TT

AN ACCOUNT OF THE PARTIAL EXCAVATION OF A "WAG" OR GALLERIED BUILDING AT FORSE, IN THE PARISH OF LATHERON, CAITHNESS. By ALEXANDER O. CURLE, C.V.O., LL.D., F.S.A.Scot., F.S.A.

Read January 25, 1941.

In the hill country forming the southern part of the parish of Latheron, and chiefly in the region where a series of narrow watersheds separate the numerous burns hurrying down to the sea, there lie a number of peculiar constructions whose period and purpose have hitherto remained undetermined.

Seeing that in a number of instances the term "wag," either alone as "The Wag," or in combination as "Wagmore" and "Wagmore Rigg," has become the place-name of their sites, it is evident that such was their original designation, though the application of the term to the structures themselves has long fallen into disuse. In the *Inventory of the Royal Commission on Ancient Monuments (Caithness)* they were designated "Galleried Dwellings," by reason of a distinctive feature of their construction and a misinterpretation of the purpose for which they were intended. The buildings were either oblong with rounded ends or circular, but, in either case, there ran around the interior a covered gallery, some 3 feet wide, open to the interior, except for the interposition of pillars some 5 to 6 feet distant from one another which supported the roof of the gallery. For the most part they are situated comparatively near the burns, and sometimes, as in the case of two groups near the foot of Morven, in very remote situations.

As will be demonstrated later on, these structures were in reality folds for cattle, sheep, or other stock. Their distribution evidently extended into the adjacent region of the County of Sutherland, and it is probable that excavation conducted on certain structural remains in the parish of Reay would reveal the ruins of others in that neighbourhood. It has been suggested that the term "Wag" has been derived from the diminutive of the Gaelic word Uamh = a cave, uamheg = a little cave, owing to the cave-like appearance of the structures when complete, but, from the details now revealed, this does not seem a very satisfactory explanation, unless its application had been, in the first instance, to the variety which was entirely roofed in, as afterwards described.

¹ Report and Inventory, Royal Commission on Ancient and Historical Monuments (Sutherland) No. 475.

² Ibid. (Caithness), Nos. 389-394.

³ Proc. Soc. Ant. Scot., vol. xlvi. p. 89.

Immediately to the west of Forse House there lies a tract of rough pasture land, partly grass, partly heather, where the lower slopes of Ben-a-Chielt fade into the plain. An old road, known as "The Crash," bounds it on the east. This tract of moorland is remarkable for the diverse remains of ancient structures that lie scattered over its surface. Towards the north end a low conical grassy hillock, on which the sheep graze, conceals the ruins of a broch: a quarter of a mile or so seaward of it, two upright pillars of stone, amidst a debris of boulders, indicate the remains of a chambered cairn, carried away within living memory for road metal: hut-circles and lesser cairns mingle with the ruins of crofts; while ancient walls, and the billowy ridges left by former cultivation, chequer the surface over a considerable area. Yet, though this wealth of evidence shows that people had made their homes over many centuries on this pleasant slope, the name they knew it by is known no longer. appears to be nameless.

Near the centre of the east side, just where the ground commences to rise, there is a low hillock whose surface is, or was, covered with a mass of huge stones scattered about in utter confusion, except for the occasional occurrence of an upright slab which thrust its head above the ruins, or of a short section of walling which happened to be exposed. When I visited this site in 1910, I recognised it as a group of wags, the largest complex of such structures that I had come across, and, at the same time, the most accessible for excavation, if ever an opportunity should occur to investigate an example.

Being in Caithness in 1937 and 1938, excavating the site of a Viking settlement at Freswick, I was in a position to make my preparations to explore the Forse wag when I had completed my Freswick adventure, which I did in the latter year. Accordingly, having obtained the consent of the proprietor, Captain Baird, and of H.M. Office of Works to excavate a scheduled monument, I got together a staff of four workmen, with Mr Samuel Bremner, our Corresponding Member, as foreman, and commenced work early in June 1939. It was a formidable task, for the ruins, which consisted for the most part of huge slabs of stone, weighing many hundredweight, covered an area of approximately 120 feet by 90 feet. No spade work was necessary, for no soil had accumulated on the top to give footing to any extent to grass or heather, and, until we reached floor level, the work consisted entirely in the handling of heavy stones. As I desired to ascertain the details of construction as well as the plans, the stones were not removed until they had been carefully considered as to their form and size, and the positions in which they lay.

On a superficial examination the ruin appeared to consist of a long chamber on the western side, lying approximately N.N.W. and S.S.E., with the entrance from the latter direction, and two similar chambers,

contiguous, on the eastern side, with an indeterminate mass of ruins occupying the space between the eastmost pair and that first mentioned, the whole contained within an encircling wall, reduced in parts almost to foundation level. This wall, which coalesced with the westmost building, passed clear behind, and thence proceeded round to the front

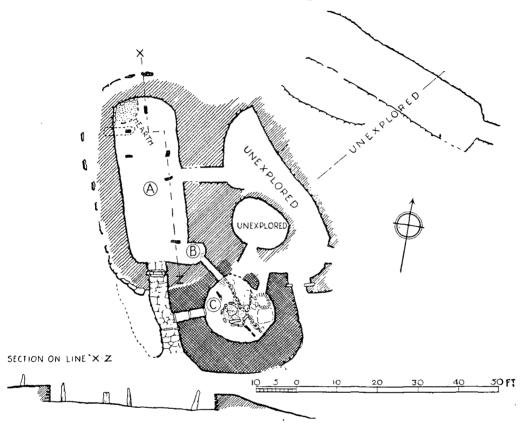


Fig. 1. Plan and section of excavated structures.

of the complex, making contact again at the west end. It has, however, yet to be explored and laid down on a plan (fig. 1).

