Transactions

of the

Dumfriesshire and Galloway Natural History

and

Antiquarian Society

LII 1976-7

Transactions

of the

Dumfriesshire and Galloway Natural History

and

Antiquarian Society

FOUNDED 20th NOVEMBER, 1862

THIRD SERIES, VOLUME LII

Editors

JAMES WILLIAMS, F.S.A.Scot., ~~M.R.I.A.~~
W. F. CORMACK, M.A., LL.B., F.S.A.Scot.

DUMFRIES

Published by the Council of the Society

1976-7

OFFICE BEARERS 1975-76

Hon. President

Mr A. E. TRUCKELL, M.B.E., M.A., F.S.A.Scot., F.M.A.

Hon. Vice-Presidents

Mr J. WILLIAMS, Mr L. MASTERS, Miss B. GERDES, Mr R. McEWEN.

Fellows of the Society

Sir ARTHUR DUNCAN, B.A.; Mr D. CUNNINGHAM, M.A.; Dr J. HARPER, M.B.E.; Mrs M. D. McLEAN; Major-General J. SCOTT-ELLIOT, C.B., C.B.E., D.S.O.; Mr J. D. S. MARTIN, B.Sc.; Mr J. ROBERTSON, B.Sc., O.B.E., J.P., F.I.C.E.; Mr J. BANKS, B.Sc.; and Mr H. McA. RUSSELL.

Hon. Secretary

Mrs E. ADAMSON assisted by Mr D. ADAMSON.

Hon. Treasurer

Miss M. DONALD

Hon. Editors of Transactions

Mr A. E. TRUCKELL and Mr W. F. CORMACK.

Hon. Librarian

Mr D. DONALDSON.

Assistant Hon. Librarian

Mr J. WILLIAMS.

Hon. Curator

Mr A. E. TRUCKELL.

Members of Council

Mrs A. F. HARRIS, Mr A. JOHNSTON, Miss C. MATHESON, Mr J. KINGAN, Mr R. SPILLING, Mrs W. ROBERTSON, Mr D. ADAMSON, Mr R. LITTLE, Mr M. ANSELL, Mr A. D. ANDERSON, Mr A. ROBERTSON and Mr K. H. DOBIE.

OFFICE-BEARERS 1976-77

Hon. President

Mr A. E. TRUCKELL, M.B.E., M.A., F.S.A.Scot., F.M.A.

Hon. Vice-Presidents

Mr L. MASTERS, Miss B. GERDES, Mr R. McEWEN and Mrs A. F. HARRIS.

Fellows of the Society

Sir ARTHUR DUNCAN, B.A.; Mr D. CUNNINGHAM, M.A.; Dr. J. HARPER, M.B.E.; Major-General J. SCOTT-ELLIOT, C.B., C.B.E., D.S.O.; Mr J. D. S. MARTIN, B.Sc.; Mr J. ROBERTSON, B.Sc., O.B.E., J.P., F.I.C.E.; Mr J. BANKS, B.Sc.; and Mr H. McA. RUSSELL.

Hon. Secretary

Mrs E. ADAMSON, 39 Roberts Crescent, Dumfries, assisted by Mr D. ADAMSON (Tel. Dumfries 2930).

Hon. Treasurer

Miss M. DONALD, 1 Suffolkhill Avenue, Dumfries (Tel. Dumfries 5694).

Hon. Joint Editors

Mr J. WILLIAMS, Tranzay Villa, Maxwell Street, Dumfries and Mr W. F. CORMACK, Royal Bank Buildings, Lockerbie.

Hon. Librarian

Mr D. DONALDSON, Ewart Library, Dumfries.

Assistant Hon. Librarian

Mr J. WILLIAMS, Tranzay Villa, Maxwell Street, Dumfries.

Hon. Curator

Mr A. E. TRUCKELL, Burgh Museum, Dumfries.

Members of Council

Mr J. KINGAN, Mr R. SPILLING, Mrs W. ROBERTSON, Mr D. ADAMSON, Mr R. LITTLE, Mr M. ANSELL, Mr A. D. ANDERSON, Mr A. ROBERTSON, Mr K. H. DOBIE, Mr J. CHINNOCK, Mr W. F. PRENTICE and Mr M. YATES.

Contents

EDITORIAL

Contributions are invited on the Natural History, Antiquities, Archaeology or Geology of South-West Scotland or the Solway Basin and preference is always given to original work on local subjects. It may also be possible to provide space for Industrial Archaeology. Intending contributors should, in the first instance, apply to the Editors for "Instructions to Contributors". Each contributor has seen a proof of his paper and neither the Editors nor the Society hold themselves responsible for the accuracy of scientific, historical or personal information.

A copy of the new Rules passed at the Special General Meeting on 4th May, 1977 is contained in this volume. A list of members was contained in Volume 50.

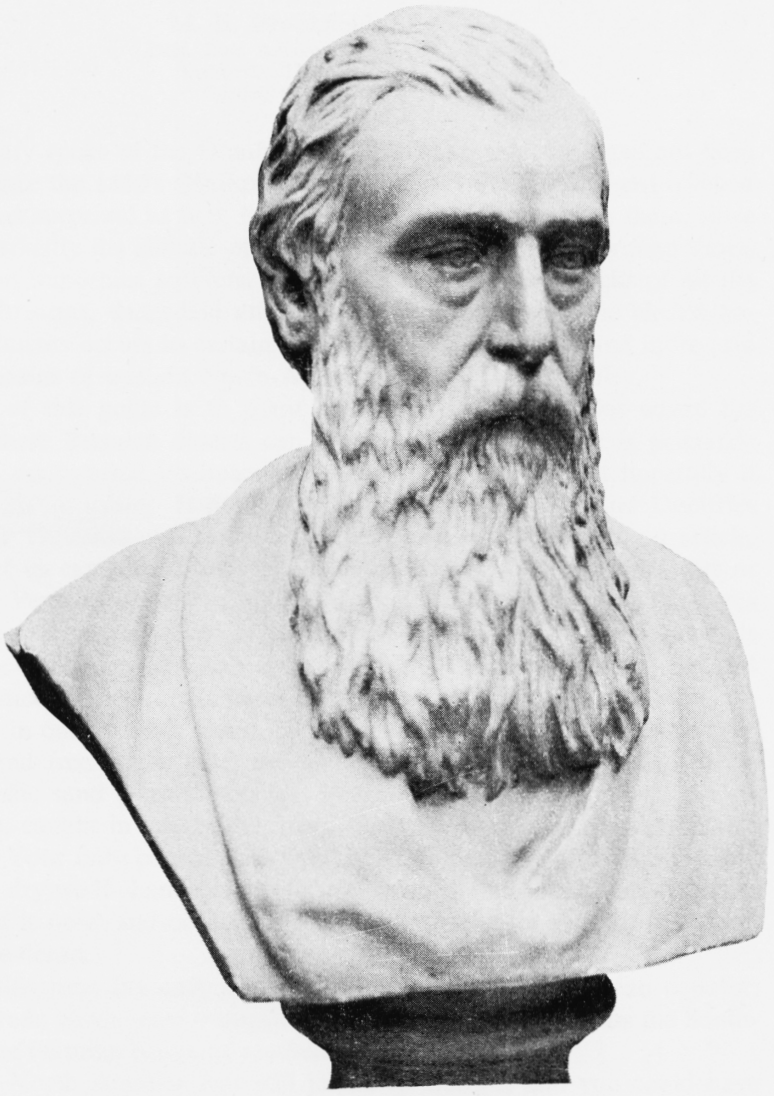
Presentations and Exhibitions should be sent to the Hon. Secretary, Mrs Eva Adamson, 39 Roberts Crescent, Dumfries, and exchanges to the Assistant Hon. Librarian, Tranzay Villa, Maxwell Street, Dumfries. Enquiries regarding purchase of Transactions should also be made to the Assistant Hon. Librarian. New members are invited to purchase back numbers — see rear cover — which, and also offprints of individual articles may be available from the Assistant Librarian. As many of the back numbers are out of stock, members can greatly assist the finances of the Society by arranging for any volumes which are not required, whether of their own or those of deceased members, to be handed in. It follows that volumes out of print may nevertheless be available from time to time. For Prof. Robertson's "Birrens", also see rear cover. Payment of subscriptions should be made to the Hon. Treasurer, Miss Morag Donald, Roshven, 1 Suffolkhill Avenue, Dumfries (Tel. 5694) who will be pleased to arrange Bonds of Covenant, which can materially increase the income of the Society without, generally, any additional cost to the member. The attention of Members and friends is drawn to the important Capital Transfer Tax and Capital Gains Tax concessions which are conferred on individuals by the Finance Act 1972, in as much as bequests to or transfers of shares to the Society are exempt from these taxes.

Limited grants may be available for excavations or other research; applications should be made prior to 28th February in each year to the Secretary. Researchers are also reminded of the existence of the Mouswald Trust founded by our late President Dr. R. C. Reid. Applications for grants from the Trust, which are confined to work on the Early Iron Age, Roman, Romano-British and Early Christian periods should be made to Primrose and Gordon, Solicitors, Irish Street, Dumfries.

The illustration on the front cover is of the Wamphray Grave Slab from the article, "The Early Church in Dumfriesshire", by the late W. G. Collingwood, in Volume XII (1924-25) of these Transactions.

This Volume is made with the assistance of a generous Carnegie Grant. Furthermore the Society is grateful to the Department of the Environment for grants towards the cost of publication of Mr Masters' articles on The Wren's Egg and Carlochan Cairn.

A corrigendum to Vol. 51 appears on p. 184.



Frontispiece—Dr. James Gilchrist. From a bust by J. W. Dods, Dumfries 1886, presented to the Society in 1913 by J. T. Johnstone, Moffat, and now in Dumfries Museum. (Photo David Hope).

(See article on The James Gilchrist Lichen Collection)

FIELD GUIDE TO THE PERMIAN ROCKS OF THE DUMFRIES AND LOCHMABEN BASINS

by

M. E. Brookfield

Dept. Land Resource Science
University of Guelph
Guelph, Ontario

The sedimentary rocks of the Dumfries and Lochmaben basins have not been studied in detail since the 1850's (Harkness, 1850, 1856). During my recent revision of the basins, I was surprised at how little attention had been paid to them, since they show how markedly the climate of the area had changed since Permian times, and are in addition important aquifers. The Permian sedimentary rocks of all the basins consist of breccias, water-laid and wind-blown sandstones. The closest analogy to these sediments occurs in certain areas of the Sahara desert and more arid of the mountain basins of western North America, and of Death Valley.

The purpose of this guide is to point out some of the localities where the main aspects of these Permian deserts can be examined. The guide is primarily designed for local educational institutes and interested amateurs, but hopefully it may be of some use to others. It deals only with the Lochmaben and Dumfries basins. The similar Thornhill and Moffat basins may be included in a later article. Since not many of us can afford, or survive, a trip through the Sahara desert or Death Valley, the Permian rocks can give us a good idea of many of the features to be found in recent deserts. They have a certain advantage over recent deserts in that, in the rock sections, you can examine sections through sand dunes and alluvial fans. In a modern desert, it is impossible to do this.

As you stand in one of these basins, sweltering in a temperature of about 110° during the day, and freezing in your sleeping bag at night, you would be overwhelmed by periodic sand storms, possibly, if unwary enough to camp in one of the wadi channels, caught in one of the many flash-floods roaring down from the surrounding hills. Your only companions would be some extinct reptiles, probably living close to the dry wadi-channels where some vegetation probably grew (though there is no sign of it now) and occasionally wandering over the sand dunes to expire of thirst in the desert.

Scotland at this time lay only a few degrees north of the Permian equator, and the easterly trade winds were transporting sand from the east across the Southern Upland into the Permian basins of southern Scotland.

To the west, North America was still joined to Europe, and you could have walked across to Chicago or New York. To the south, deserts and recent high mountains stretched southward to North Africa, which was still firmly joined to both North America and south-western Europe. A little further east a broad deep ocean was opening on the present site of the Mediterranean. North-east of Scotland, lavas were active in the Oslo region of Norway, but to reach this area you would have had to walk across a flat desert with enormous sand dunes, bare rock and temporary lakes occupying the present North Sea. And this desert stretched

even further eastward in Germany and the Low Countries. To the north-west a long arm of a shallow sea extended between Greenland and Norway, marking the line which, over 80 million years later would start splitting and cracking, as Europe and Africa started their slow separation from North America and Greenland.

We will start by noting the characteristics of some of the environments that can be seen in the Permian. Since interpretation of these rocks depends heavily on comparisons with recent desert basins, the characteristics of each environment are derived from studies of recent deserts. The most obvious, but by no means the commonest feature of recent deserts are sand dunes. Modern coastal dunes can be seen at various places along the Solway Coast. But these hardly resemble some of the large dunes of the Sahara, which can be up to 250 metres high and 3 Km. across. It is these large dunes that were present in the Permian basins, for example at Locharbriggs. These dunes show some of the features of Sahara dunes — the presence of very-well-rounded sand grains ('Millet seed' sand), almost entirely of quartz sand; massive cross-bedding and sand ripples and sometimes footprints of reptiles. As the grains were blown across the desert, only the hardest could survive. Rock fragments, and minerals with cleavages such as felspar and mica were shattered and degraded to dust, which was blown entirely out of the basins, leaving only the resistant quartz sand: though some felspar and rock fragments survive in the desert sandstones, appearing as small decomposed white spots. The red colour of the desert sandstones, and in fact of most of the other sediments is due to a ferric oxide coat around the grains. It is not a feature of recent deserts, and its origin is not entirely understood, but it appears to indicate oxidizing conditions. Occasionally where a speck of organic matter has been incorporated in the sediments, the red colour has been reduced around the spot to green, and sometimes water percolating through some of the more porous units has also reduced the prevailing red colour to green or white. However, the red colour was 'fixed' relatively early, as it is not now reduced by the passage of groundwaters.

The breccias, which occur mainly along the margins of the basins, were laid down on alluvial fans, or the closely akin wadi-fans. An alluvial fan is a fan-shaped body of rather coarse material, built up by a mountain stream at the base of a mountain front, where a steeper slope passes abruptly in a more gentle slope, mainly where the mountains end abruptly in a valley. Alluvial fans are characteristic of arid and semi-arid regions. Heavy rainfall appears to inhibit their development. Usually, several alluvial fans occur next to each other, and by their lateral coalescing form a broad sloping plain — an alluvial piedmont slope. Often alluvial fans develop in a tectonically active area where the mountains are being elevated, and the plain of valley sinking along a marginal fault. Alluvial fans are most common in an environment where mountain streams carry mountain debris into the plains. Wadi-fans differ from alluvial fans in that they are associated with desert dunes, and indicate very arid climate with only occasional floods carrying sediments down into the basin from the mountains. A lot of wind reworking of the deposits on the fan surface occurs, and often dune sandstones are interbedded with the breccias. The channels of wadi-fans often show alternations of wind and water-laid sediment.

The sediments on the wadi-fans and alluvial fans are deposited by a number of methods. Most of the water-laid deposits of fans are of the following types.

Debris-flow deposits. When a mass of flowing water picks up enough sediment, it starts behaving like a plastic mass, and can not immediately deposit its sediment load. Debris flows have high density and viscosity compared to normal streams. Because of this, debris flows are poorly sorted, often with very large boulders in a sandy, silty or clayey matrix. They are capable of transporting boulders weighing many tons. Factors which promote debris flows are abundant water over short periods of time and at irregular intervals, steep slopes with insufficient vegetation cover to prevent rapid erosion, and a source material that provides a matrix of mud. They are commonest near the head of alluvial fans. Because the wind removed much of the clay-sized material in the Permian desert environment, and because only the lower parts of the fans are usually preserved, debris flows are relatively rare in the Permian fans.

Sheetflood deposits. These are deposited by surges of sediment-laden water which spread out from the end of a stream channel on a fan. The resulting deposit is a sheet-like layer of sand or gravel. The deposits often contain little visible clay. In general they are well-sorted. They sometimes show a decrease in grain-size upwards due to waning of the flow with time. They can also show imbricated pebbles (i.e. pebbles inclined upstream and often arranged in layers — these are useful in that they show the direction in which the stream was flowing. Sheetflood sediments are the dominant ones in the Permian breccias.

