side of the opening or "hatchway." As this is placed on the right hand of the paddler, it seems to have been used as a "rest" for his spear, which would thus be freer for instant use than if the butt-

<sup>1</sup> I am indebted to Sir Murdoch Smith and Mr Walter Clark for affording me much valuable assistance in this inquiry.

end were thrust under the line behind. (This "rest" is plainly seen in the enlarged view of the middle of the boat.) Some of the most marked characteristics of this boat are seen in the enlarged view, which enables one to get a glimpse into the interior. It may first be pointed out that the rim or casing round the aperture is made of baleen, as also the horn-shaped attachment behind. This latter, which is no doubt made to enable the kayaker to carry a certain amount of "deck cargo" is, I am informed, quite an exceptional feature. It is fastened to the deck by three separate strips of baleen, but the thongs which are used to keep the side portions in an upright position (for this is a single piece of whalebone) are of seal-skin.

When one looks into the interior of the kayak, as well as one may by means of a light, one gains a fairly good idea of the construction of the framework. (Nothing short of dissection would enable one to speak with certainty.) It is then seen that all the longitudinal "strakes" are made of wood. There is one of these on each side, of a much greater breadth than the intervening ones, which are three in number. The larger ones are about  $4\frac{1}{2}$  inches in breadth. All those lengthwise strakes, therefore, are of wood. Presumably they stretch the whole length of the kayak. But the cross "ribs," which appear to be about thirty in number, are of baleen,—that is, with the exception of the two which are in front of the paddler. These are of wood, and have been joined or "spliced." But each of the other ribs is of baleen, consisting of a single piece, bent to the shape of the boat, and tied down to the longitudinal strakes with coiled strips of baleen. *Everything*, indeed, in this kayak is either joined by means of stitching or by tying; there is not a nail or rivet to be seen.

The "roof" of this framework consists of crosswise spars of wood, apparently corresponding in number to the bent ribs of whalebone below. These cross spars are strengthened by a centre-strake or "ridge-pole," which runs from the place where the rower sits to either extremity of the skiff. At the stern end the roof is further supported by a small wooden stick or post.

Although the photograph reveals the interior of the boat at the central aperture, it was first necessary to remove the cushion upon which the

kayaker sat before the bottom of the boat could be seen. The cushion itself is believed to be an exceptional luxury. It is made of seal-skin, stitched together with baleen, and it is stuffed with a kind of heath, of which I have a specimen. This heath has been submitted to Mr Lindsay, the Curator of our Botanical Gardens, who pronounces it to be of the genus *Andromeda*, and (so far as one may judge from a dried specimen) perhaps *A. tetragona*. As *Andromeda* is found all round the Arctic Circle, this does not, however, give us any clue to the home of the owner of this kayak. It may be added that the weight of this padded seat or cushion is 4 lbs.

The oar which is shown in the photograph is believed to belong to the boat, although this is not quite certain. It is a double-bladed paddle, of rough driftwood, in three separate portions, lashed together with strips of skin and baleen. Its blades are tipped with bone, which is fastened to the wood by bone rivets, and also by stitches of hide. The weight of this paddle is  $4\frac{1}{2}$  lbs. The waterproof "shirt," and the spear or "dart," which were given to the University in the seventeenth century, have disappeared.

The aim of this paper has been to draw attention (1) to the seventeenth-century accounts of kayak-using "Finnmen," whose presence in Orkney waters was at least frequent enough to give rise to the local saying that "by their coming they drive away the fishes from the coasts"; (2) to the existence of legendary accounts, relating to about the same period, of a race of "Finns" who came across from Bergen and other parts of Norway, which traditions may reasonably be held to corroborate the statements of Wallace and Brand; and (3) to attempt to trace the subsequent history of the kayak obtained by Sir Andrew Balfour, and presented by the Royal College of Physicians to the University of Edinburgh on 24th September 1696. The obscurity which has unfortunately been allowed to gather round that most interesting specimen, prevents us from saying with certainty that Edinburgh possesses the only known example of the European kayak. That one of the two kayaks of uncertain antecedents which the University possessed in 1865 may be the kayak received by the University in 1696 is quite

possible. But, until corroborative documentary evidence between the two dates referred to can be produced, or unless it can be shown that the unidentified kayak possesses some characteristic that marks it off distinctly from the kayaks of North America, this must remain a matter of uncertainty. Indeed, for aught we know to the contrary, the custodiers of the canoe after 1696 may have been so neglectful of their trust as to allow that specimen to perish altogether.