Work was commenced on the westmost structure, starting from the entrance at its southern extremity.¹ It proved to be a building measuring interiorly 41 feet 9 inches in length, by 15 feet in breadth, an oblong on plan, with rounded corners, and rounded at the inner end. The wall, though somewhat irregular, had an average width of 6 feet, and a height of from 4 to 5 feet on the inside where still erect. The masonry was

¹ For simplification in description, the approximate cardinal points of the compass are used where divergence is slight.

exceptionally good, and resembled, in its massive character, the stone work of a broch. The stones were not dressed, but were just as they came out of a quarry nearby. Many of them, forming the outer edge, where it remained, measured from 4 to 5 feet in length, and nearly a foot in depth, while those on the inner face measured from 2 to 3 feet, and even more, in length, by 8 inches in depth.

The stone used was Old Red Sandstone, obtained from an outcrop at the foot of the rising ground immediately to the north of the hillock on which the wag was situated, where it was exposed in more or less loose flags.

The external face of the wall had been almost entirely removed on the It was reduced on the north, where the natural surface was at a higher level, to its base, which consisted of a line of large stones (Pl. V, 1). It was evident that at this end the ground, in forming the interior, had been excavated to a depth of from 2 to 3 feet, and also that to serve any purpose of exclusion, the original wall, rising, as it did, from the natural level on the outside, must have been of considerable height. east corner was occupied by a small chamber, rounded at the back, and recessed into the wall, to be described later. The entrance was not in the centre, but had been placed a foot or two nearer to the west side of the building, and was 4 feet 9 inches in width at its inner end. approached by a passage, paved throughout its length, originally 10 feet long, but subsequently extended by an additional 11 feet when other additions, to be described hereafter, were constructed. The doorway (Pl. V, 2) had been placed within the passage, 2 feet back from the entrance into the building, and on either side there had stood posts to form checks. That on the east side—of stone—still remained, measuring 4 feet or thereby in height, but the pillar on the opposite wall had been removed, leaving exposed the recess which it had occupied. The space between the portals had been about 3 feet wide. In advance of the position of the door a triangular sill crossed the passage, apex upwards, to a height of 10 inches. As this sill was above the original level of the passage, it evidently belonged to the later period in its history. On the inner side of the jambs was another slab, laid on edge, and evidently buttressed with two blocks to keep it in position and resist the pressure from a heavy door which must have stood against it. There were no bar holes, but, on the left or west side of the actual entrance, the cornerstone on the lowest course, before the wall turns from the passage to the interior of the chamber, was an L-shaped block, laid in such a way that the re-entrant angle was exposed in the face of the wall (Pl. VI, 1). is suggested that this may have been used as a socket for one end of a wooden stay, the other end of which was thrust into the angle between the closed door and the wall on the opposite side of the passage, so as to keep the door closed.

At the commencement of the excavation a huge slab, measuring 4 feet 10 inches by 3 feet by 8 inches, and reckoned to weigh from 15 cwt. to a ton (Pl. VI, 2), lay obliquely within the doorway, and had evidently been a lintel. As it was impossible to clear the interior so long as this stone remained where it had fallen, it was removed to the outside.

To the right of the entrance (B on plan) was the small chamber recessed in the wall in the corner, referred to above (Pl. VII, 1). It measured 5 feet 6 inches in breadth across the opening, and 4 feet 6 inches in depth.

On the south side of the entrance to this cell, i.e. directly opposite the corner of the north to south wall of the main building, a recess had been formed, measuring 12 inches by 15 inches by 5 inches deep, by hammering off the corner of a stone immediately above the bottom course (Pl. VII, 2). It is extremely difficult to conjecture for what purpose this recess was intended, but it may have been formed in connection with a wooden partition to screen off this cell from the main building, with a Towards one side of the back wall an opening, doorway through it. measuring 2 feet wide by 2 feet 9 inches in height, gave access to a lintelled passage, 6 feet 8 inches long, with two of the lintels still in situ (Pl. XI, 2) leading into the circular chamber C on plan. Within the passage and paving the floor, lay a broken saddle quern. On the left of the entrance to it there had been a peat fire, the ashes of which had spread into the passage itself. A few flat stones, laid across the opening of this cell and the surface of an outcropping rock, formed a partial pavement.