Stream-channel deposits. The deposits that back-fill channels temporarily entrenched in a fan generally are coarser-grained and more poorly sorted than the sheetflood sediments, and they are often characterized by large-scale cross-bedding.

In many deserts, the vast amounts of water released by flash floods accumulate at the bases of the fans forming temporary desert lakes in which finer-grained sediments — silts and clays accumulate. These lakes may also be formed by the advance of sand dunes across the base of a fan, causing blockage of some of the fan channels. In the Permian basins, they are rare but may be examined in two places in the Thornhill basin.

Bare rock surfaces. Since these are the sites of erosion, they are rarely preserved in ancient deserts, but may occasionally be found buried beneath sand dunes or breccias. We are fortunate in this area, because at a number of places in the Lochmaben and Dumfries basins such surfaces underly breccias and dune sandstone. In the Thornhill basin, we can even see how an irregular lava surface was slowly buried by sand dune and stream deposits.

Rock Sequences. The vertical arrangements of rock types in the basins, show how the environments changed through time. But because of the extreme lateral variability of rock types, e.g. wadi-fan breccia pass into and are interbedded with dune sandstone laid down at the same time, the sequence shown below only very generally indicates the vertical changes. The vertical thicknesses given are the maximum, units often decrease in thickness to zero in places.

6. Red breccias with relatively well-rounded pebbles, indicating a semi-arid environment, but with greater rainfall than the units below. These breccias are

found only in the southern part of the Lochmaben basin, and in the small isolated Snar Valley basin, far to the north. Maximum thickness about 1,000 metres in the Snar Valley, 50 metres in the Lochmaben basin.

5. Red sandy breccias and sandstones with angular pebbles of local rocks, mainly sheet-flood deposits, with no 'millet seed' aeolian sand. These occur along the eastern margin of the Moffat basin, and at the top of the breccias along the western margin of the Dumfries basin. Maximum thickness about 500 m.

4. Red sandy breccias and sandstones with relatively abundant 'millet seed' sand, interbedded with dune sandstones. These occur along the western margin of the Dumfries breccia and along the eastern margin of the Moffat basin, where they are interbedded and pass into the upper part of the dune sandstones. Maximum thickness 1500 m.

3. Dune sandstones. Found in all the basins, often interfingering and overlying breccias in the Moffat, Thornhill and Lochmaben basins. Maximum thickness 1000 m.

2. Sandy breccias and sandstones, along the margins of the Thornhill, Moffat and Lochmaben basins, where they underlie the dune sandstones. These are predominantly sheet-flood deposits, but include some temporary lake deposits. They normally form the base of the sequence, but in the Thornhill basin overlie the basal lavas. Maximum thickness 100 m.

1. Basalt lavas, interbedded fine-grained breccias mainly in and to the south-east of the Thornhill basin. Maximum thickness 500 m. These lie unconformably on Carboniferous or older rocks.

Geological History. It is possible, by noting the depositional and stratigraphic relationships to give a rough history of the area during Permian times.

1. Erosion at the end of the Carboniferous, scooping out of the soft Carboniferous sediments from the Thornhill, Moffat, and possibly the Lochmaben basin. This was followed by eruptions of olivine basalt lava in Ayrshire, which extended down into the Thornhill basin, and almost into the Lochmaben basin. Erosion continued during the eruptions, as thin breccias with local greywacke pebbles, as well as basalt pebbles lie between the lavas.

2. Erosion continued on the uplands, as desert conditions became established breccias and sandstones, often with abundant fragments of the earlier lavas were laid down in the Thornhill basin, and along the northern margin of the Lochmaben basin. In the southern part of the Lochmaben basin, debris flow breccias contain large limestone boulders derived from Carboniferous rocks to the south. Desert conditions were established shortly after lava eruptions, as the breccias above them contain abundant wind-rounded sand grains, and polished and facetted pebbles. These were derived from wind-reworked surfaces of the wadi-fans.

3. As the uplands were worn down, wadi-fan activity slackened, and dune sandstones spread over the Thornhill, Moffat and Lochmaben basins, often extending, as in the Lochmaben and Thornhill basins, onto the Lower Palaeozoic rocks.

At this stage, the Dumfries basin appears to have been initiated by faulting along its western margin.

4. During the later stages of dune activity, faulting appears to have again

led to the spreading out of wadi-fans from the western side of the Dumfries basin, and from the eastern side of the Moffat basin.

5. Climatic changes towards the end of the breccia deposition in the Dumfries basin, caused deposition of sheetflood sediments on alluvial fans, with few wind-rounded sand grains.

6. This change culminated in the breccias with rounded clasts and silty-clay matrix of the southern Lochmaben and Snar Valley basins, and possibly the breccias and sandstones at Ballantrae, near Girvan, and at Stranraer. The changing climate may have been partly due to the encroachment of shallow seas to the south in the Upper Permian, flooding the Irish Sea and north-eastern England, leading to a more humid climate throughout S. Scotland. In the Vale of Eden, plant remains are abundant in lake deposits which are probably of the same age as these breccias.

Field Guide. Each locality is arranged by basin. Almost all the localities worth visiting are given, with the important features shown in each and the exact location, by national grid reference numbers. I assume you will be using a road vehicle of some sort. The time required for each locality is of course a bit subjective, but it includes the time needed to walk from the nearest parking spot to the locality and back, and usually around half an hour at each locality. You should choose your itinerary to suit available time and transport.

The maps needed are the one-inch to one mile Ordnance Survey topographic maps of the following sheets: 75 (Dumfries and Gretna), 74 (Dumfries), 68 (Biggar, Moffat and Sanquhar), and 69 (Selkirk). Geological maps on the scale of one-inch to the mile are currently available from sheets 5 and 9 (the Thornhill basin, northern part of the Moffat basin and western part of the Dumfries basin). Sheets 6 and 10 covering the greater part of the Dumfries, Lochmaben and Moffat basins have not been available for many years. Air photos are available from the Scottish Development Office, Edinburgh.

ALWAYS ASK PERMISSION, IF POSSIBLE, FROM THE NEAREST FARM OR HOUSE. Some localities require access through the gardens of private houses. I have never known permission to be refused, and it is only courteous to do so. Many farmers and householders in other parts of the country have, quite rightly, become thoroughly sick of the numbers of field parties who thoughtlessly and without permission trespass on their land, destroying crops, hedges and anything else that lies in their path.

DUMFRIES BASIN

Western Exposures

1. Old railway cutting, south-west of Cargenbridge (NX 935 739 to 941 740).

Thick tabular breccias with thin interbeds of water-laid sandstone are exposed in a 500 metre long cutting, up to 5 metres high. Note angular pebbles of acid rhyolitic intrusive rocks and greywacke in a silty sand matrix, the vertical decrease in grain-size within each breccia unit, and lenticular silty sandstone interbeds, the absence of channelling of one breccia unit by another, and the repetitive sequence of these breccias. Sheetflood deposits.

Walk westwards along the cutting. A small stream separates this cutting from the next cutting, in which shattered Lower Palaeozoic greywacke and mudstone are intermittently exposed. The stream between the two cuttings marks the site of the western marginal fault of the Dumfries basin, dropping the Permian breccia down against the Lower Palaeozoic.

Access: Park at Doweel Farm, just north of the cutting, and walk south about 100 metres. Time: about 1½ hours (1 hour in cutting). Alternatively, if you wish to examine good sections of the Lower Palaeozoic on the west, park just off the A 711, at NX 930 730, climb up the south banking, examining the interbedded greywacke and mudstone, then walk east along the old railway bed until you get to the cutting with the breccias. Excellent exposures of Lower Palaeozoic can be seen in other cuttings on the way. Time: about 2½ hours.

2. Stream section, south of old mill near Waterside (NX 928 756).

On the north bank of the stream, the following section can be examined:

3. Moderately coarse, well-sorted breccia with a matrix of granular sandy siltstone, 2 metres thick.
2. Medium-grained red quartz sandstone; cross-bedded and well-sorted 1 metre thick.
1. Red silty, fine-grained red sandstone, parallel-laminated with a thin breccia lens towards the top, 1 metre thick.

This section is interesting in that it shows a wind-blown sand unit (bed 2) between a water-laid sandstone and a breccia unit at the most extreme westerly breccia exposure in the basin. Both breccia and water-laid sandstone are sheetflood deposits: the breccia shows slight channelling at the base.

About 10 metres upstream, thick-bedded Lower Palaeozoic greywackes and thin mudstones dip steeply south. The covered ground between the exposures marks the western boundary fault of the basin.

Access: Park on north side of bridge over the Cargen Water at Waterside Farm. Walk west up the stud farm drive, and ask permission to examine the exposures which are behind the farm. Time: about ¾ hour.

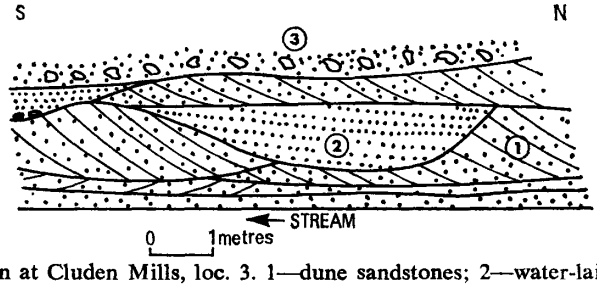


Fig. 1. Section at Cluden Mills, loc. 3. 1—dune sandstones; 2—water-laid sandstones; 3—breccias.

3. Section at Cluden Mills (NX 942 793).

In the north and south banks of the Cluden Water and in the stream-bed at the old mill, interbedded dune sandstones, channel sandstones and sheetflood breccias are exposed. A good section, showing the complex interbedding of wind and water laid sediments lies on the south bank (fig. 1). Wadi-fan channel.

Access: Turn off A 76 north of Dumfries onto B 720 just north of New Bridge. Take first side road on left (about 700 metres from junction) to Cluden Mills. Time: ½ hour.

4. Small quarry at Kilroy (NX 918 833).

This small quarry shows interbedded fine-grained breccia sandstones and sandstones, with slight channelling at the bases of some of the breccia sandstones. Total of 2 metres exposed. Wadi-fan channel or sheetflood deposits, on the lower part of a fan.

Access: Quarry lies on south side of side-road, just east of Kilroy Farm. Take side road to west, just north of cutting on the A 76, about 4½ kilometres north-west of New Bridge. Quarry is just over 1 km from the junction. Time: ½ hour.

5. Large quarry at Milliganton (NX 909 835).

This large quarry shows up to 9 metres of dune sandstone, which underlie the fluviatile sandstones of locality 4. Typical sweeping dune cross bedding can be seen in the quarry faces, indicating winds from the east during deposition. The quarry is flooded and only a small part of the south-western face is accessible. This locality represents the most westerly exposure of thick dune sandstones.

Access: Continue west on side road from locality 4. After about 1 kilometre turn south on farm track opposite Milliganton farm. Park among farm buildings, after asking permission at the farm, then walk up track for about 100 metres. Turn right off track and enter wooded area, where quarry can easily be seen.

South of Dumfries

This area provides some of the best exposures in the Dumfries basin, and the dune sandstones and overlying breccias can be seen in many small quarries and in exposures on the 'craigs'. The breccias mark advances of the alluvial fans into the desert basin, separated by periods of stability represented by fluviatile sandstone and rare dune sandstone, which unfortunately are rarely exposed, occupying the depressions between the 'craigs'. The area around Dumfries and to the south, in fact marks the fluctuating zone between the thick breccias to the west and the dune sandstones to the east.

6. Old quarry and other exposures at Castledykes Park, Dumfries (NX 976 746).

Some of the most interesting sedimentary features of the area can be seen in Castledykes Park (fig. 2). Note that a tectonic tilt of 10° west must be allowed for the interpretation of the section.

On section A, the dune sandstones on the left have been cut into by a back-filled breccia channel, showing large-scale cross-bedding and several phases of filling. Eventually, the channel was covered by a sheetflood breccia. This 'over-flow' of the channel can be seen on section C, where it overlies an earlier channel fill of fine-grained breccia and sandstone. The latter are also seen on section B, cutting into the dune sandstones. Here, they are cut by breccia (5) and sandstone (4) dykes. The sandstone dyke shows laminae of 'millet seed' sand parallel to the walls and large pebbles of siltstone. Since dune sands are present only below the breccias in this section, the dyke must have been injected from below. The origin of the dykes must be related to hydrostatic pressure by the thick breccia of section A on water-saturated sediments below.

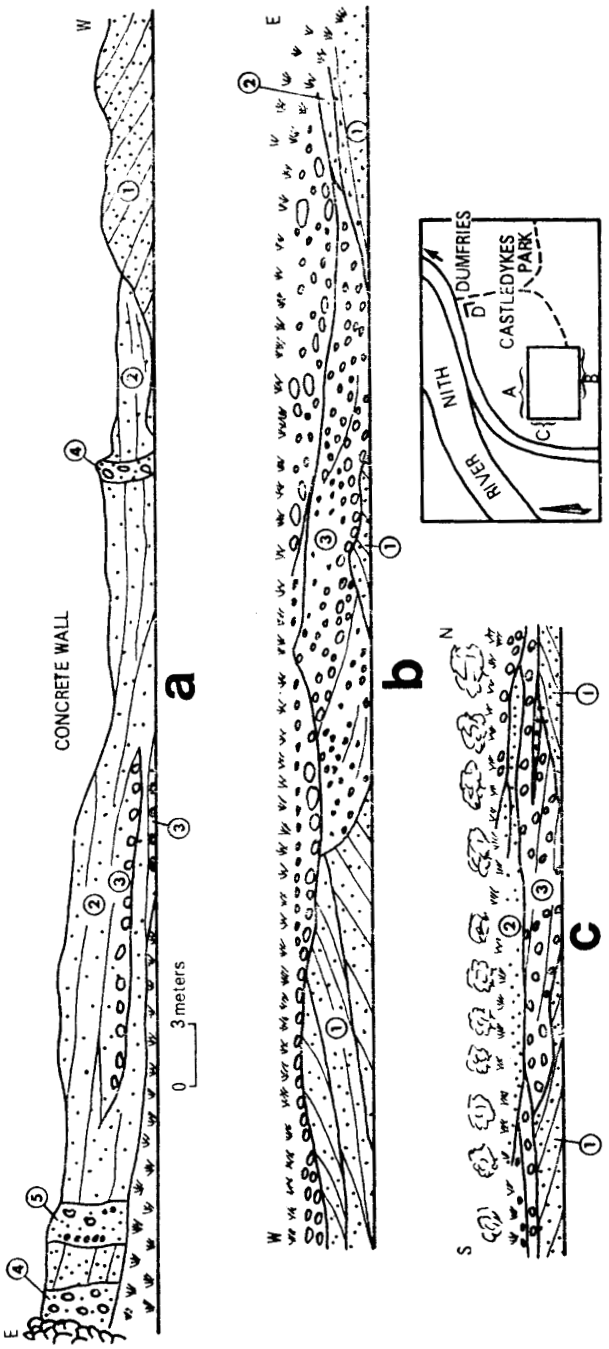


Fig. 2. Sections at loc. 6, Castledykes park. 1—dune sandstone; 2—water-laid sandstone; 3—breccias; 4—breccia dykes; 5—sandstone dyke.

Overlying fine-grained breccias and sandstones, showing channelling can be seen at the park entrance (loc. D on fig. 2). These are braided stream deposits.

Access: On A 75 by-pass of Dumfries town centre turn south on B 725 to Glencaple. After 500 metres turn right on the B 726 south from Dumfries to Kingholm Quay. Park at the western entrance of Castledykes Park. Enter park and proceed west to the formal gardens, occupying the old quarry. On the way back, examine the sheetflood braided stream breccias at the park entrance. Time: suggest at least 1 hour here.

7. Cliff section at Maidenbower Craigs (NX 977 744 to 988 746).

In this section, thick-bedded debris flow breccias and interbedded thin sandstones can be seen overlying fluviatile sandstones and fine-grained breccias. Above this comes up to 20 metres of thick-bedded breccia. This section illustrates the advance of a coarse-grained fan facies over a finer-grained sheetflood facies, possibly due to building out of the alluvial fan.