The specimen of 1696, interesting though it be, is of course a mere detail in the question which it raises. For the use of the kayak at the present day is so identified with a certain type of man, that one is apt to believe that any race using that species of canoe must have had some affinity with the Mongoloid peoples. That the twelfth-century Finns of the Lofoten district should have built boats without using a single nail, merely tying the woodwork together with sinews (or *sen*), is very suggestive; for the Finns are akin to the Eskimos, and these people, as we have seen, construct the framework of their kayaks after the same fashion. It is true that the boats referred to, which the Finns built for Sigurd Slembe, were not skin-boats; but it is equally clear that the method of joining the timbers was not that of Sigurd's people, but of the Finns themselves. Evidence is certainly lacking of the use of skin-boats by the Finns. Yet, on the other hand, such boats have been used in Western and North-Western Europe from time immemorial,—by the Iberians, on the Garonne, throughout the British Islands, and, according to two different writers, by the Saxons of the Baltic lands.<sup>1</sup> It is well known that the skin-boat is still used in Wales and in Ireland, and our *Proceedings* of 1880–81 (pp. 179–180) and 1887–88 (p. 344), show that it was used last century in the north of Scotland. Armstrong, in his *Gaelic Dictionary* (s. v. "Curach"), says that the skin-boats "were much in use in the Western Isles, even long after the art of building boats of wood was introduced into those parts," and that the Hebrideans "fearlessly

<sup>1</sup> Dr Reeves (*Life of St Columba*, 1874, 281) quotes Mr Henry Petrie's definition of *curicæ*, the Latinised form of "curachs," as "naves Saxonum ita vocatæ." And in Armstrong's *Gaelic Dictionary* (s. v. "Curach"), it is stated that "Sidonius Apollinaris, *Carm.* vii., observes that the Saxon pirates of his time frequently crossed the British seas in such boats."

committed themselves, in these slight pinnaces, to the mercy of the most violent weather." These skin-boats appear to have been of various shapes, such as the small round "coracle" used on the rivers of Wales and Ireland, and formerly in the north of Scotland, and again, that variety used last century on the Donegal coast, described as an "oval basket covered with seal-skins,"<sup>1</sup> which was apparently of larger size. And, again, there is the larger skin-boat, still in use on the Irish coasts, which, like the same vessel among the Eskimos, has oars, and occasionally sails. Both among modern Eskimos and ancient British populations there are evidences of the use of skin-boats of very considerable size.

Beyond the general inference that European people who employed open skin-boats resembling those of the Eskimos may also have used the covered-in kayak of that modern people, there is no distinct statement that I am aware of which plainly says that the kayak was really used in Europe, until we come to the statements of Wallace and Brand. There are, however, one or two references which might be held to indicate the kayak. For example, the Gaelic *curachan*, which is defined as "a little skiff, a canoe" (Armstrong), and which is the diminutive of *curach*, is evidently not the same thing as the *curach* itself. And although Armstrong is speaking of the *curach* when he says that the Hebrideans "fearlessly committed themselves, in these slight pinnaces, to the mercy of the most violent weather," his words recall those of Brand regarding the Finnman, of whom he says that "when in a storm he seeth the high surge of a wave approaching, he hath a way of sinking his Boat, till the wave pass over," indicating the usage of the Eskimos with their kayaks in similar circumstances. Indeed, the *open* skin-boat would be the last kind of vessel in which one would "fearlessly commit oneself to the mercy of the most violent weather," although a decked kayak might prove safe enough. There is, moreover, a passage in Gildas which rather tends to support the idea that one form of the *curach* used in these islands in the time of the Romans was the same as that of the seventeenth-century "Finnman's" canoe. Referring to the inroads of the Scots and Picts after the withdrawal of the Romans, Gildas says:—"Itaque illis ad sua revertentibus, emergunt certatim de

<sup>1</sup> *Annual Register*, 1788, "Manners of Nations," pp. 77-80.



curicis, quibus sunt trans Tithicam vallem vecti, quasi in alto Titane incalescenteque caumate de arctissimis foraminum cavernulis fuscis vermiculorum cunei, tetri Scotorum Pictorumque greges,"<sup>1</sup> &c. Archbishop Usher, writing in the seventeenth century, explains<sup>2</sup> that "curicis" refers to their "corroghes," or skin-boats, and on this point the commentators of Gildas are generally agreed. But the point to be considered is whether the passage "de arctissimis foraminum cavernulis" does not bear reference to the narrow man-hole out of which the kayaker emerges when he quits his narrow, decked "curach." The passage is admittedly obscure, but if the kayak species of "curach" was used in British waters during the sixth century, as it was in the seventeenth, then Gildas' meaning would be tolerably clear.

Such are some of the deductions to be drawn from the statements of the two Orkney diarists. Much more might be said in the same direction; but the object of the present paper was rather to deal with the specimen of 1696 than to enter fully into the questions connected with it. It is greatly to be regretted that the identity of that specimen has been so obscured by indifference and neglect that we cannot at present say whether or not it is one of those preserved in our Museum of Science and Art. Possibly some more definite information may yet result from the present inquiry.

<sup>1</sup> *De Excidiis Britanniae*, Stevenson's ed., London, 1838, pp. 24, 25.

<sup>2</sup> *Britannicarum Ecclesiarum Antiquitates*, Dublin, 1639, p. 606.