The floor of the long building, or wag (A on plan), consisted of a bed of yellow clay, some 3 to 4 inches in depth, very hard and dry, and immixed with small fragments of stone which seemed to be natural, but reference to the surface of the rock in the adjacent outcrop would verify or In the interior (Pl. VIII, 1), ranged along either disprove this assumption. side and the inner end, there had been erected a series of upright slabs. some 5 feet in height, placed at a distance of 2 feet or thereby from the wall face, and from 4 to 5 feet from each other (fig. 1). Six of these stones remained in situ, though one, that at the south-east end, had been tilted to some extent, and that nearest the inner end, on the east side. had been reduced to half its height. These stones, as a rule, had not been bedded in the clay floor (Pl. VIII, 2), but had been merely placed on a slight mound composed of the floor-clay, with, in a few instances. one or more flat stones inserted beneath to form a wedge as required, and afford greater stability. It was evidently intended that they should be maintained in position by the superincumbent weight of heavy lintels, which they carried, reaching from the top of the existing wall-head. these only one remained in situ, but it may be accepted as a typical example, there having been numerous similar flags lying among the The massive character of this cap-stone can be gauged from the

illustration (Pl. IX, 1). It measured some 6 feet in length, and rested on the existing wall-head to the extent of 1 foot, and projected to about the same distance beyond the pillar. It did not lie horizontally, but with a slight decline towards its base on the wall. Covering the space between the adjacent lintels there had originally been cross lintels. There was thus formed around the interior a covered corridor. None of the cross lintels remained in situ, but one may be seen in position in a wag at Houstry of Dunbeath, a few miles inland from Forse.

Near the centre of the east wall there had been a doorway into a passage 4 feet wide, which led into a complex of buildings not yet explored. This doorway had been built up, and the passage behind it blocked. As one of the pillar stones stood directly in front of the doorway, it is obvious that the passage was lintelled at the height of the existing wall-head, the lintel affording support to the roof of the corridor in front of it.

In the north-west corner of the wag a fire-place (Pl. IX, 1) had been Against the base of the wall stood a row of flat elliptical boulders to act as a fire-back, and there were indications of a built front. The area enclosed measured some 2 feet 4 inches by 2 feet 1 inch, and had been paved. As much charcoal remained on the surface adjacent to the hearth, it was evident that the fuel employed had been entirely wood, while the extent to which many of the stones had been reddened, and fractured by fire, indicated that a great heat must have been generated. Nowhere else in either of the chambers excavated, was there any sign of the use of wood as fuel instead of peat, yet the level of the bottom of this fire-place, relative to the floor in which it was sunk, militated against any possibility that it could have been secondary. an absence of charcoal on the actual burnt stones on the surface of the hearth, but, beneath, the soil was black and greasy. A shallow narrow channel between two paving stones in front of the hearth may have been a surface drain—a possible arrangement, in view of the fact that the fireplace had probably not been covered with a roof.

The relics found on the floor of the wag were meagre in the extreme, and consisted merely of a few small fragments of coarse pot. There was also only very slight discoloration of the surface of the floor, in marked contrast to the usual condition of prehistoric floors, all of which goes to show that human habitation was not the purpose of the wag. In the clay floor there were occasional small specks of carbonised material, such as might have come from some vegetable bedding with which it had been covered.

As previously mentioned, the entrance passage, from an original length of 10 feet, had been extended for a farther distance of 11 feet, and, while the original passage was straight, this addition made a slight inclination towards the east. There were no remains of a gate, or doorway, at the

outer extremity, and, in view of the fact that it widened out towards the end, it is doubtful if one ever existed at that point. At 7 feet inwards, however, there obviously had been a door, as a sill and door jambs, on either side, were still in situ. Inward from this position some 1 foot 9 inches, and on the right or east side, there was an entrance to a side passage giving access to the circular dwelling (C on plan, Pl. IX, 2). passage measured 2 feet 4 inches in width and 8 feet in length. Where it left the main passage it was crossed by a sill, but there were no indications of a door having existed at that point. At 3 feet 10 inches farther inwards there was a second sill with an elevation of 1 foot 2 inches at the centre. Here there had obviously been a door, probably of wood, for on the north side there was a semicircular hole, 5 inches across, cut out of the edge of a paving slab to form one side of a socket, 6 inches deep, as if to hold a wooden post, while on the opposite side there was a rectangular recess for a stone check.1 At the inner end the passage was again crossed by a sill, in this case only 4 inches high.

When the dwelling (C) to which this passage gives access was abandoned, as related hereafter, the passage had been filled in, after the lintels which roofed it had been removed, while at the same time the main passage into the wag (A) was also raised to a higher level with flat stones, carefully laid, an alteration which obviously corresponded with the change in level at the inner doorway.

The dwelling (C) was roughly circular, with a diameter varying from 14 to 17 feet, and was contained within a wall varying from 7 to 10 feet in thickness. From the character and the size of the stones that filled the interior (mostly flat stones, some 14 inches in length, and 3 to 4 inches in thickness), as well as from the manner in which they lay overlapping one another, it was apparent that the dwelling had been covered with a There was a complete absence of the pillar and lintel style of roofing displayed in A. One upright, a tall pillar stone measuring 6 feet in height from floor level, was standing, placed a few feet to the left, or north, of the entrance, and only 18 inches away from the wall face (Pl. X, 1). Presumably it has been employed, with the addition of packing stones, to support a weak part of the roof. The style of construction of the wall differed from that employed in the long building. The stones used were not so massive, nor were they so well laid, and there was much use made of thin fragments, or spawls, between the larger blocks, as in broch-building—a feature less noticeable in the walls of the long chamber. It is evident that on the north there had been a collapse of the wall, which no doubt brought down the roof, and caused the dwelling to be abandoned.