Access: On A 75 by-pass of Dumfries town centre, turn south onto the B 725 to Glencaple. After 300 metres turn sharply left before the old infirmary, then right onto Craigs road. In 500 metres there is a fork in the road; take the right fork. Proceed for 1 kilometre. Park at entrance to road to Maidenbower House. Walk south-west along dirt road. Continue along footpath due south-west, where the road to Maidenbower House swings sharply south-south-east. In woods at end of path is the section shown in fig. 3. About 50 metres south of this is a good section of the overlying debris-flow breccias can be seen. Time: suggest 1 hour.

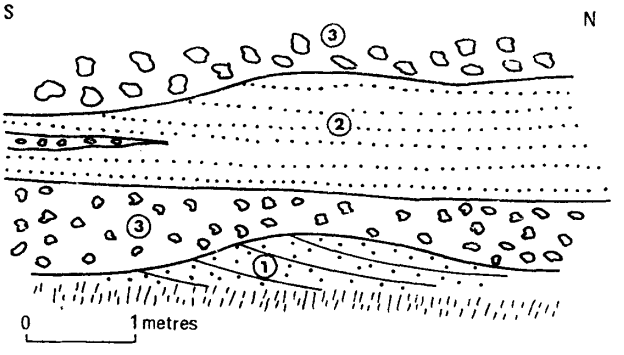


Fig. 3. Section at Maidenbower Craigs, loc. 7. Legend as for fig. 1.

8. Cliff section at Mid Craig (NX 994 744).

At Mid Craig, a lower breccia unit, similar to that at Maidenbower Craig is well-exposed. The major features of interest in this exposure are thin cross-laminated sandstone lenses, showing reworked 'millet seed' aeolian sand.

Access: Proceed south on the side road from Maidenbower Craigs for 500 metres. Park at Craigs Lodge, then proceed west to the exposures on the west side of the road. Time: ½ hour.

9. Quarry section at Georgetown (NX 998 742).

This quarry (Craigs Quarry) was noted by Harkness (1850): it furnished reptilian footprints from the dune sandstones. The quarry is overgrown and the faces

inaccessible, but steeply dipping tabular sandstones dip west. The quarry shows identical features to those at Locharbriggs (loc. 12), and is worth a stop only to show the uniform lithology of the dune sandstones immediately below the breccias.

Access: Proceed west along the side road from locality 8 for 500 metres. Turn left along a narrow road. After 200 metres turn left. Proceed for 200 metres and park. The quarry entrance is on the west side of the road. Time: ¼ hour.

Exposures in the Southern Part of the Dumfries Area

Proceed south on the B 725 from Dumfries, 600 metres from the A 75 junction bear left on Bankend road. 7.5 kilometres further on a small wood on the left at Greenmill hides the old and now flooded Greenmill Quarry. This shows dune sandstone dipping west, with the bedding planes of the sandstones covered with siltstone partings on which footprints were formerly common. Except to the adventurous, and those with no sense of smell, a visit is not recommended. Proceed south on Bankend Road, to Bankend.

10. Old quarry south of Bankend (NY 028 677).

This small quarry shows typical dune sandstones, but with rather more irregularly dipping cross-bedding than in other dune sandstone exposures, possibly due to more variable winds near the alluvial fans at the southern edge of the basin.

Access: About 1 kilometre south of Bankend, stop at the cottage by the roadside. Ask permission from the occupier to go through their garden into the overgrown quarry behind. Time: ½ hour.

11. Breccia on east bank of River Nith, south of Glencaple (NX 995 681).

This small shore section shows well-sorted sheetflood breccias, with clasts dominantly of the Criffell granadiorite, which forms the hills to the south-west. Note the strong control on pebble type by the local geology of the hills to the west, indicating very local derivation of the pebbles (contrast with pebbles at locality 6).

Access: 300 metres south of Glencaple. Park and walk west to the outcrops which lie just above high-water mark on the estuary. Time: ½ hour.

Other exposures in the area which are worth visiting occur on and around Chapelhill. At NY 007 686, a small quarry and cliff exposure shows sheetflood breccias overlying and occasionally channelling interbedded water-laid and wind-laid sandstones and fine-grained breccias. Dune sandstones are exposed in small quarries at NY 015 685 and NY 023 683. Sheetflood breccias and sandstones are exposed on the east side of Chapelhill (NY 015 684 to NY 016 678).

Exposures North of Dumfries

The whole of the north-eastern part of the Dumfries basin is underlain by dune sandstones. But these can only be examined in small, scattered exposures, apart from the quarries at Locharbriggs and Quarrelwood.

12. Three large quarries at Locharbriggs expose extensive vertical facies of dune sandstone up to 15 metres high. The best and most accessible quarry is at Locharbriggs North Quarry (NX 810 990). Here planar and wedge shaped tabular cross-laminated sandstones dip up to 30° south-west. In the upper and western parts of the quarry these are very regular, and the surfaces of the cross-stratified sets are frequently covered with wind ripples. In the lower and eastern part of the quarry, an exhumed crescentic dune slipface can be seen, ending in sharp crests running

down the dip. These were considered by Glennie (1970) to be part of the horn of a barchan dune. But they appear to me to be minor ridges of a predominantly transverse dune system (cf. McKee, 1966).

Access: Take the A 701 north-east from Dumfries. Go through the village of Locharbriggs. On the northern outskirts, a side road joins the main road from the right. Proceed for 300 metres, then turn left onto a side road between two gravel pits at the bottom of the hill. Proceed for 200 metres up the hill; then ask permission at the quarry office to visit the quarry. The entrance to the quarry lies 100 metres further on, on the left. Time: 2 hours.

To the south lies the flooded, and now almost inaccessible Locharbriggs South Quarry (NX 992 808) which shows mainly regular tabular cross-laminated dune sandstone.

300 metres north-west of the entrance at Locharbriggs North Quarry along the side road, is the entrance to Knowehead Quarry (NX 988 814) which shows the same features: regular tabular dune sandstone sets, underlain by crescentic more irregular dune slipfaces.

13. Quarrelwood Quarry (NX 962 843).

This quarry shows dune sandstones similar to Locharbriggs, though only a few metres can now be seen, and the quarry is partly overgrown and being filled with rubbish.

Access: From locality 12, continue north-west along the side road. After 400 metres turn right at the 'T' junction. After 450 metres turn left on the road to Kirkton. In Kirkton, turn right at another 'T' junction. Proceed for 3 kilometres before turning right onto the road to Newlands. Proceed for 400 metres. The quarry entrance lies on the right. Time: ¼ hour.

Of more interest than the quarry itself are exposures in the stream on the left hand side of the road, about 50 metres north of the quarry entrance. Here, medium-grained finely-laminated dune sandstones can be seen overlying vertically dipping Ordovician greywacke and mudstone, with only a small stretch of covered ground between. Note especially the fine-grained nature of the dune sandstones, directly above the unconformity. Time: ¼ hour.

LOCHMABEN BASIN

Northern Part

14. Channel in greywacke, filled with breccia and dune sandstone; Water of Ae, east of Aebriggend (012 867).

This exposure lies on the south bank of the water of Ae, and is only accessible at low water. Here, a thin sandy breccia lies in a channel cut into Ordovician greywacke and mudstone, and is in turn overlain by dune standstone (fig. 4). This probably represents a fan channel incised into bedrock on the extreme western margin of the fan, where it overlapped onto the high ground, now represented by the ridge between the Lochmaben and Dumfries basins.

Access: Take A 701 from Dumfries towards Moffat. About 11 kilometres out of Dumfries, just before the bridge over the Water of Ae, turn left on the road to Ae village, and park at a suitable spot. Return to the main A 701 on foot cross

the bridge and descend to your right to the north bank of the Water of Ae. Walk downstream for about 150 metres until the stream swings sharply south to cut into the southern bank. The exposure shown on fig. 4 occurs here. Wade across the stream just upstream from the exposure. You can then walk, sometimes knee-high in water, along the exposure. Time: 1½ hours.

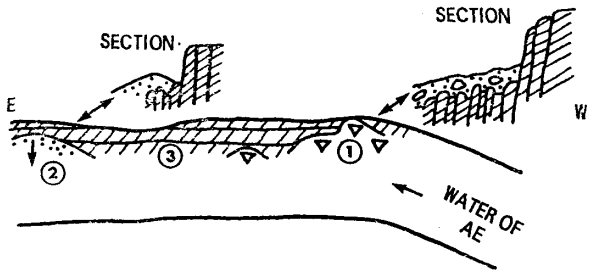


Fig. 4. Plan view and sections in the Water of Ae, loc. 14. 1—breccia; 2—dune sandstone; 3—Lower Palaeozoic greywacke and shale.

15. If you have already got yourself wet at locality 14, it is worth examining the exposure of water-laid sandstone at Shieldhill to the south (NY 037 853).

Here, fine-grained silty sandstone and breccia sandstone represent a fine-grained facies of the wadi fans to the north (exposures 16-18). These are exposed in the bed of the Water of Ae, and require a walk along the bed of the stream to see them.

Access: From Aebriggend, return south-west along the A 701 for 0.5 kilometres. Turn left on the first side road. Proceed for 2½ kilometres. At the 'T' junction turn right; after 300 metres turn left and park immediately before the bridge over the abandoned railway, or in the side road on the right just over the bridge. Walk east along the northern side of the railway for 600 metres, until you reach the water of Ae, which here swings in from the north. Descend to the stream and walk along it for a few metres until the red sandstones appear in the stream bed. From here red sandstones occur for about 100 metres in the bed, and outside curve of the meander.

In the northern part of the basin, several streams have cut through the Pleistocene drift, to expose good sections.

16. Garrel Water section.

This exposes dune sandstones, underlain by thin, water-laid sandstones and basalt bearing fine-grained breccias. In a branch of the Garrel Water, a fine section shows fine-grained basalt-bearing breccias unconformable on steeply dipping Ordovician greywackes. Since this is a composite section, the rocks will be described with the access section.

Proceed north-east from Aebriggend towards Moffat, for 3½ kilometres. At 3 kilometres, you pass the farm of Kirkland on the left, then pass a side road off to the right. 400 metres past this road, turn off left on a small side road to Garvald Church, just before Burrance bridge. Park at Garvald Church ruins. Walk due north across the fields to the Garrel Water. At NY 042 905, are dune sandstones.

Proceed north along the stream. At NY 040 906, a good exposure of dune sandstone lies on the west bank, just before a stream joins the Garrel Water from the north-west. Proceed up the Garrel Water for 300 metres. Between NY 039 909 and 039 910, good exposures of water-laid pebbly sandstones overlie fine-grained tabular sandy, graded breccias with small, very angular clasts of greywacke and occasional basalt. These are sheetflood deposits on the lower parts of wadi-fans. They include large quantities of aeolian sand and facetted basalt pebbles.

Return down stream to tributary which joins Garrel Water from north-west. Time permitting, it is worth struggling 600 metres up this stream, choked with fallen trees, to see the magnificent Permian-Ordovician unconformity at NY 035 908.

17. A small section is also exposed in the Mollin Burn to the east.

This shows fine-grained breccias, fluviatile sandstones and occasional interbedded dune sandstones unconformable on the Ordovician greywacke.

Access: 2 kilometres north east of Burrance bridge, the A 701 crosses the bridge over the Mollin Burn. 200 metres further on turn left on the side road to Mollinburn Farm. Proceed for 150 metres, then park at the farm. Directly opposite, on the west bank of the Mollin burn, are fine-grained breccias. 10 metres upstream, a scrappy section in the bed of the burn can be interpreted as the Permian-Ordovician unconformity. Go down the stream, below an old bridge. After 50 metres you will come to an interesting bankside exposure showing fine-grained tabular and channelled fine-grained sandy breccias overlying dune sandstones (NY 059 920).

18. Section in Kinnel Water at Hartfield Farm (NY 068 925 to NY 068 914).

This interesting section shows a thick breccia section overlain by, and in places interbedded with, dune sandstones.

1½ kilometres north west of the Mollin Burn (locality 17), turn right onto the road to Hartfield Farm. Park at the farm, ask permission, and then walk east to the river. In a meander cliff are thinly laminated dune sandstones dipping south. Proceed upstream (it helps if you do not mind getting your feet wet), for 350 metres. Cross the stream and look up at the cliff exposure on the west bank. Here, a fine-grained tabular breccia sandstones and sandstones are faulted against the Ordovician to the north, (NY 068 925). These are dominantly sheetflood sediments.

Return downstream past Hartfield farm. 200 metres south of the farm on the south bank are some fine-grained graded breccias and sandstones, showing cross-bedding, channelling and imbrication. These are braided stream channel sediments (NY 070 920).

Further downstream (NY 068 918), fine-grained breccias are well-exposed, and further on (NY 066 915) are overlain by thick dune sandstones, which are intermittently exposed for a further 500 metres on the outside curves of the meanders. Time: at least 2 hours.

Further east, a number of scrappy exposures south of Johnstone bridge will only be briefly referred to here. At NY 100 916, dune sandstones are exposed on the west bank of the River Annan. South of this at NY 103 855, fine-grained water-laid sandstones are interbedded with very fine-grained breccias, probably repre-

senting deposits at the extreme base of the wadi fans coming in from the north.

Exposures in the Centre and Eastern Part of the Lochmaben Basin

In the centre of the basin, two exposures of the dune sandstones are worth visiting.

19. Corncockle Quarry (NY 085 870).

This large quarry exposes massive faces of dune sandstone up to 40 metres high and 150 metres long. In the north-eastern parts of the quarry, very evenly bedded tabular cross-laminated sets dip about 30° south-west. In the extreme south-western part of the quarry convex upward bounding surfaces may represent dome-shaped dunes (cf. McKee, 1966).

Unfortunately the quarry is flooded, and the faces accessible only at a few points, but it is still worth visiting.

Access: From Lochmaben take the B 7020 north. At Templand, turn right at the cross-roads. Proceed for 1¼ kilometres, then turn left. Proceed for 1½ kilometres, the quarry entrance lies in the south-western angle of the road junction. Park and proceed for 600 metres on foot along the marked path. On the left is the quarry.

20. Corsua Quarry (NY 075 880).

This small, overgrown and flooded quarry is still worth a visit, as it shows very coarse dune sandstone which underlines the fine-grained dune sandstones at Locharbriggs, and were formerly worked at Templand. Note especially the quartz overgrowths on the coarse sand grains.

Access: At Templand cross-roads, proceed west on the side-road. In 250 metres turn right onto another side road and proceed north for 1½ kilometres. Take the dirt road east to a small group of cottages, just before Corsua Farm. Or alternatively park on the main road and walk the 150 metres to the cottages. Ask at the cottage for permission to go to the quarry directly behind. The face is only accessible by scrambling down at the extreme north-western corner. Take care you do not fall into the flooded, rubbish-filled pit.

21. Stream section at Upper Cleugh Farm, north of Lockerbie (NY 119 871 to NY 120 873).

This interesting exposure shows coarse breccias unconformable on Ordovician greywacke, in turn overlain by fine-grained breccias and breccia sandstones, with water-laid sandstones. The breccias contain occasional basalt clasts derived from the north-west, indicating that the wadi-fans which deposited the breccias along the northwestern margins of the Lochmaben basin at least periodically extended right across to the eastern side of the basin.

Access: Proceed north from Lockerbie on the A 74. Cross the Dryfe Water. 2 kilometres from here turn right on the road to Nethercleugh at the second cross-road. After crossing the railway turn left. After 1 kilometre turn right onto the road to Upper Cleugh Farm. Park and ask permission to visit the exposures at the farm. Then walk through the farm and down the hill to the stream. Walk upstream about 10 metres to the first exposure of breccia and sandstone. Exposures are almost continuous for 200 metres upstream, until the unconformity is met at NY 120 873. (Again, the overgrown, choked stream is best negotiated by simply wading up the

stream.)

22. Road-cutting on A 74 (T), north of Lockerbie, (NY 131 828).

This section shows about 4 metres of interbedded breccia sandstones and moderately to poorly sorted sandy breccias. The breccias contain rare Carboniferous limestone clasts, derived from the south and occasional large boulders of pink intrusive rhyolite, as well as the usual angular greywacke and argillite pebbles. These were derived from outcrops to the south of the Lochmaben basin. Dominantly wadi-fan debris flow and sheetflood deposits.