¹ The door would probably be a primitive construction of wood, such as may still be met with in Shetland, in which the door, built in one piece with one of the posts, revolves with it in stone sockets at top and bottom respectively.

At one time a second entrance into the house from the north had been in use, but details of this can only be forthcoming after further exploration. The small passage which connected the cell B with this building opened into it at a point some 7 feet to the north of the main entrance, measuring 1 foot 8 inches by 1 foot 6 inches at its entrance, which opened at a height of 2 feet 7 inches above the actual floor level (Plate X, 2). At the back of the wall, only 2 feet beneath it, lay a gutter-shaped stone on which a peat fire had burned, and which itself lay on peat ash. As there was evidence of reconstruction and extension in the main passage into the long building A, so, also, there was an indication of alteration and extension in the side walls of this passage.

On the floor of the dwelling C, placed a few feet nearer the south side than the north, there was a circular hearth (Pl. XI, 1), measuring 5 feet 6 inches in diameter, rising to a height of 8 inches above the floor level, and outlined with small flat-sided stones set on end to form a kerb, except towards the east, where two heavier stones projecting some 8 inches above The surface of the hearth was paved. the surface formed a fire-back. except in front of the fire-back, where there was a deep bed of peat ash. Crossing the floor of the dwelling from the east side of the fire-back to the wall were two upright stones, placed in line in the floor and obviously intended to divide the interior of the chamber into two definite areas of The area between the partitioning stones and the entrance was unpaved, and black and greasy on the surface. The corresponding area on the north was carefully drained, dry and clean. From a point just to the right of the end of the narrow passage from A a drain ran in an easterly direction, passing by the edge of the hearth towards the main wall of the building, through which it was carried, debouching on sloping ground outside. From the north wall, just to the left of the unexplored passage, a branch drain ran to connect with the other at the hearth, and, in combination, they passed across the floor and through beneath the Where the combined drain gave on the sloping ground beyond, clumps of rashes growing there showed how effectively it had functioned during the many centuries since its formation. The section coming from the direction of B measured 6 inches across by 5 inches in depth, and was formed with sloping sides of stone and covering slabs, and a flat unpaved bottom, while the other was merely a channel scooped out in the clay, 4 inches deep and 7 inches across, and furnished with occasional stones at the side to support the single covering slabs with which it also was provided. The main drain, so to speak, was formed with sides built up with flat stones, and was covered with a double layer of flags. It measured 11 inches in breadth by 7 inches in depth.

This northern half of the hut had evidently been particularly reserved for human occupation. Not only was it thoroughly drained to render it habitable, but a large flat stone, measuring some 3 feet 9 inches square, had been laid on the floor in the angle between the face of the wall and the main drain and appears in the background of Pl. XI, 1, while immediately to the north of it there was an area of similar dimension, slightly hollowed out and unpaved, but covered with small particles of carbonised matter which did not seem to have been produced by burning as there was no indication of a fire on the spot (see also Pl. XI, 1). It is probable, therefore, that on this dry area the inmates lived, and that the carbonised matter was the remains of heather, or of some other vegetable substance used for bedding.

The house had obviously collapsed during the period of its occupation, for on the peat ash covering the hearth lay the remains of a cooking-pot which had been crushed by the fallen stones of the roof (Pl. XII, 1), and beside it was an angular fragment of stone, reddened by fire, probably the cooking-stone used within it.

Numerous other cooking-stones came from the floor in the vicinity, with three complete stone pot-lids and one-half of another, while a fourth was found in the passage.

Within this dwelling, in the course of excavation at a depth of 3 to 4 feet, measured from the top of the tall monolith, we found numerous pieces of grey compacted clay immixed with charcoal which appeared to have been from a secondary floor, and, at the same level, there was found, close by the tall upright, a polished sandstone disc, thin, slightly concave on one surface, and measuring 3½ inches in diameter. Similar discs were found in the broch of Skirza and in the Road broch at Keiss in Caithness, as well as at Traprain Law and various other Iron Age sites. section of a very small vessel of black pottery of globular form, with an everted rim, was found on the same level. At about 8 inches above the floor level an unfinished whorl was picked up. Almost on the actual floor, four segments that went to complete a rudely fashioned jet ring, with a diameter of $2\frac{1}{2}$ inches, a couple of oblong pounders or hammerstones, and a rim segment of a cooking-pot, with a series of finger-tip impressions beneath the rim (Pl. XII, 2), were found. The last-mentioned came from the peat ash on the hearth within C at the end of the passage from the cell B.

Alterations in the plan as above-mentioned show three periods in the history of the wag (A). The first when it existed with a comparatively short entrance passage, and before the construction of the dwelling C. The second when the passage was extended, and C with the branch passage into it were formed; and the third after the collapse and abandonment of C, and the levelling up of the main entrance passage.

When the excavation of the foregoing buildings had been completed there did not remain sufficient time to explore completely any further portion of the complex before the day arrived for my departure from Caithness, so I set my workmen to follow out various walls, portions of which emerged from the ruins, with the results laid down on the interim plan. This revealed the existence of a number of enclosures, including one oblong building resembling "A," and others of indeterminate character. Besides these, there were more connected ruins farther east, which were neither explored nor planned. These probably include yet another oblong wag.

In the course of tracing these walls the following objects were found, viz.: a quartz pebble which had been used as a pounder, much abraded at one end, and measuring $5\frac{1}{4}$ inches in diameter lengthways; a heavy hammerstone, $8\frac{1}{2}$ inches long; and a saddle quern, 1 foot 6 inches in length by 12 inches in breadth.

So far, the relics recovered have been few in number, but they were all such as might have been found in a broch, including the potsherds, and it is noteworthy that only saddle querns have been, so far, found, which, in the absence of any of the rotary type, would indicate an early period in the history of the brochs if the building was contemporary. Inasmuch, however, as only a small portion of the structure has been explored, it is too early yet to form any conclusions from these relics as to the date. It must be borne in mind also that most of them came from the dwelling (C) which was secondary to the actual wag.

It has already been stated that in the long chamber (A) there was no indication of its use as a dwelling, while, in the circular building adjoining (C), the facts disclosed clearly pointed to an opposite conclusion. What, then, was the purpose for which A, and the other wags, oblong or circular, were erected?

If we refer to Pennant's Tour 1 we shall find that such buildings had not escaped the notice of earlier antiquaries, and that a description and explanation of them had been supplied to Pennant by the Rev. Mr Pope of Reay, with a plan, which, in light of modern exploration, can safely be regarded as inaccurate. To quote from the *Tour*, these buildings were "styled forest or hunting houses, for they are supposed to have been used by the antient inhabitants for retreats in the hunting countries. consist of a gallery, with a number of small rooms on the sides, each formed of three large stones, viz. one on each side, and a third by way These are made with the vast flags this country is famous for. At the extremity is a larger apartment of an oval figure, probably the quarters of the chieftain. The passage or gallery is without a roof: a proof that they were only temporary habitations. The length is from 50 to 60 feet. These buildings are only in places where the great In Glen Loth are three, and are called by the country flags are plentiful.

A Tour in Scotland, MDCCLXXII, Part II. Additions to the Tour, p. 18.



1. North end: figure on natural level.



2. Doorway: looking outwards.



1. West wall of passage, showing socket.



2. Fallen lintel in doorway.



1. Small chamber B: passage entrance at X.



2. South Wall of C: recess at foot-rule.



1. View of interior of wag.



2. Pillar slab resting on floor.



1. Pillar with capstone in situ: Fireplace beyond.



2. Entrance passage to dwelling.



1. Pillar stone beside entrance to dwelling.



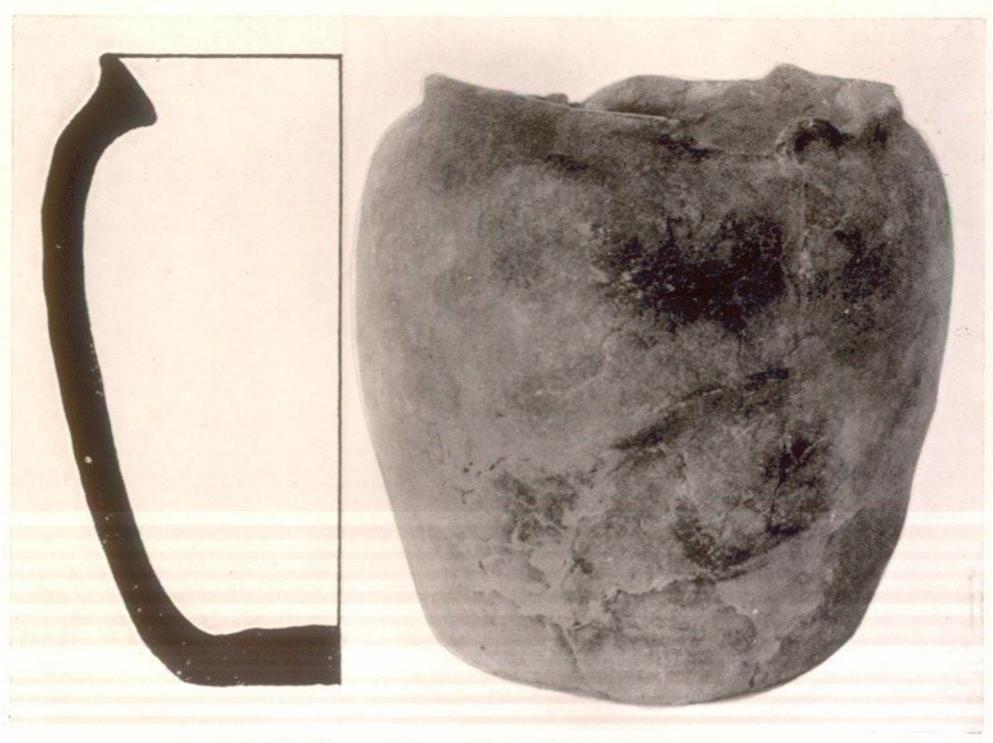
2. Entrance from small passage in wall of dwelling.