Access: From Upper Cleugh (loc. 22), return to the A 74 (T). Proceed south for 4.5 km. Exposures occur on both sides of the cutting, and lie close above the Permian - Ordovician unconformity in this area.

23. Breccias with rounded clasts at Kettleholm (NY 143 768).

On the east bank of the Water of Milk, about 20 metres of coarse-grained moderately sorted breccias contain relatively well-rounded greywacke and argillite clasts in a matrix of silty granules. Quartz sand is rare. Though the tabular breccias show little internal fabric apart from imbrication they closely resemble braided stream or sheetflood sediments of alluvial fans. The absence of limestone and basalt clasts is surprising as they lie very close to the outcrop of the Birrenswark Lavas to the south. Imbrication indicates a south-westerly current flow, and possibly by the time these breccias were laid down the lava outcrop had been eroded back almost to its present position. The absence of basalt and limestone clasts and the rounded nature of the pebbles may indicate that these breccias were deposited in a more humid climate after the earlier desert one.

Access: From Lockerbie, take the B723 south. In the village of Kettleholm, 4 km. south of Lockerbie, park at the bridge over the Water of Milk. Proceed about 50 metres south, then turn right into the first opening in the wall, walk north to the river bank, where the breccias are exposed.

24. Limestone breccias at Daltonhook (NY 110 769).

In an old, partly flooded and rubbish-filled quarry, an unusual limestone breccia can be examined. Here massive debris flow and sheet-flood sandy breccias contain blocks of Carboniferous limestone up to 1 metre across. These are possibly equivalent in age to the breccias at loc. 22, but as they are closer to the Carboniferous limestone source (about 3 km. south), they are coarser grained. These breccias apparently directly overlie the basement below the Permian, and probably interfinger with the aeolian sandstones of the Lochmaben basin centre.

Access: From Kettleholm (loc. 24) take the side road west, directly opposite the old school. After 1 km. there is a cross-roads, proceed directly across. After 1.5 km. the road bears left, after 1.5 km. another cross-roads. Proceed directly across to Daltonhook Farm. After 0.5 km. bear right at the farm and proceed for 0.7 km. until you see the rubbish-filled quarry on your right. The best and most accessible exposures occur at its northern end.

References

GLENNIE, K. W., 1970. **Desert Sedimentary Environments.** Elsevier, Amsterdam. 222 p.

HARKNESS, R., 1850. On the New Red Sandstone of the southern portion of the Vale of the Nith. **Quart. J. geol. Soc. London,** 6: 389-399.

HARKNESS, R., 1856. On the sandstones and breccias of the south of Scotland of an age subsequent to the Carboniferous period. **Quart. J. geol. Soc. London,** 12: 254-267.

McKEE, E. D., 1966. Structure of dunes at White Sands National Monument, New Mexico (and a comparison with structures of dunes from other selected areas). **Sedimentology,** 7: 1-69.

THE JAMES GILCHRIST LICHEN COLLECTION AT DUMFRIES MUSEUM

by

M. R. D. SEAWARD

School of Environmental Science, University of Bradford

and

B. J. COPPINS

Royal Botanic Garden, Edinburgh

James Gilchrist was born 21 June 1813, the son of a working mason, at Collin near Dumfries. His father died of consumption at the early age of 30 in 1816. James was brought up by his mother, a woman of strong character. As a young boy he helped to contribute towards the cost of his education at the parish school of Torthorwald by working on local farms during his school holidays. His education appears to have been somewhat sporadic; however he was able to benefit from occasional attendance at the Dumfries Academy where a distant relative of his was a teacher. It was here that he became interested in the sciences. He continued to educate himself after being apprenticed to a draper in Dumfries, but his health suffered as a result of working so hard.

His work at the local Sunday school kindled in him a desire to enter the Presbyterian ministry. Leaving the uncongenial drapery trade, he managed after a time as a schoolmaster in a boarding school to raise enough money through his own efforts and those of his friends to enable him to attend a university, first Glasgow (1843) and later at Edinburgh — a remarkable achievement for a largely self-educated man at the age of 30. Unfortunately ill-health forced him to retire from the divinity course, and he convalesced in the country which no doubt fostered his interest in natural history. During this period he gave up his plans to enter the ministry, and he decided instead to study medicine, returning to Edinburgh University in 1846. Impressed by his ability, several of his professors generously waived payment for their classes — a debt which he repaid in later years. He obtained his M.D. in 1850 and was appointed from then until 1853 as medical assistant at the Crichton Royal Institution, Dumfries, and as medical superintendent at the Montrose Royal Asylum from 1853 to 1857. In 1857 he became medical superintendent at the Crichton Royal, where he remained until heart trouble forced him to retire in 1879. In his retirement he organized and conducted classes in natural history. He died at Dumfries on 7 December 1885; obituaries are to be found in several publications including the **Transactions of the Botanical Society of Edinburgh** (17: 2-11) and the **Scottish Naturalist** (8: 242-243). He triumphed over adversity; he was a stern Presbyterian, a non-smoker, a teetotaller, and a martyr to dyspepsia. He was gentle and kindly, and pioneered new treatments of psychiatric illness. He married twice late in life: his first wife died, aged 35, in 1881 leaving him two sons; he married again in 1883. His second wife nursed him and was a devoted stepmother to the two boys, both of whom rose to eminence — one in surgery, one in music.

All his life he was a keen botanist and geologist. He was essentially a field worker, and travelled widely in the British Isles and on the Continent. He created a botanical and geological study group at the Crichton Royal, and founded the Dumfries and Galloway Natural History Society in 1862, being its President from 1874 to 1878 and from 1882 to 1885. A plaster bust of Gilchrist by Dods, made in 1886, was presented to the Society in 1913, and is now in Dumfries Museum (see frontispiece). He was President of the Cryptogamic Society of Scotland in 1883. His published botanical work is limited; only two minor contributions (Gilchrist, 1855; Smith and Gilchrist, 1860), are known, and the role he played in the compilation of papers by other authors is not fully recognized.

Dr Gilchrist's cryptogamic interests were in all probability stimulated through his meetings with Mr Alexander Croall (1809-1885). He was also in contact with Dr William Lauder Lindsay (1828-1880), one of the foremost lichenologists of his day; no doubt their communications in the first instance were of a professional nature since they were both involved in mental health treatment. There are clear indications from the contents of the lichen collections, publications and correspondence of Gilchrist, Lindsay and their contemporaries that there was close collaboration in field work in Scotland, and a free circulation of their herbarium material. Many of the locations for the Dumfries Museum herbarium material listed below were the favourite haunts (e.g. Kinnoull and Craigie Hills) of Lindsay. The accumulation of Gilchrist's herbarium material may have resulted either directly from Lindsay, and(or) by joint field activities by the two, and(or) by independent collection by Gilchrist, possibly on the advice of Lindsay. The majority of the collections made in Kirkcudbrightshire and Dumfriesshire at this time were almost certainly those of Gilchrist, and were used in Lindsay (1856) and in Leighton (1879). There is no reference to Gilchrist's contribution in the former work, and only a single mention of his name appears in the latter work although the locations given in both works are indicative of his researches in lowland Scotland. A few of Gilchrist's specimens were examined by Lindsay in the preparation of his major work on imperfect states in lichens (Lindsay, 1861).

The list which follows is based on the lichens contained in the Gilchrist botanical collection housed at Dumfries Museum. With few exceptions, only that material which can be adequately named, localized and dated has been catalogued. There are, in addition to the field collections listed, numerous lichen specimens with inadequate herbarium labelling, together with a collection of bryophytes as yet not investigated. The collection cannot be regarded as of paramount importance, especially since some of the material is duplicated in W. L. Lindsay's herbarium at the Royal Botanic Garden, Edinburgh. Furthermore, many of Gilchrist's specimens, not duplicated in the Dumfries Museum collection, are to be found in Lindsay's herbarium. Nevertheless, there are some very interesting specimens at the Dumfries Museum and the data derived from this investigation give a clearer indication of the nature of the 19th century lichen flora, and its investigators, of an area of Scotland which has been poorly documented (cf. Seaward, 1974).

In the list which follows, the nomenclature is according to James (1965), and vice-county numbers are provided in parentheses after each locality (spelt **verbatim**

according to packet labelling). New vice-county records, in respect of Watson (1953), are denoted by an asterisk(*). The names of collectors are for the most part unknown (see above); the contraction 'Dr.G.' no doubt refers to Gilchrist, but the collectors Dr Moffat (of Millriggs, Hutton, near Lockerbie), 'Mrs.W.' and 'Mr.B.' await further investigation.

The authors wish to express their thanks to Mr A. E. Truckell, Curator of the Dumfries Museum, for making the Gilchrist collection readily available for study, and for his help in the compilation of the biographical section of this paper, and to Dr D. L. Hawksworth of the Commonwealth Mycological Institute for his confirmation and determination of some critical lichen material.

THE COLLECTION

Alectoria fuscescens Gyeln. Kinnoul Wood (87), 10.10.1857, named as **Cornicularia jubata.** var. **positiva** (Gyeln.) D. Hawksw. Mchl Girdie (88), 9.8.1855, named as **A.jubata.**

A.saramentosa subsp. **vexillifera** (Nyl.) D. Hawksw. Morchone, Braemar (92), Aug. 1856.

Anaptychia ciliaris (L.) Körb. Reigate (17), 17.9.1860, **c.fr.**; Kinnoul Wood (87)*, 10.10.1857, **c.fr.**

A.fusca (Huds.) Vain. Gareloch (99)*, Nov. 1861, **c.fr.**

Baeomyces roseus Pers. Ben Nevis (97), 14.8.1856.

Buellia canescens (Dicks.) DNot. Caerlaverock (72)*, 10.6.1861, incorrectly named as **Physcia caesia.**

Cetraria chlorophylla (Willd.) Vain. Reeky Linn (90), 8.9.1862, incorrectly named as **C.sepincola** (cf. Watson, 1953).

C.commixta (Nyl.) Th. Fr. Braemar (92), Aug. 1856, **c.fr.**

C.glauca (L.) Ach. New Abbey (73) 24 & 25.6.1861; Coolins, Isle of Skye (104), 18.8.1856.

C.islandica (L.) Ach. Craig Challioch (88), 4.8.1853; Braemar (92), Aug. 1954 & Aug. 1956; Ben Nevis (97), 14.8.1856.

C.nivalis (L.) Ach. Craig an Dahl (92), 11.8.1854; Braemar (92), Aug. 1856.

Cladonia arbuscula (Wallr.) Rabenh. Ben Lawers (88), 6.8.1855.

C.bellidiflora (Ach.) Schaer. Ben Lawers (88), 6.8.1855; Braemar (92), Aug. 1854, incorrectly named as **C.deformis;** Ben Nevis (97), 14.8.1856; Storr, Isle of Skye (104), 20.8.1856.

C.coccifera (L.) Willd. Dalscairth Moss (73), July 1860, named as **C.extensa.**

C.conista (Ach.) Robb. ex Allen Ben Lomond (86)*, Aug. 1847, named as **C.pyxidata.**

C.floerkeana (Fr.) Sommerf. Storr, Isle of Skye (104), 19 & 20.8.1856, incorrectly named as **C.gracilis.**

C.furcata (Huds.) Schrad. Dumfries (72), 1850; Tinwald Downs (72), 28.8.1861.

C.gonecha (Ach.) Asah. Braemar (92), Aug. 1855; Ben Nevis (97), 14.8.1856; Dun's Moor (VC unknown), 10.1.1863, **c.fr.**; all collections named as **C.deformis.**

C.gracilis (L.) Willd. Dalscairth Moss (73), July 1860.

C.impexa Harm. Dalscairth Moss (73), July 1860; Craig an Dahl (92), 11.8.1854, incorrectly named as **C.rangiferina.**

C.ochrochlora Flörke Falls of Clyde (77), 23.7.1848, incorrectly named as **C.gracilis.**

C.rangiferina (L.) Web. Ben Lawers (88), 6.8.1855.

C.rangiformis Hoffm. Tinwald Downs (72), 28.8.1861.

C.squamosa (Scop.) Hoffm. Dalscairth Moss (73), July 1860.

C.tenuis (Flörke) Harm. Ben Nevis (97), 14.8.1856, incorrectly named as **C.rangiferina.**

C.uncialis (L.) Web. Colvend, Solway (73), 1.6.1861; Braemar (92), Aug. 1854; Ben Nevis (97), 14.8.1856.

C.verticillata (Hoffm.) Schaer. Ben Nevis (97), 14.8.1856, incorrectly named as **C.furcata.**

Collema flaccidum (Ach.) Ach. Kinnoul Hill (87), March 1856, named as **C.granulatum.**

Cornicularia aculeata (Schreb.) Ach. Mehl Girdie (88), 9.8.1855; Montrose Links (90), Feb. 1859; Storr, Isle of Skye (104), 19.8.1856.

C.muricata (Ach.) Ach. Tinwald Downs (72)*, 28.8.1861, incorrectly named as **C.aculeata.**

C.normoerica (Gunn.) Du Rietz Ben Nevis (97), 14.8.1856.

Dermatocarpon miniatum (L.) Mann var. **miniatum** Stenton Crag, Dunkeld (89), April 1856; Dunstaffridge Chapel (VC 98), 7.7.1860.

var. **complicatum** (lightf.) Hellb. Kinnoul Hill (87), March 1856.

Evernia prunastri (L) Ach. Dumfries (72), 1850; Drumlanrig (72), July 18—, **c.fr.** Bankend Dumfries (72), 2.2.1862; Kenmuir Wood (73), 29.4.1861, **c.fr.** Charlton Wood (90), 1857. The two records of fertile material from Lowland Scotland are important to our understanding of the reduction in fertility and luxuriance which are associated with increasing air pollution levels (cf. Hawksworth **et al.** 1974, fig. 5).

Lecanora carpinea (L.) Vain. Crichton Grounds (72)*, 8.8.1861, VC record here predates that of Seaward (1974).

L.chlarotera agg. Crichton Grounds (72)*, 8.8.1861, VC record here predates that of Seaward (1974).

Lobaria amplissima (Scop.) Forss. Inverary (98), Aug. 1867, leg. Mr.B.

L.laetevirens (Lightf.) Zahlbr. Ardrishaig, Mull (103)*, July 1860; Killarney (H2), Aug. 1861.

L.pulmonaria (L.) Hoffm. Kenmuir Wood (73), 29.4.1861.

L.scrobiculata (Scop.) DC. New Abbey (73), 4.11.1861.

Nephroma laevigatum Ach. Kenmuir Wood (73)*, 29.4.1861, incorrectly named as **N.resupinatum** (cf. Watson, 1953).

N.parile (Ach.) Ach. Falls of Foyers (96), 13.8.1856, incorrectly named as **N.resupinatum** (cf. Watson, 1953).

Parmelia caperata (L.) Ach. New Abbey (73), 4.11.1861.

P.conspersa (Ehrh. ex Ach.) Ach. Bankend, Dumfries (72), 4.3.1861, **c.fr.**; Auldgirth (72), 29.7.1861.

P.crinita Ach. New Abbey (73), 25.6.1861, incorrectly named as **Cetraria glauca.**

P.furfuracea (L.) Ach. var. **furfuracea** Kinnoul Wood (87), 10.10.1857, **c.fr.**

var. **ceratea** Ach. New Abbey (73), 4.11.1861.

P.glabratula (Lamy) Nyl. subsp. **fuliginosa** (Fr. ex Duby) Laund. Irongray Churchyard (72), 23.12.1860, **c.fr.**; Bankend, Dumfries (72), 2.2.1862, **c.fr.**; both collections named as **P.olivacea.**

P.omphalodes (L.) Ach. Criffel (73), Aug. 1860, **c.fr.**; Braemar (92), Aug. 1854.

P.perlata (Huds.) Ach. Bankend, Dumfries (72), 2.2.1862; New Abbey (73), 25.6.1861, incorrectly named as **Cetraria glauca**; Crinan Canal (101), Aug. 1856.

P.physodes (L.) Ach. Dumfries (72), 1853; New Abbey (73), 24.6.1861, **c.fr.**; Den of Airlie (90), 9.9.1862, **c.fr.**

P.saxatilis (L.) Ach. Caerlaverock (72), 10.6.1861, **c.fr.**; New Abbey (73), 24.6.1861; Coolins, Isle of Skye (104), 18.8.1856.

P.sulcata T. Tayl. Bankend, Dumfries (72), 2.2.1862; Auldgirth (72)*, 29.7.1861, VC record predates that of Seaward (1974).

Parmeliella plumbea (Lightf.) Vain. Falls of Foyers (96), 13.8.1856, **c.fr.**; Basaltic Cliff, South Oban (98), 7.7.1860, **c.fr.**; Kinlochscriden, Mull (103)*, 11.7.1860.

Peltigera aphthosa (L.) Willd. var. **variolosa** (Massal.) Thoms. Reeky Linn (90)*, 8.9.1862, **c.fr.**

P.canina (L.) Willd. Moffat Road (probably in VC 72), 24.8.1861.

P.horizontalis (Huds.) Baumg. Dalscairth (73), 3.2.1862; Reeky Linn (90), 8.9.1862.

P.polydactyla (Neck.) Hoffm. Annan (72), 9.9.1861, incorrectly named as **P.horizontalis** (cf. Watson, 1953); Crags, Dumfries (72), 31.10.1861, incorrectly named as **P.canina.**

P. cf. **polydactyla** (Neck.) Hoffm. Kirkmahoe (72), 11.11.1861; Ben Nevis (97), 14.8.1856; both named as **P.canina.**

P.venosa (L.) Baumg. Loch Tay (88), Aug. 1855.

Pertusaria leioplaca (Ach.) DC. Falls of Foyers (96), 13.8.1856, incorrectly named as **P.pertusa.**

Physcia adscendens (Th.Fr.) Oliv. em. Bitt. Bankend, Dumfries (72), 4.3.1861, **c.fr.**; Cupar-Angus (90), 26.9.1861.

P.aipolia (Ehrh. ex Humb.) Hampe Auldgirth (72)* 29.7.1861; Maryfield, Dumfries (72), March 1861; Falls of Foyers (96), 13.8.1856; all collections incorrectly named as **P. stellaris** (cf. Watson, 1953).

P.orbicularis (Neck.) Poetsch Bankend, Dumfries (72)*, 4.3.1861, VC record predates that of Seaward (1974).

P.pulverulenta (Schreb.) Hampe Bankend, Dumfries (72), 2.2.1862, incorrectly named as **P.stellaris** (cf. Watson, 1953), Maryfield, Dumfries (72), March 1861; Auldgirth (72), 29.7.1861.

P.tenella (Scop.) DC. em. Bitt. Bankend, Dumfries (72), 4.3.1861; Rossie Moor (90), 23.5.1857; Cupar-Angus (90), 26.9.1861.

Pseudocyphellaria crocata (L) Vain. Inverary (98), Aug. 1867.

Ramalina calicaris (L.) Fr. Craig-Hall (VC unknown), 27.9.1861, **c.fr.**

R.farinacea (L) Ach. var. **farinacea** Dumfries (72), 1850; New Abbey (73). 25.6.1861; Doune (87), 8.8.1863, leg. Mrs. W.

var. **hypoprotocetrarica** (Culb.) D. Hawksw. New Abbey (73), 25.6.1861; Doune (87), 8.8.1863, leg. Mrs W.

R.fastigiata (Pers.) Ach. Bankend, Dumfries (72), 4.3.1861; Lochmaben (72), 24.3.1860.

R.fraxinea (L.) Ach. Charlton Wood (90), 1857, **c.fr.**; Craig-Hall (VC unknown) 27.9.1861, **c.fr.**

Solorina crocea (L.) Ach. Ben Lawers (88), 6.8.1855.

S.saccata (L.) Ach. Reeky Linn (90), 8.9.1862.

Sphaerophorus globosus (Huds.) Vain. New Abbey (73), 7.9.1860 & 24.6.1861; Ben Lawers (88), 9.8.1855; Morchone, Braemar (92), Aug. 1856; Falls of Foyers (96), 13.8.1856.

S.melanocarpus (Sw.) DC. Inverary (98), Aug. 1867, leg. Mr B.

S. cf. **melanocarpus** (Sw.) DC. Lerwick, Shetland (112), Sept. 1852.

Stereocaulon dactylophyllum Flörke Criffel (73), July 1860; Ben Nevis (97), 14.8.1856; both incorrectly names as **S.paschale** (cf. Watson, 1953).

S.vesuvianum Pers. Ben Lawers (88), 9.8.1855; Mehl Girdie (88), 9.8.1855, incorrectly named as **S.paschale**; Braemar (92), Aug. 1854; Coolins, Isle of Skye (104), 18.8.1856.

Sticta fuliginosa (Dicks.) Ach. New Abbey (73), 4.11.1861, **c.fr.**

S.limbata (Sm.) Ach. New Abbey (73), 7.9.1860.

S.sylvatica (Huds.) Ach. New Abbey (73), 4.11.1861; Kinlochschriden, Mull (103)*, 11.7.1860.

Teloschistes flavicans (Sw.) Norm. New Forest (11), May 1860.

Umbilicaria cylindrica (L.) Del. ex Duby Ben Challum (88), 14.8.1853; Ben Nevis (97), 14.8.1856, incorrectly named as **U.proboscidea.**

U.polyphylla (L.) Baumg. Craig-y-Burns, Dunkeld (89), April 1856; Braemar (92), Aug. 1856.

U.pustulata (L.) Hoffm. Coolins, Isle of Skye (104), 16.8.1856.

U.torrefacta (Lightf.) Schrad. Glen-Dee, Braemar (92), Aug. 1856.

Usnea filipendula Stirt. Kinnoul Wood (87), 10.10.1857, named as **U.barbata.**

U.florida (L.) Web. New Forest (11), May 1860; Kenmuir Wood (73)*, 29.4.1861.

U.subfloridana Stirt. Water O' Milk, Dumfries (72), Oct. 18—, named as **U.barbata**; Moffat (72), 2.6.1868, **c.fr.**, incorrectly named as **U.florida** (see Plate 1); Kenmuir Wood (73), 29.4.1861, **c.fr.**, incorrectly named as **U.florida.**

Xanthoria elegans (Link) Th. Fr. Dryfesdale (72)*, 1859, incorrectly named as **X.parietina,** leg. Dr. Moffat, VC record here predates that of Seaward (1974).

X.parietina (L.) Th. Fr. Lochmaben (72), 24.3.1860; Bankend, Dumfries (72), 4.3.1861; Mary field, Dumfries (72), March 1861; Dryfesdale (72), 1858 & 1859, leg. Dr. Moffat; Polnackie (73), 15.4.1861; Cupar-Angus (90), 26.9.1861.

REFERENCES

Gilchrist, J. 1855. On the geological relations of some rare alpine plants. **Proc. Bot. Soc. Edinb. 1855:** 9:11.

Hawksworth, D. L., Coppins, B. J. and Rose, F., 1974. Changes in the British lichen flora. In Hawksworth, D.L., ed. **The Changing Flora and Fauna of Britain** pp 47-78. Academic Press, London.

James, P. W. 1965. A new check-list of British lichens. **Lichenologist 3:** 95-153.

Leighton, W. A. 1879. **The Lichen Flora of Great Britain, Ireland and the Channel Islands.** 3rd ed. Shrewsbury.

Lindsay, W. L. 1856. **A Popular History of British Lichens.** London.

Lindsay, W. L. 1861. Memoir on the spermogones and pycnides of filamentous, fruiticulose and foliaceous lichens. **Trans. R. Soc. Edinb. 22:** 101-303.

Seaward, M. R. D. 1974. Contributions to the lichen flora of lowland Scotland—1. Dumfriesshire. **Trans. Bot. Soc. Edinb. 42:** 143-151.

Smith, J. A. and Gilchrist, J. 1860. Notice of plants collected in the Isle of Skye. **Trans. Bot. Soc. Edin.** 6-44.

Watson, W. 1953. Census Catalogue of British Lichens. London.

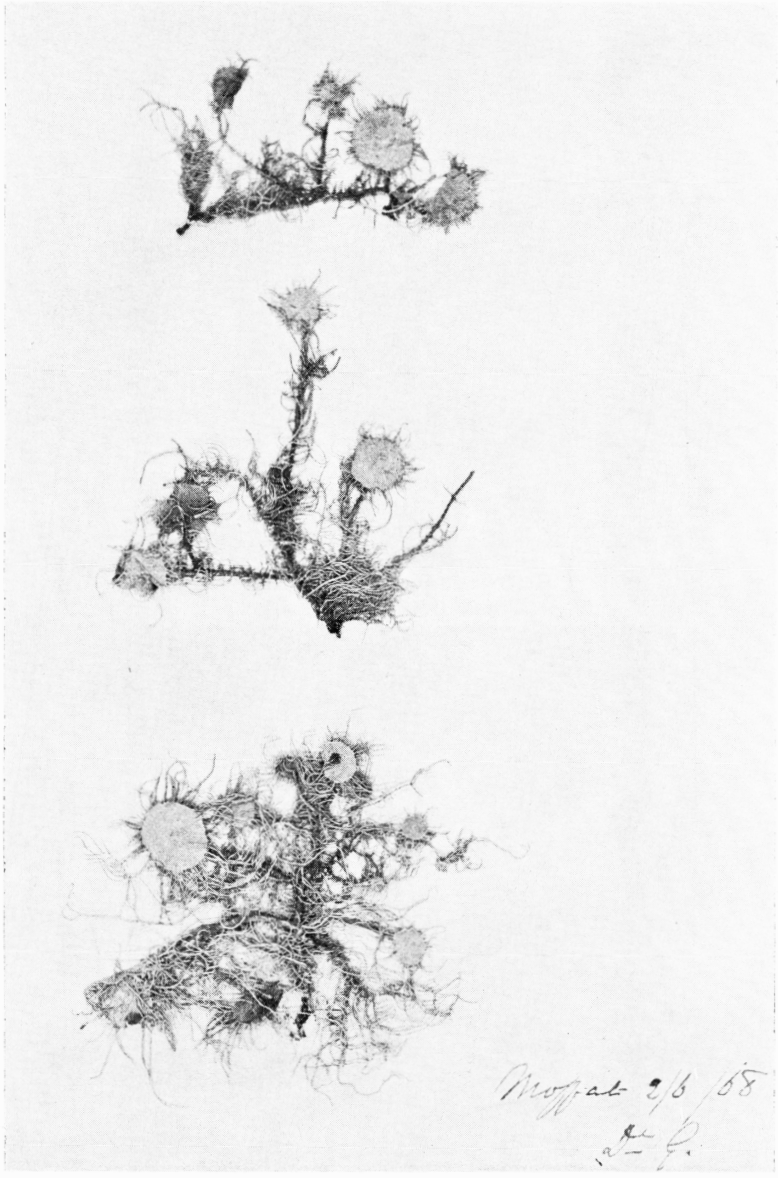


Plate I—Herbarium sheet of Usnea subfloridana, in fruit, from Gilchrist lichen collection — scale $\frac{2}{3}$ natural size.

BLYSMUS RUFUS (HUDS) LINK

ITS DISTRIBUTION ON THE CAERLAVEROCK NATIONAL NATURE RESERVE, DUMFRIES AND GALLOWAY

by Joanna Martin, Nature Conservancy Council

The presence of **Blysmus rufus** (Huds) Link, a sedge of maritime grassland and saltmarsh on the Caerlaverock National Nature Reserve, was thought to be significant — in view of its distribution in Europe and Great Britain. A more thorough survey of the species' distribution on the National Nature Reserve was suggested and this work was undertaken in 1972 and 1973.

Blysmus rufus the saltmarsh flat-sedge is an oceanic northern species in Europe. In Great Britain (see Fig. 1) it is recorded from South and North Wales, northern England, South Scotland, east and west Highlands and Northern Ireland as a halophyte on saltmarshes and estuarine grasslands. The species is believed to have decreased during the present century, especially in the southern parts of its range (NCC — A Nature Conservation Review — in press).

The first record known to date in vicinity of Caerlaverock is that of Professor J. H. Balfour while on a botanical excursion to Caerlaverock Castle in 1864. The plant is recorded from "Glencaple" in 1882 and the specimen is in the Dumfries Museum. D. A. Ratcliffe recorded **Blysmus rufus** as being "locally abundant in shallow muddy pools on consolidated zone of saltmarsh at Caerlaverock" in 1956. In 1970 Ranwell of the Nature Conservancy included **Blysmus rufus** in his species list for the Flooders, now part of the Caerlaverock NNR.

For survey purposes it was essential to familiarise oneself with the species in the field. Specimens were collected and identification confirmed by the British Museum (Natural History). The plant grows in swarms, monospecific communities which are dense collections of stems and leaves 10-35 cm high. The stems and leaves are bluish green, enabling recognition of the plant from a distance. The leaves are smooth and have in-rolled margins. 5-8 spikelets form a flattened dark brown fruiting head; the lowest bract exceeds this spike. The fruiting head is visible from June to October (see Fig. 2). It is possible that historically this plant may have been confused with **Blysmus compressus.** Records for both species occur along the Solway shore, but **Blysmus compressus** is believed to be more frequent in marshy places inland.

A number of synonyms have been used for **Blysmus rufus** and all are listed in Clapham Tutin and Warburg 1962 and Beetle A. A. 1949. They are as follows:

1. **Blysmus rufus** (Huds) Link
2. **Scirpus rufus** (Huds) Schrad
3. **Scirpus rufus** Schrad Flora Germ 1: 33 + l.f. 31806
4. **Nomochloa rufa** (Schrad) Beetle var neogaeus Fern Rhodora 45: 287. 1943
5. **Nomochloa rufa** (Schrad) Beetle var neogaea (Fern) Beetle

For field recording a 6 in. scale map of the Reserve area was acquired and

each 1 km square divided into 100 parts, giving 100 metre quadrats. The entire merse area was covered on foot, the intention being to traverse each 100 metre quadrat. With no grid reference points, it was difficult to determine one's exact

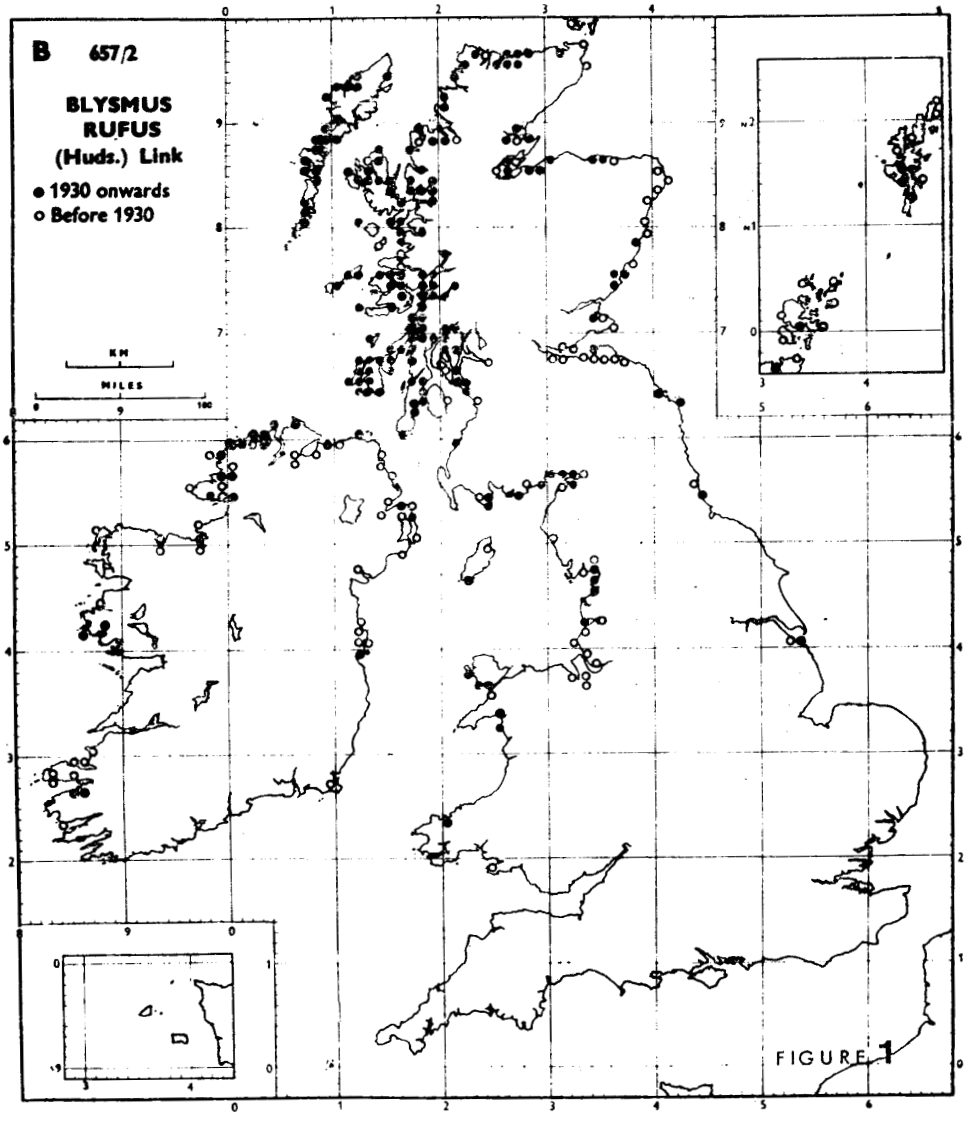


Fig. 1. Distribution of Blysmus rufus (Hids.) Link in the British Isles — reproduced from **Atlas of the British Flora** by permission of the Botanical Society of the British Isles.

location. The best method was found to be pacing out the area of a square from a landmark and walking parallel with fences, banks etc. Wherever the plant was seen a dot was placed in the centre of the appropriate 100 metre square to indicate

its presence. No estimate of abundance was made The presence of the species in the 100 metre squares was then plotted onto a 2½ in. scale map and the merse edge and Reserve boundary transferred onto this map from 1973 aerial photographs (see Fig. 3).