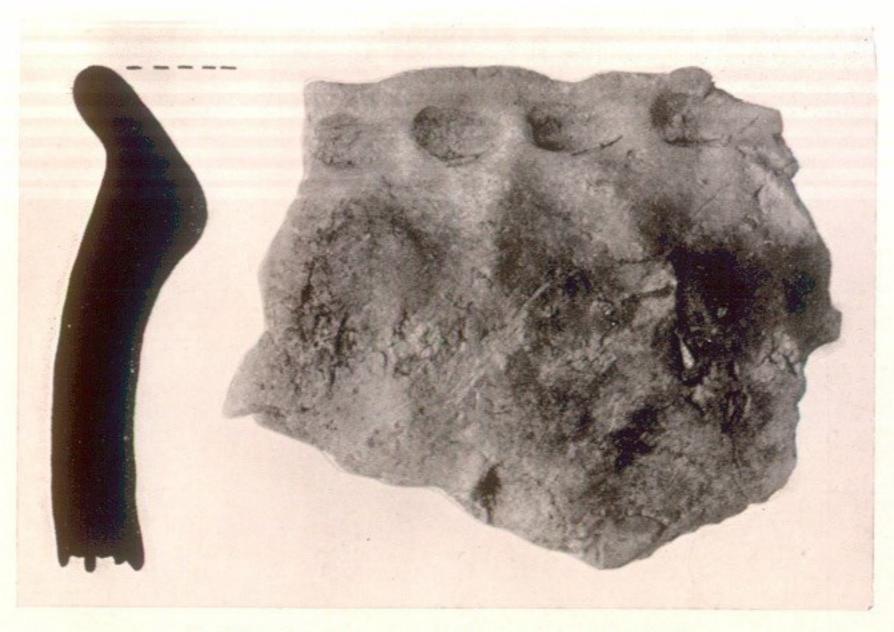
1. Interior of dwelling: showing hearth.



2. Passage from chamber B to dwelling C.



1. Cooking pot (reconstructed) found on hearth.



2. Rim of cooking pot with fingertip impressions.

people Wags." The inference drawn from the locality of these structures, viz. that they were connected with hunting, was not unnatural, but in respect of the frequency of their distribution, and of certain features of their construction, it is quite untenable.

There can now be little doubt that they were the folds, and byres or cattle pens, into which the stock was driven every night for protection from the wolves ¹ and foxes, with which the hill country was infested in those times, and possibly also from bears, and in this connection it is interesting to note ² that in Caithness, as late as the commencement of the nineteenth century, it remained the general practice to house cattle at night, both in summer and winter, while a similar course was followed in the case of sheep by the country tenantry, one reason being to preserve the latter from the attacks of foxes and dogs. Thus an explanation of the wood fire, uncovered by a roof, in the north-west corner of the wag may have been to furnish a glow in order to scare away any wandering beasts of prey.

The farm stock of the broch occupants, as ascertainable from the bones found in their kitchen-middens in Caithness, consisted of oxen, sheep, goats, swine, and horses. From the earliest period in broch occupancy, measures must have been taken for the preservation of the food supply, which also, in patriarchal fashion, at that period formed the wealth of the community. Among the outbuildings of many brochs, no doubt, suitable accommodation was provided, but as outbuildings are not found around all brochs, this was not universally the case. Where outbuildings were lacking which might have been applied to such a purpose, folds and cattle shelters may have existed at a distance from the broch, perhaps in close proximity to pasture. Fortunately for the elucidation of our problem, a group of typical wags, built outside a broch, were exposed, and planned, in 1866-67 by Dr Joseph Anderson, and a consideration of the features then discovered tends to bear out the foregoing conclusions as to their purpose. The particular broch was that known as the Broch of Yarrows, situated adjacent to the loch of that

Outside the broch, and built against it, were two long, irregularly shaped enclosures (C and D on plan, fig. 2) and several small cells. The outer enclosure (D) was 100 feet in length, and varied in width from 6 feet to 20 feet; the inner enclosure was some 70 feet in length, and about 12 feet in width, and each had a little cell, provided with door checks, opening off it. In some places the walls of these enclosures remained entire to the height of 10 feet. Both of them had irregular rows of long slabs set

¹ For very full information as to the former existence of wolves in Great Britain and Ireland in historic times, see Hasting's British Animals extinct within Historical Times, published in 1880.

Henderson's Agricultural Survey of the County of Caithness, 1812, p. 210.
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on end in their floors. The secondary character of all these exterior constructions was obvious from the fact that underneath the foundations there was a considerable depth of stones overlying the original soil and

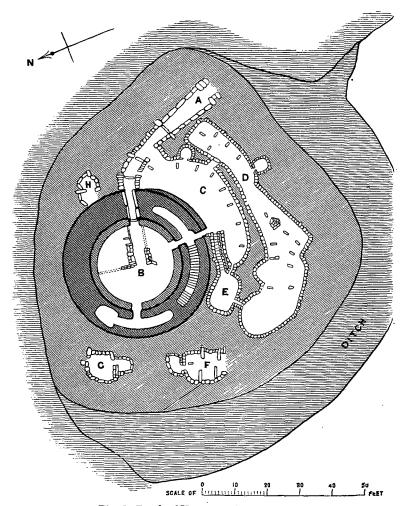


Fig. 2. Broch of Yarrows, after Anderson.