Fig. 2. Blysmus rufus (Huds.) Link. Scale: natural size, with detail approximately 1⅓ natural size.

The area of merse on the Caerlaverock National Nature Reserve in 1973 is calculated to be 634.00 ha. This represents a decrease of 66 ha since 1954 when the 2½ in. O.S. map was prepared. This decrease is represented as 700 ha in 1954 minus 110 ha plus 44 ha = 634 ha (1973 aerial photographs). **Blysmus rufus** occurs

in 190 x 100 metre squares within the Reserve area, i.e. occurring in over 33% of the Reserve. The greatest concentrations of the species occur on the Lantonside Merse (A) around Sherrington and Browhouse Creeks in front of Castle Wood (B)

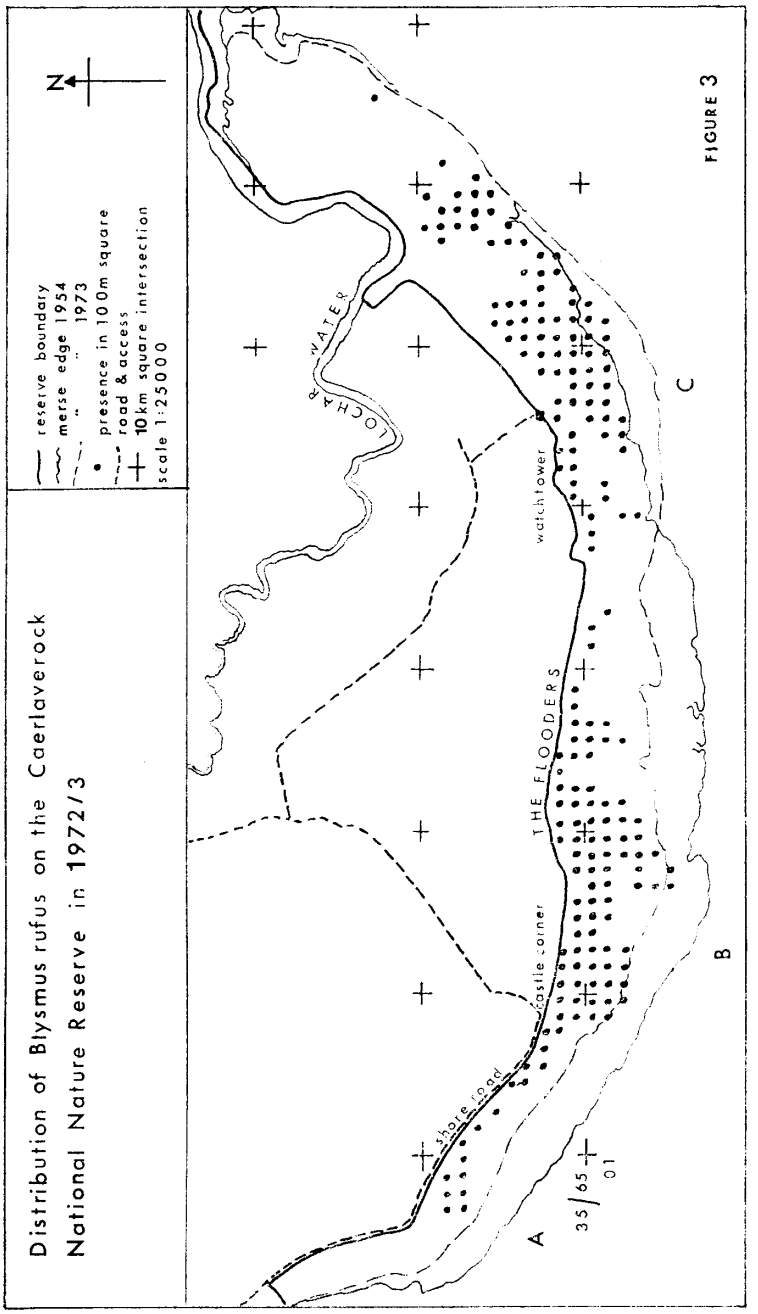


Fig. 3

and on Eastpark Merse in front of the Southcot Hills and the NCC watchtower (C). In all three areas the species was observed growing on firm ground between damp depressions and in monospecific swarms. Initially it was thought that **Blysmus rufus** did not grow in standing water or too close to maritime influences. However, the most healthy and tallest specimens were recorded from the New Merse on Eastpark. The leaves and flowering stems reached 30-45 cm and the plant was rooted in water and formed a large clump covering 10 square metres. Associated species were **Aster tripolium, Juncus gerardii** and **Glaux maritima.** The situation was ungrazed and it appeared that the species' growth was restricted in drier parts. On Lantonside Merse the species was not recorded from within the dense and rank **Puccinellia maritima** swards attributed to no grazing. On comparing the geographical distribution in 1972 and 73 with a vegetation map produced by Marshall 1960-61, it appears that **Blysmus rufus** is growing within the general community types —**Glaux-Festuca-Agrostis** zone in the east,**Glaux-Triglochin** and **Aster-Plantago-Triglochin** with **Festuca** and **Agrostis** in the west.

The distribution of **Blysmus rufus** on the Caerlaverock NNR is not uniform and the presence or absence may be linked with microtopographic situations, habitat preferences or a grazing regime. There is insufficient autecological information to draw any conclusions. At Caerlaverock it occurs on both old and newly formed merses and Scott-Elliot 1900 recorded it as a 'landformer' at Langbank on Clyde, although a less significant one than **"Scirpus lacustris var Tabernoemontani".** It may be useful to discover the more detailed distribution of the species along the Solway shore with the help of local botanical recorders and to consider its presence in relation to other species of a restricted distribution in Great Britain.

BIBLOGRAPHY

Aerial photographs 1973 Meridian. NCC collection

Beetle A. A. 1949 Annotated List of Original Descriptions in Scirpus. Am. Mid. Nat. 41.

Clapham Tutin and Warburg 1962 Flora of the British Isles. Cambridge.

Hulten, E. 1971 Atlas over Vaxternas Utbredning i Norden.

Marshall, J. 1960-61 Physiographic Development of Caerlaverock Merse. TDGNHAS Vol. 39, 3rd series.

Perring and Walters (Eds) 1962 Atlas of the British Flora.

Scott-Elliot, G. F. 1900 The Formation of New Lands by Various Plants. Annals Andersonian Nat. Soc. Vol. II, part 2.

EXCAVATIONS AT THE WREN'S EGG, PORT WILLIAM, WIGTOWN DISTRICT

by Lionel Masters, M.A., F.S.A., F.S.A.Scot.

Summary

An erratic boulder (The Wren's Egg) and two standing stones have been considered to be the remains of a double concentric stone circle with the erratic as a centre stone. Excavations failed to provide evidence for any additional stone holes and, on other grounds, it is argued that a stone circle was unlikely to have existed at this site.

Introduction

A pair of standing stones and a large erratic boulder, known as the Wren's Egg, occupy the south end of a natural elongated mound, some 250 m. north-west of Blairbuy Farm in the Parish of Glasserton, which now forms part of the Wig-

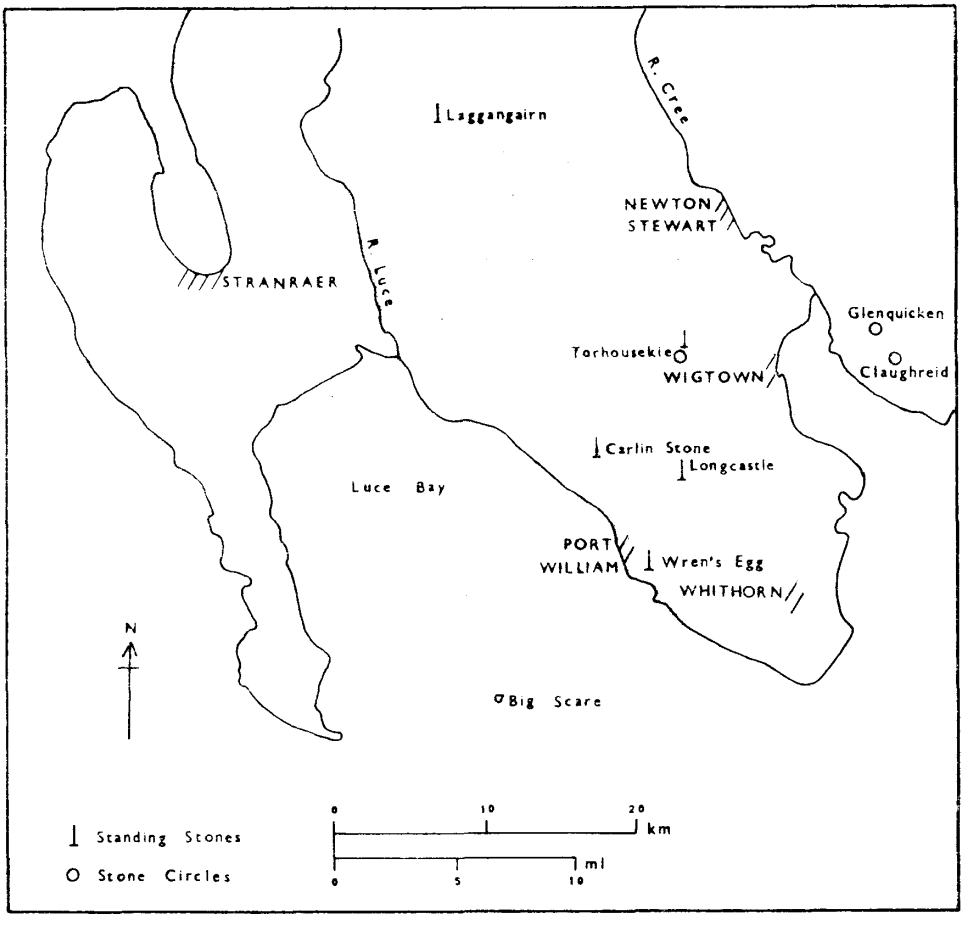


Fig. 1 Location of The Wren's Egg and other sites mentioned in text.

town District of the Dumfries and Galloway Region (N.G. Ref. NX 361420), (Fig. 1). This monument, together with a number of others in the area, was amongst the first to be offered into guardianship under the Ancient Monuments Act of 1882, by Sir Herbert Maxwell, M.P., of Monreith House. The Wren's Egg was visited in 1887 by General Pitt-Rivers in his capacity as Inspector for the Office of Works, and his original notes, plan and sketch indicate that little has changed at the site in the succeeding ninety years (PRO/MW/1/775). By 1890 the site had been included in the Schedule of Monuments, and in 1908 the site was again visited by an Inspector of the Office of Works, Mr J. Fitzgerald, whose account of his visit is worth quoting in full because of the subsequent controversy which has surrounded the classification of this site (PRO/MW/1/775):

> "This huge monolith is the centre of a Circle of Stones, of which but few remain in their original position. Many have been removed, even within the memory of old parishioners to form gate-posts, etc., or even to be broken up.
>
> I discussed with the owner of the land, Sir H. Maxwell and the Tenant, Mr McMasters, the recovery and replacing of the lost Stones. The tenant promised his co-operation — without which nothing could be done, and I hope that the Circle which was once of exceptional importance may be reformed.
>
> A new Metal Notice is required instead of the old wooden one — it should be placed near the farm, **not** close to the Wren's Egg.
>
> (sd.) J. Fitzgerald
> 11th July, 1908."

Fitzgerald's account is of considerable interest, for it seems to be the first occasion on which it is definitely stated that there was a stone circle around the Wren's Egg. In his 1887 notes, Pitt-Rivers does mention the possibility of stones being removed, but does not suggest that there was ever a stone circle. How much reliance may be placed on Fitzgerald's report will be discussed later, but it is perhaps worth noting in passing that he mentions "few" stones remaining, when Pitt-Rivers clearly states that there were only two standing stones.

With the publication of the first volume of the Royal Commission's **Inventory of Galloway** in 1912, a further classification for the Wren's Egg emerged. Here it is stated that "there stands a large granitic ice-borne boulder, around which there formerly stood a double concentric stone circle. Only two small pointed boulders remain **in situ,** opposite members of each circle, some 6 ft. apart and E. by N. of the central boulder. The radius of the outer circle has been 66 ft." (RCAHMS, 1912, 12). Thus in the 25 years since Pitt-Rivers first visited the site, it had "developed" from a glacial erratic and a pair of standing stones to the remains of a double concentric stone circle, with the Wren's Egg itself as a central stone. The latter classification has been accepted by a number of subsequent writers (Childe and Simpson, 1961, 126), and most recently by MacKie (1975, 64). Nevertheless, there was obviously some doubt as to the exact classification, the Department of the Environment for instance only refers to "Standing Stones" on its notice board

at the site. The 1909 edition of the Ordnance Survey 1 : 10560 map (Wigtownshire, Sheet XXX, S.E.) refers only to standing stones, but the new 1 : 50000 map (Sheet 83) has the site marked as a stone circle. Burl, however, does not include the Wren's Egg in his **corpus** of stone circles (1976, 365, but note that the grid reference given here refers to a pair of standing stones 400 m. south-south-east of the Wren's Egg).

In an attempt to solve the dilemma surrounding the classification of this monument, the Inspectorate of Ancient Monuments (Scotland) invited the writer to undertake a small excavation. The excavation took place from 21st June to 4th July, during a period of exceptionally hot and dry weather.