intermingled with ashes and food refuse. It is obvious, therefore, from the plan and description—for the buildings are now ruined and the pillars overturned—that against the wall of the broch there had been constructed, at a date subsequent to that of its original occupation, a group of typical wags. A close examination of the plan throws considerable light on the practice followed. There had evidently been three separate folds—C, which was the largest, and undivided, and D, which

was probably divided into two by a fence, or gate, where the salient angle near the centre of the south wall has constricted the interior to some 4 feet, an arrangement difficult to explain, except on the assumption of The entrance into C, as shown on the plan, is 4 feet some such division. A row of pillars was carried all along in front of the south wall, and, though, when the excavations were carried out, there were none on the opposite side, the fact that the outer face of the broch had been furnished with an apparent scarcement on this section, suitable to support the ends of the lintels, justifies the presumption that originally they had also stood there. Near the entrance, a small cell, measuring some 4 feet in depth, and furnished with checks for a door, had been constructed At the opposite end was a larger chamber, E, similarly conin the wall. structed, measuring some 12 feet by 7, and approached by a passage, 12 feet long, roofed with flags, and only some 2 feet wide. From this chamber a narrow slit had been formed, connecting with the inner end of C.

If the arrangements in this wag (C and E) are compared with those in the wag explored at Forse, certain marked resemblances will be observed. The entrance, presuming it to have been in its original state when excavated by Dr Anderson, was approximately of the same dimensions: the greatest width of the chamber was some 12 feet, and the space between opposing pillars must have been approximately 6 feet. If, as elsewhere, the lintels projected 1 foot beyond each pillar, the central space would be reduced to 4 feet. Had it been desired to roof this space. the breadth of the building would have been diminished instead of expanded by curving the south wall outwards. We may presume, therefore, that, as at Forse, the central space between the lateral galleries was open. The chamber E corresponded, to some extent, with chamber B of the Forse plan, but whereas at Yarrows this chamber was separated from the wag by 12 feet of covered passage, at Forse, apparently there had been interposed a partition, or screen. The slit resembles the similar narrow passage connecting B with the circular dwelling C at Forse and would serve the same purpose. We know that the outer wall of the wag at Forse must have been of considerable height, and to exclude wolves, which could easily have mounted a rough-built wall of any lower height, it must have been at least 10 or 12 feet high. The width of the entrance indicates that it was for the housing of cattle. We may thus assume that this was a typical cattle-wag with a high outer wall, which would obviate the necessity of entirely covering over the interior, sufficient protection from the weather being afforded by the roofing over the surrounding gallery. That being so, we may then regard this Yarrows wag, C, as a cattle enclosure. In that case, the small chamber, E, was for the cattle herds, the entrance being sufficiently narrow to prevent the ingress of

cattle. The narrow passage or slit into the wag was probably fashioned to enable the herds to hear if there was any disturbance among the animals, either caused by the entrance of thieves, or of wild beasts, or by an animal breaking loose, and so to take immediate action to counteract it, an inference borne out by the existence of a similar slit connecting E with the inner end of D. The narrow passage at Forse would be intended for a similar purpose, for, with a peat fire at either end, it was evidently not used for transit, though available for an escape if necessity arose. The small round cells near the entrances to C and D at Yarrows were obviously guard chambers to protect the doorways.

It has already been pointed out that the enclosure D had been divided into two parts at the point of constriction, just beyond the guard chamber. The greatest width between the pillars in the outer or eastern section is 3 feet 6 inches, and, if we allow 1 foot for the projection of each lintel beyond its supporting pillar, a very small space is left in the centre which could easily be covered by a roofing flag. We may assume, therefore, that this section of D was completely roofed over, unless an open space was left in front of the guard chamber.

In the western section Dr Anderson noted the presence of a built pier in the centre of the flooring, which is shown on the plan just beyond the first pillar. It will be observed that that pillar had been placed with its sides parallel to the walls and so contrary to the usual practice, as also is the pillar just beyond the pier. This arrangement of pier, and pillars, was obviously made to facilitate roofing with flags over a narrow space, the pier being capable of supporting lintels from the side walls as well as from the two adjacent pillars, such lintels, in their turn, being used to carry cross From this it is evident that the portion of this section to the east of the pier, on which no pillars were found, had not been roofed. There is no evidence now to show whether the inner extremity was roofed or not, but its greater width suggests that it was not. Nor is there any explanation of the rounded recess in the north wall, though it is conceivable that it may have been for a fire, such as existed in the northwest corner of the wag at Forse.

If the assumption is correct that enclosures with wide entrances, and roofed only along the sides, were for cattle, then those with narrow entrances, and entirely roofed over, were intended for the folding of sheep, or goats. It must be borne in mind that the cattle of those days were generally small, some of them exceptionally so, owing largely to the conditions under which they had to live, and thus the comparatively short distance between the upright pillars, which would be insufficient for the accommodation of a modern ox, was, no doubt, sufficient for its prehistoric

¹ C. Bryner Jones, "Origin and Development of British Cattle," Proceedings of the First Congress of Prehistoric and Protohistoric Sciences, 1932, p. 151.

ancestor. To prevent the cattle goring one another, they were no doubt tethered at night.

The complete excavation of the wag at Forse will probably throw more light on the pastoral practices of the prehistoric occupants of the far north in the Iron Age. Information will no doubt also be obtained from the number and character of other human habitations discovered in the ruins as to whether the people who occupied them were in fact the owners of the flocks and herds, or merely shepherds and guardians.

While the situation of the Forse wag would permit its occupation throughout the year, that of the majority of the wags provokes the question whether in many cases they did not serve the purpose of summer shielings, furnishing accommodation when the animals were brought up to the hill country for the summer in order to graze on the hill pastures, a practice once almost universal, and which only fell into disuse in the outer islands in the nineteenth century. It seems very improbable that cattle and sheep were kept throughout the year on the slopes of Morven at an altitude over sea-level of from 750 to 1000 feet, where one finds remains of wags, as on the Wagmore Rigg. Such buildings seem unduly massive for mere summer shielings, but to serve their purpose they required to be lofty, and they were intended to be permanent. Except on some such supposition, it is difficult to understand the social conditions which would drive the human occupants of these wags to retire into such exile from their fellows. Such was not the practice in prehistoric times where, for the sake of mutual protection, men lived a somewhat gregarious existence in small communities. Also, when the land carried a smaller population, and there was a freer choice of desirable holdings, such communities were mostly settled in the river valleys, or in the fertile belt that fringed the shore. It is seldom that remains of human habitation are found in the remote recesses of the hills, except in the form of hut-circles, which were, no doubt, in many cases also of the nature of summer shielings. The frequent occurrence throughout Scotland of place-names combining either the term airigh in Gaelic, or "shiels" in Lowland Scots, shows how prevalent the practice was of periodic migrations, and also indicates that it was an indigenous practice, and not necessarily one introduced by the Norsemen, whose "saeter" life is better known at the present day.

There is another consideration on which future excavation may throw some light. What, if any, are the relations of these structures to the brochs? We have seen that at the broch by the Loch of Yarrows there is actually a complex of wags built against it. Though it was shown to be secondary when the broch was excavated, it was not demonstrated that the broch and the wag were not in contemporary occupation, and, in that regard, it is noteworthy that the Yarrows wag was not furnished

with a connected dwelling, as at Forse. There is a broch in the near vicinity of a wag at Langwell, and, as has been stated, there is one within a few hundred yards of that at Forse. The character of the relics from the Forse wag are suggestive of broch culture, while the style of building, especially the massive nature of the material employed, is certainly reminiscent of the brochs.

The excavation of the neighbouring broch at Forse might provide more positive evidence, but that is an undertaking not to be hoped for in the present times.

The wealth of the broch owners was in the form of flocks and herds, and we may assume from the dimensions of their "castles" that they were wealthy. Around a number of brochs there are undoubted cattle enclosures, and in the restricted compass of the interior court, which invariably affords space for a central hearth, there was no room for animals other than the domestic dog. But, around a considerable number of brochs, notably in the county of Sutherland, there are no cattle enclosures or evidence of associated out-buildings. It may also be stated in various cases where excavation has taken place, that such outside buildings have usually been considered secondary. It may have been the case, therefore, that the wags were the "farm steadings" of the broch owners where, nightly, in wolf-infested regions, their flocks and herds were housed. In other districts where such highly protective buildings could be dispensed with, the folds would be constructed in a less massive and permanent style.

Finally, a word as to a possible source from which these curious structures emanated. One cannot avoid the conclusion that there is some connection between these "wags" and the remarkable buildings in North and South Uist to which attention was first directed by Captain Thomas ¹ and, subsequently, by Mr Erskine Beveridge.² Though these buildings in the west were obviously dwellings occurring by the seashore, and, in their actual masonry presenting no marked analogy, yet, in the internal. arrangements, with surrounding corridors fashioned by upright slabs, or piers and lintels, as in the wag, the resemblance is striking. Nor must one lose sight of the fact that the ruins of a construction with certain of the characteristic features of a wag, the pillars and lintels forming a corridor around a circular chamber, are to be seen near the summit of the range of mountains which separates Loch Eriboll from the Kyle of Durness, at an elevation of nearly 1000 feet above sea-level, and were examined and reported on by Mr John Mathieson, F.R.S.E.,3 one of our Corresponding Members, Though the site is remote from the Western Isles, it is the only link so far known between the parish of Reay, where the remains of wags are believed also to exist, and the Islands.

¹ Proc. Soc. Ant. Scot., vol. vii. p. 173.

² Erskine Beveridge, North Uist, p. 120.

³ Proc. Soc. Ant. Scot., vol. lix. p. 221.

The system of roofing by the use of stone monoliths and lintels is also met with in certain earth-houses in the Orkney Islands.

In conclusion I must acknowledge my indebtedness to the Council of the Society for a grant from the Excavations Fund which enabled me to carry out the excavation; to Mr James S. Richardson, F.S.A.Scot., for redrawing my plan; to F. L. Robertson, Ph.D., of the County Library, Wick, for lending me his tent; and finally I would pay tribute to my team of workmen for labouring so cheerfully at a herculean task.