The Site and its Setting

The gently undulating topography of the Wigtown-Whithorn peninsula is the result of modifications made predominantly during the later stages of the Würm-Weichsel glacial period. Numerous drumlins, low hog-backed ridges, resulting from the moulding of the upper till by ice movement, are particularly com-

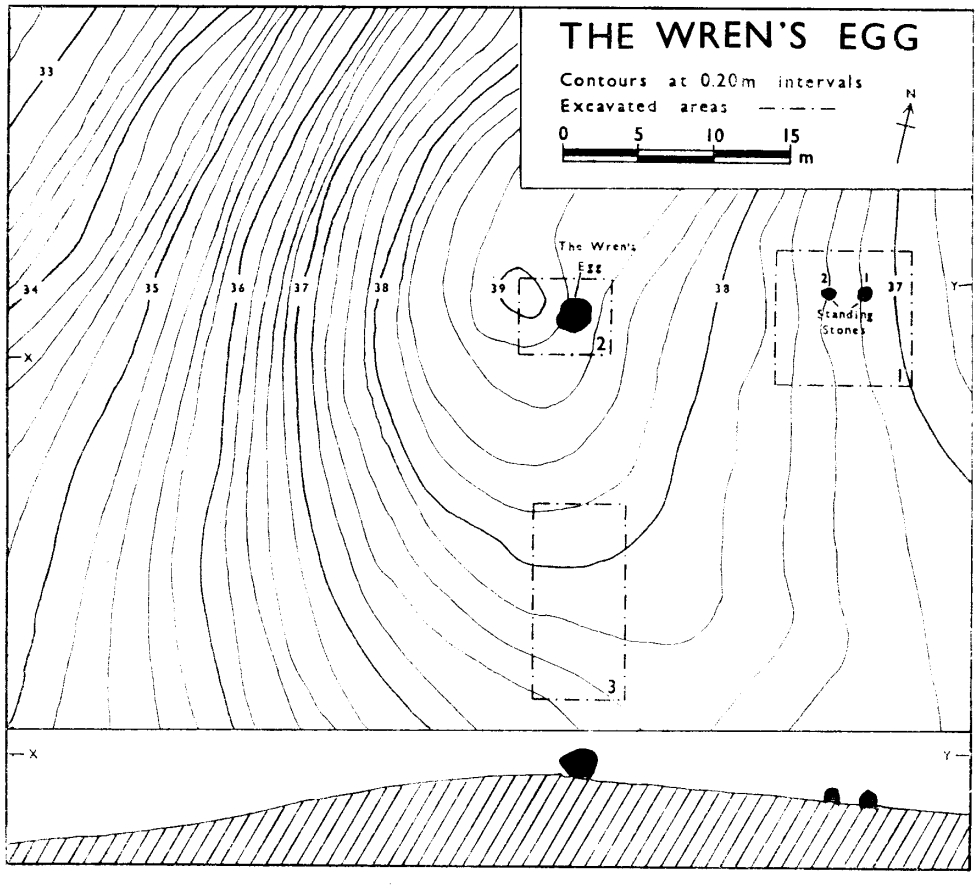


Fig. 2. The Wren's Egg: Contour survey and layout of excavated areas.

mon in the Machars area between Burrow Head and Kirkcowan. Fluvioglacial deposits resulting from the melting of the last ice-sheets, are also a common feature of the countryside. Beneath the glacial drift lie the Silurian greywacke rocks of the Llandovery series (Greig, 1971). Still to be seen are many glacial erratics, though a significantly large number have been removed or broken up in the course of agricultural improvements during the last two hundred years.

The soils of Western Galloway have recently been mapped by the Soil Survey of Scotland (Kirkmaiden, Whithorn, Stranraer and Wigtown, Sheets 1, 2, 3, 4 and part Sheet 7 (Soil)). The present soils in the area around the Wren's Egg constitute a soil complex, but in the immediate vicinity of the site the subsoil consists of fluvioglacial gravels derived from the local Silurian rocks.

The Wren's Egg is situated at the southern end of a low natural ridge at a height of between 37 and 39 m. above O. D. (fig. 2). To the east the view is domi nated by the Fell of Barhullion, which rises to a height of 136 m., whilst to the south and south-west the land rises to a height of some 50 m. thus obscuring, for the most part, any extensive views of Luce Bay. To the west and north the view is similarly obscured by the rolling countryside. A copse of mature trees occupies the northern half of the ridge and, to judge from the sketch prepared by Pitt-Rivers in 1887, the appearance of the site is much the same today as it was then, the only difference being that the wall surrounding the copse as shown in the sketch, has now fallen and is largely overgrown.

The Excavation

In order to test the hypothesis of a double concentric stone circle, three areas were selected for investigation (fig. 2). Area 1 was laid out in order to look for the next pair of stone holes to the south of the present standing stones, assuming the circle's centre to be the Wren's Egg. At the same time, this area was designed to test the possibility that the standing stones might have formed part of the western arc of a double concentric stone circle, for it should be noted that the ground is more level to the east of the standing stones, and is therefore a more likely situation for a stone circle. Area 3 was selected to look for stone holes, again assuming the Wren's Egg to be the centre stone. The length of the area excavated was dictated by the necessity of assuming that the putative circle might not be circular, but could belong to one of the flattened or egg-shaped rings, or indeed might even have been an ellipse (Thom, 1967). Area 2 was investigated in the hope that the Wren's Egg might have formed a focal point for some prehistoric activity. In total, 184 sq. m. were investigated by hand. The field in which the site is situated has been regularly ploughed for at least a hundred years, and it was known that plough-ing had taken place close to the edges of both the standing stones and the Wren's Egg.

Area 1 (fig. 3)

In order to establish the undisturbed appearance of the stone holes, the area around the pair of standing stones was investigated first. The topsoil around and

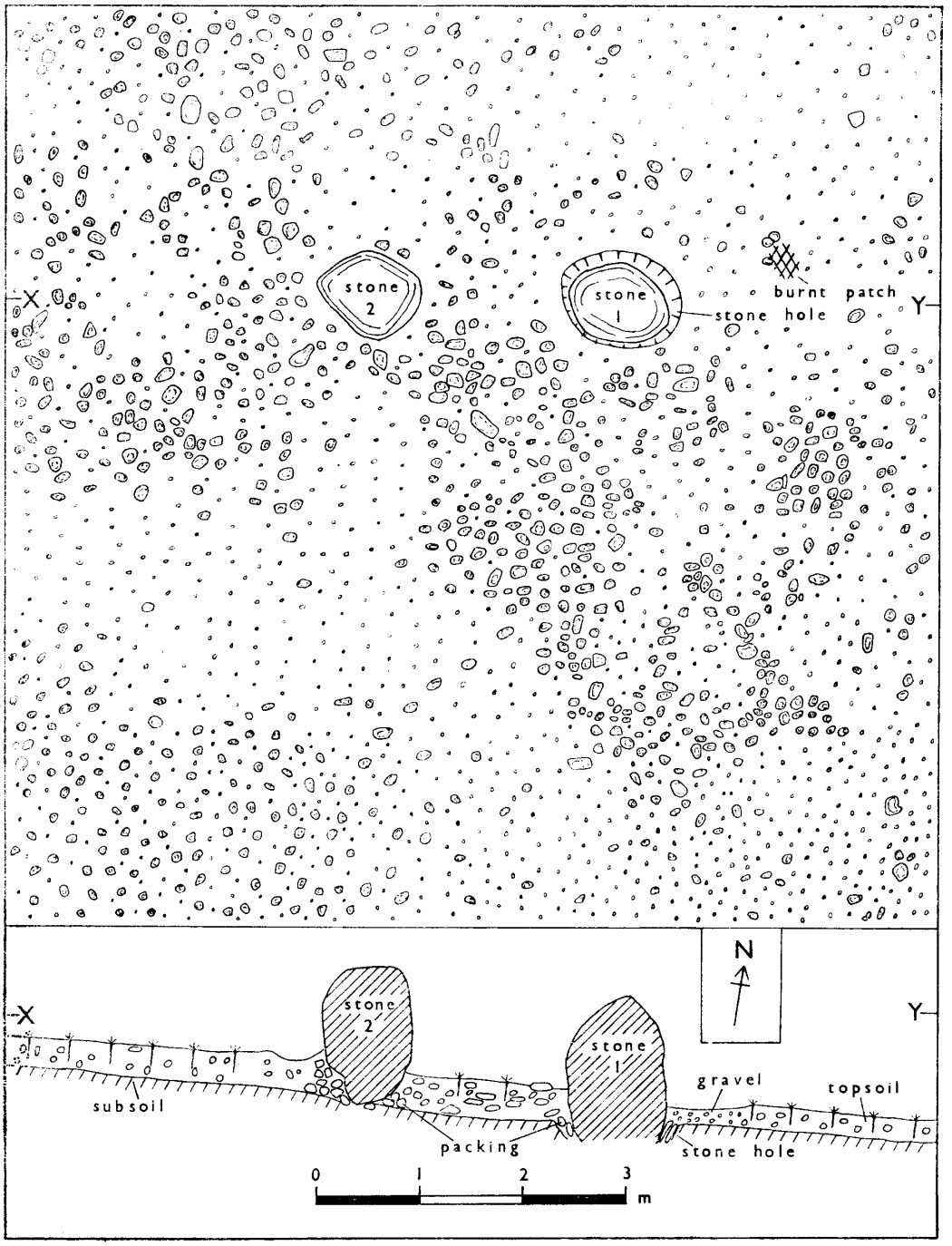


Fig. 3. The Wren's Egg: Plan and section of Area 1.

between the standing stones had been considerably disturbed by the trampling of both sheep and cattle. Removal of the remaining grass cover between the standing stones revealed a heavily compacted topsoil, in which there were numerous small rounded stones, some of which might possibly be the result of casual field clearance. Beneath this was a layer of more-or-less stone free brown soil immediately above the subsoil. Around the standing stones there was a tight stone packing, except on the east side of Stone 1, where there was a patch of stone free gravel soil, much disturbed by cattle trampling. The soil contained within the stone packing around the standing stones was a light brown/yellow in colour, in contrast to the darker brown soil between the stones.

Stone 1 (plate II) is an unworked granite boulder with a pointed top. It had been set into a hole, 1.22 by 0.94 m., which had been cut into the gravel subsoil to a depth of at least 200 mm. The hole had been tightly packed with a mixture of small rounded stones, up to 200 mm. in length, and a few larger thin slabs. One slab measuring 350 by 220 and 70 mm. thick had been tightly wedged between the underside of the standing stone and the edge of the hole. Because of the danger of the standing stone falling over, it was not possible to make a complete examination of the stone hole. Nevertheless, some packing was removed and later replaced. So far as could be seen, the hole contained nothing but packing stones and soil, whilst the bottom of the standing stone itself appeared to be gently rounded. The total height of stone 1 is not known, but it is at least 1.50 m., and its maximum circumference is 2.56 m. The weight of the stone can be estimated at around 1.50 tonnes.

Stone 2 (plate III) is situated 1.50 m. to the west of stone 1. It is also an unworked granite boulder, 1.34 m. in height and 2.50 m. in maximum circumference. Its weight is probably only slightly less than the 1.50 tonnes of stone 1. This stone had been positioned so that its top was almost flat, whilst its base proved to be more pointed. Unlike stone 1, this stone had not been set in a stone hole, but could be seen to be resting in a slight hollow no more than 30 mm. deep. The base of the stone had been carefully packed with small rounded stones, particularly on the west side, where the packing survived to a height of 400 mm. above the top of the subsoil. As with stone 1, no finds were made in the packing around this stone.

With the topsoil removed from the rest of area 1, the natural gravel subsoil was investigated for possible additional stone holes, or concentrated areas of small stones which could have been the remnants of packing, such as was noted around stone 2. The topsoil over much of the area proved to be quite shallow, varying between 220 and 360 mm. It must be admitted therefore, that if other standing stones had been packed in a manner similar to stone 2, all traces of that packing could have been dispersed by a century of ploughing. The subsoil itself presented a variegated surface composed of areas of small water-rounded stones and spreads of coarse and fine gravel. There were no immediately obvious features to suggest the former presence of standing stones, but there were three small areas which gave slight indications of being possible stone holes or hollows.

The first of these lay some 2.70 m. to the south-east of stone 1 (centre to centre) and consisted of an approximately oval patch of more densely concen-

trated small stones, 1.40 by 1.10 m. In excavation, both horizontally and vertically, there was no convincing evidence to indicate that the disposition of the small stones was anything but natural. These stones were resting immediately on top of the fine gravel subsoil, and no hole or hollow was found beneath them. The second

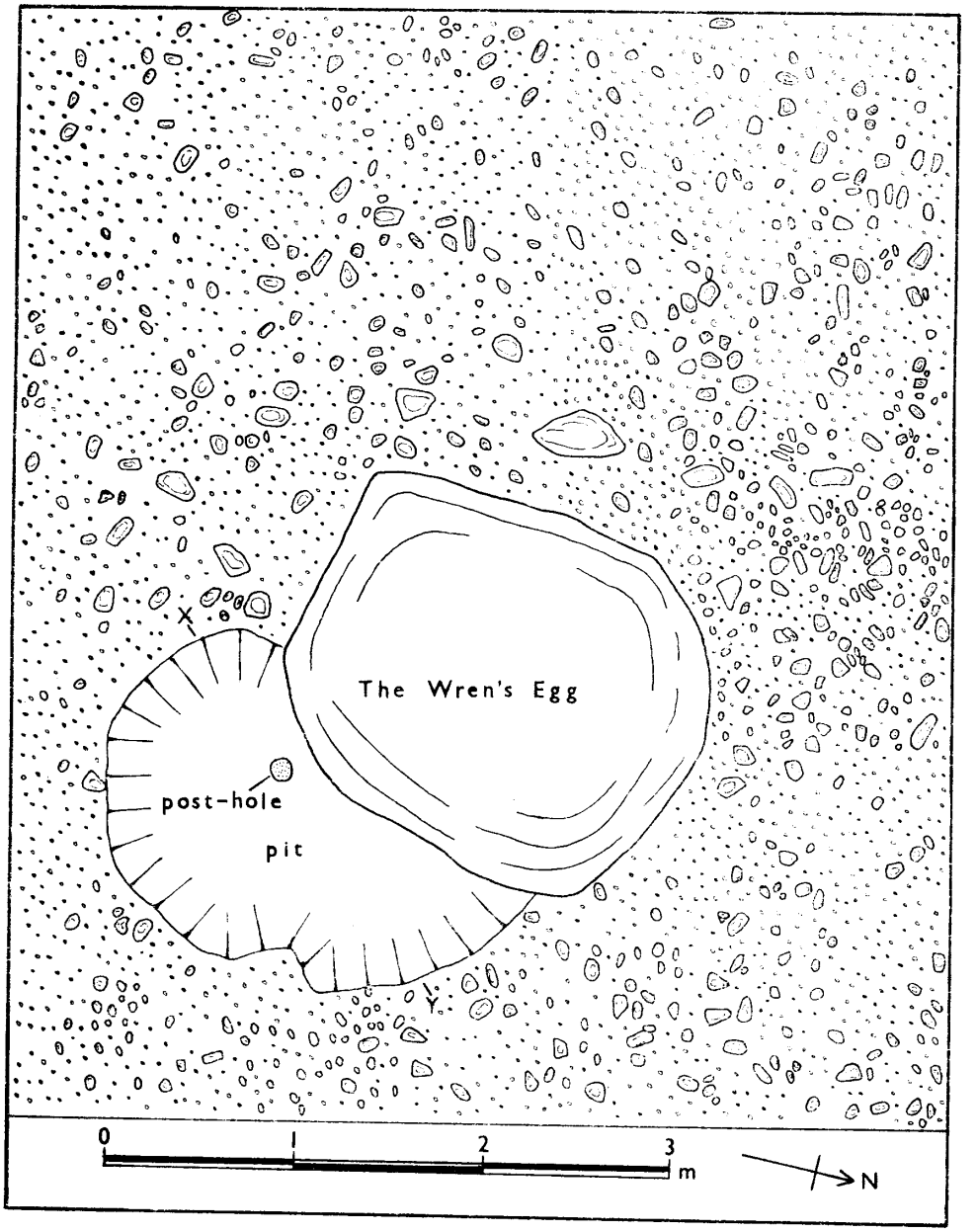


Fig. 4 The Wren's Egg: Plan of Area 2.

area comprised an approximately circular ring of small stones, 1.10 m. in diameter, surrounding a patch of fine gravel, and situated some 3.80 m. to the south-south-east of stone 1. Again the stones were found to be resting directly above the gravel subsoil, and there were no indications of any vertical penetration. The third area was almost in line with stones 1 and 2, and some 3 m. to the west of stone 2. It consisted of a small circular area of black soil, a little over 0.50 m. in diameter, partially surrounded by a circle of small stones. Removal of this black soil revealed a small, slight hollow in the subsoil, a few millimetres in depth and 200 mm. in diameter. In size this hollow is much smaller than either the hole for

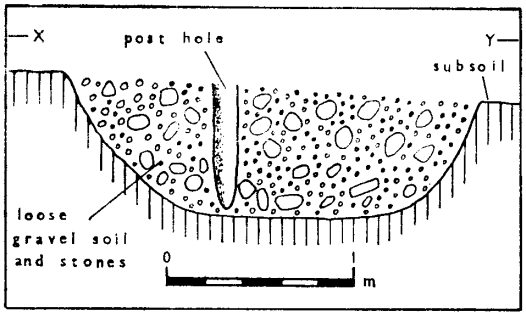


Fig. 5 The Wren's Egg: Section of pit, Area 2.

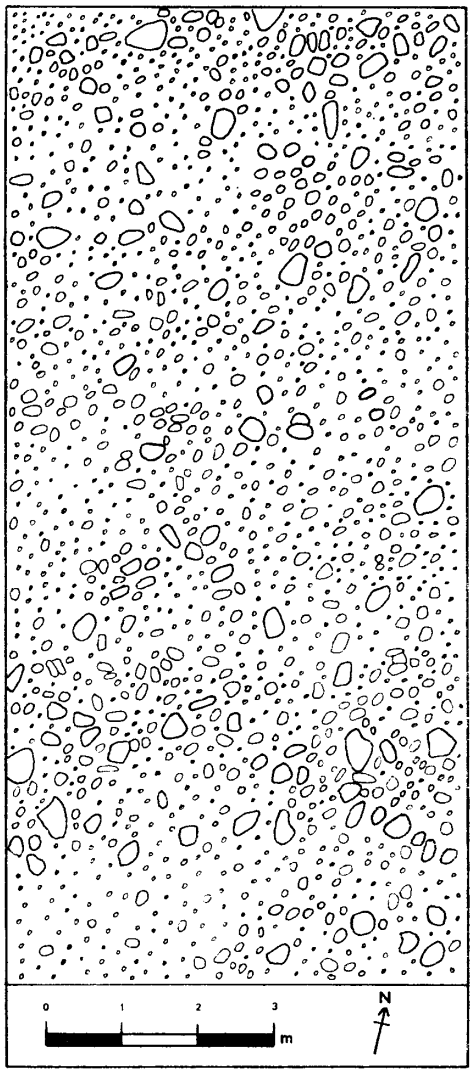


Fig. 6 The Wren's Egg: Plan of Area 3.

stone 1 or the hollow below stone 2. Nevertheless, given the different shapes of boulders which could have been employed in a more elaborate setting, it must be considered a possibility, however remote, that this feature represents the last remains of an additional stone position.

A small burnt area, 300 by 200 mm., was found on the subsoil to the east of stone 1. It consisted of small flecks of charcoal mixed with the light brown gravel subsoil, and had been disturbed by ploughing. There was insufficient charcoal for a radiocarbon date, and nothing to indicate whether it was ancient or modern.

As there was no rain during the course of the excavation, to test for differential drying of the subsoil, water was brought from a nearby pond. Area 1 was soaked on two occasions and a number of damp patches were revealed after some drying of the subsoil had taken place. These patches could all be shown to be the result of differential scraping or natural slight undulations within the subsoil. Probing of the subsoil also failed to reveal any softer patches which might have resulted from the removal of a standing stone.

Area 2 (figs. 4 and 5)

It seemed worthwhile to investigate the area around the Wren's Egg itself on the assumption that it might have formed the focus of some prehistoric activity. Ploughing had taken place in close proximity to the erratic, and the ground had been considerably disturbed by the trampling of both sheep and cattle. The massive erratic stands to a height of 2 m. and has a maximum circumference of 7.20 m. Its weight is probably about 15 tonnes. The erratic is perched only slightly east of the top of the ridge (fig. 2). Part of an iron plough chain and two branch bases of recent date were found lying within thick vegetation under the overhang of the erratic.

In the area excavated, the topsoil was very thin being only some 150 to 200 mm. in depth. The subsoil was similar to that encountered in area 1, although to the north of the Wren's Egg there was an area of densely compacted stones, which seemed to represent the natural subsoil undisturbed by ploughing. To the south of the Wren's Egg a single post hole, 120 mm. in diameter, was found. Only the top 200 mm. of the post hole was filled with a fine gravel soil, the rest of the post cavity, which proved to be 700 mm. in total depth, being empty. The purpose of this post hole is at least clear, for it can be none other than the original Office of Works notice board referred to by Fitzgerald in his memorandum of 11th July, 1908. Of more interest, however, was that the post hole could be seen to be contained within a large pit, visible on the surface of the subsoil as an area of loose dirty gravel soil and stones. The pit had a maximum excavated diameter of almost 2.30 m. and occupied the area to the east and south of the Wren's Egg itself. To the east the pit appeared to run under the erratic, but for safety reasons it was not possible to excavate any further in this direction. The western edge of the pit as it approached the Wren's Egg was more difficult to define, but it appeared to be turning, and its edge may have run under the overhang of the erratic. The pit was moderately steep-sided and flat-bottomed, with a maximum depth from the top

of the subsoil of 730 mm. The post hole for the Office of Works notice board terminated a few millimetres above the bottom of the pit. The fill consisted of loose, dirty gravel soil mixed with numerous small water-rounded boulders.

The only finds from the pit were a ceramic shirt button, which Mr A. E. Truckell (Dumfries Museum) considers to be of a type not earlier than 1880 A.D., and seven branch bases. Dr. A. J. Hayes (Department of Forestry and Natural Resources, University of Edinburgh) has kindly contributed the following report on the branch bases:

> "All nine specimens (i.e. including the two found under the overhang of the Wren's Egg) are the surviving branch bases of a tree. Conditions in the deposit must have been just right to allow the trunk of the tree to decay away, leaving the branch bases (which are normally buried in the body of the tree-trunk) intact. Microscopic examination shows that the surfaces of the surviving portions are extensively burrowed by insects and mites both of which break down wood mechanically into small fragments. The strong resinous smell and arrangement of the tissues strongly suggest that the timber was a softwood, and in one specimen at least the evidence suggests that it is a pine (**Pinus** spp), most probably the indigenous Scots pine (**Pinus sylvestris** L.)."

The purpose of this pit is certainly enigmatic, and its contents are of no great antiquity. Its large size might indicate that it was dug in an attempt to topple and bury the Wren's Egg itself, though its depth would be nowhere near sufficient. As the notice board post hole occurs within the fill of the pit, it might have had something to do with the erection of the notice board itself, but the amount of labour involved is hardly commensurate with the erection of a single post. It is also possible that the pit was dug to bury animals, though the fact that the pit goes so far under the overhang of the erratic would make this exercise highly dangerous.

Area 3 (fig. 6)

This area, 13 by 6 m., was investigated in the hope of finding evidence for the putative stone circle in its single or double concentric form. Removal of the topsoil, which varied in depth from 250 to 360 mm., again revealed a subsoil with spreads of fine and coarse gravel interspersed with patches of water-rounded small stones. No evidence for stone holes or hollows was encountered within the area, and none of the features excavated could be said to be other than natural, or the result of ploughing.

Small Finds (fig. 7, 1-10)

During the excavation 64 pieces of flint were found, mainly in the topsoil, but with a few from the natural subsoil. In size the flints range from small flakes, 12 by 8 mm., to water rolled pebbles, 40 by 30 mm. The flint is highly variable in colour, ranging from translucent white, through grey to honey-coloured, red

and black. Several of the flints are patinated. The distribution of the flints by excavated area is given in Table 1.

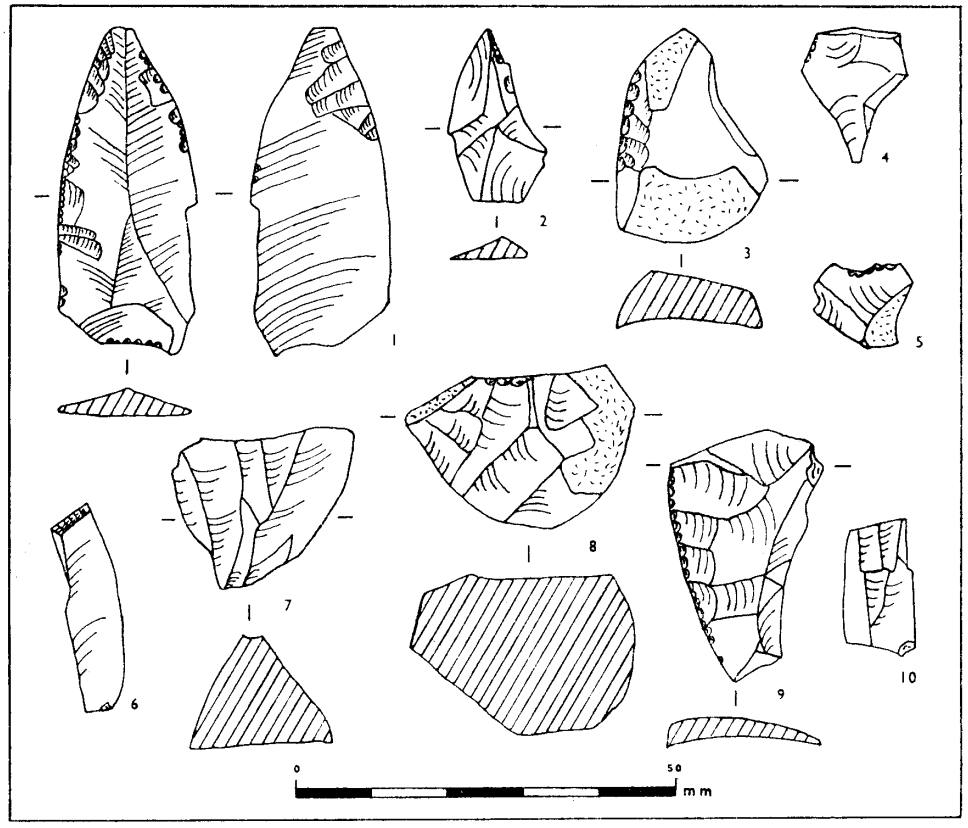


Fig. 7. The Wren's Egg: Flints Knife (1), Piercer (2), Scrapers (3, 4, 5, 6), Cores (7, 8), Core rejuvenation flake. (9), Snapped blade (10). Scale 1:1.

	Natural pebbles	Struck flakes	Utilised	Artefacts
Area 1 38 flints	9	21	5	3
Area 2 12 flints	2	3	4	3
Area 3 14 flints	1	7	2	4
Totals 64 flints and %	12 (18.75%)	31 (48.44%)	11 (17.18%)	10 (15.63%)

Table 1. Wren's Egg, analysis of flints by excavated area.

From this table it can be seen that the majority of the flints have been worked in some way, although the high proportion of struck flakes might include some which have resulted from plough damage. Evidence for utilisation is confined to minute flaking along the edges of some pieces.

Catalogue of flint artefacts (fig. 7, 1-10)

The code in brackets is the site reference number marked on the finds.

1. Knife of fine grey/brown translucent flint, 43 x 18 x 4 mm., with main secondary flaking along one edge and extending on to the bulbar surface. Area 1, topsoil. (WE 12/13).
2. Piercer of fine brown translucent flint, 18 x 14 x 3 mm., with slight secondary flaking on one edge of point. Area 2, topsoil. (WE 17).
3. Side scraper of mottled yellow/white flint, 29 x 20 x 9 mm., with steep secondary flaking on one edge and cortex remaining at both ends. Area 1, top of subsoil. (WE 28).
4. A possible end scraper of white translucent flint, 18 x 14 x 2 mm., with slight indications of utilisation on one edge. The tang might have been used to haft the flint. Area 2, topsoil. (WE 34).
5. A possible hollow scraper of mottled yellow/brown flint, 12 x 12 x 3 mm., with slight indications of secondary flaking along the hollow edge. Area 3 topsoil. (WE 54).
6. End scraper of white flint, 29 x 8 x 3 mm., with secondary flaking on the plane-like end. Area 3, topsoil. (WE 67).
7. Core of patinated cream coloured flint, 19 x 24 x 17 mm., with a number of small irregular flakes detached from a single platform. Cormack's type A2b (1970, 70). Area 1, topsoil. (WE 44).
8. Core of grey flint, 28 x 22 x 19 mm., with small irregular flakes detached from three striking platforms. Cormack's type 3 (1970, 70). Area 3, top of subsoil. (WE 75).
9. Core rejuvenation flake of mottled grey flint, 31 x 20 x 8 mm., with indica tions of secondary flaking and use along one edge. Area 2, topsoil. (WE 19).
10. Snapped blade of white flint, 18 x 10 x 3 mm. Area 3, topsoil. (WE 35).

While the patinated flints would not be out of place on the Galloway coastal Mesolithic sites, such as the nearby excavated examples at Low Clone and Barsalloch (Cormack and Coles, 1968; Cormack, 1970), the remaining flints could well be contemporary with prehistoric activity near the standing stones.

Other finds (not illustrated)

11. Ceramic shirt button, 11 mm. diameter, with four holes. Area 2, in filling of pit at depth of 270 mm. from the top of the subsoil. (WE 70).
12. Iron plough chain, 3.70 m. long. Area 2, in vegetation under Wren's Egg. (WE 82).

Discussion

As the results of the excavation were largely inconclusive, any conclusions regarding the classification of the Wren's Egg must be based on a balancing of probabilities. In favour of a larger monument, there is the hint in the report by Pitt-Rivers that stones have probably been taken away at some time. Fitzgerald's memorandum of 1908, quoted above, is far more positive, but we are given no proof that there was formerly a "Circle of Stones" other than the remark that stones had been removed from the field "even within the memory of old par-

ishioners". It is quite certain that stones have been removed from this field, for the present farmer at Blairbuy, Mr R. McMaster, the grandson of the Mr McMaster referred to in Fitzgerald's memorandum, can remember large granite boulders being removed within the last forty years. The point here is that these boulders represent no more than the common glacial erratics found in the glacial drift of the Machars, and there is nothing to connect them with a stone circle around the Wren's Egg as they were found in many parts of the field. Therefore it must be at least possible that the stones mentioned by Fitzgerald could have been similar glacial erratics from any part of the field encountered in the course of agricultural improvements in the 19th century. It is strange that there is no mention of the Wren's Egg in the **Old Statistical Account** for Wigtownshire.Some comment might have been expected if the monument was of the type envisaged by Fitzgerald.

Apart from the rather negative results obtained by excavation, there are a number of other arguments which can be advanced against the hypothesis of a stone circle around the Wren's Egg, double concentric or otherwise. If such a monument had existed, it would have been very large. For the outer circle the radius from the Wren's Egg would have been between 19 and 20 m. with a circumference of about 120 to 125 m. As the two remaining stones are only 1.50 m. apart, and as it is common for concentric circles to have similar distances between stones circumferentially as between inner and outer stones, this would mean that the outer circle could have had between 60 and 70 stones. Including the putative inner circle, there would have been well over one hundred stones. It may seem a little fortuitous that only two stones should remain standing.

The topography immediately around the Wren's Egg might also be invoked as an argument against the existence of a stone circle around it. The majority of British stone circles are situated on level or gently sloping ground. With the exception of the outer circle at Avebury, and those circles which contain an additional feature within the ring of stones, a cairn for instance, all stone circles have inter visibility between the stones across the diameter of the circle. The contour survey and elevation (fig. 2) clearly indicate that this would not be possible at the Wren's Egg, particularly from east to west and **vice versa.** Indeed the stones of any circle with the erratic as the centre stone would have to be situated on the steep western slope of the ridge, a feature which would be without parallel amongst the stone circles of the British Isles.

Amongst the Galloway stone circles, the presence of a centre stone is not uncommon (Burl, 1976, 208 and fig. 37). At Glenquicken (fig. 1) near Creetown, a flattened circle of small round erratic boulders, 16.80 by 14.60 m., surrounds a tall pillar stone 1.80 m. high, whilst at the nearby site of Claughreid (fig. 1), an ellipse of 10.70 by 8.80 m., again composed of small rounded boulders less than a metre in height, surround a now fallen centre stone 1.65 m. long. The main features of these Galloway centre stone circles are the presence of a conspicuous centre stone, a ring composed of comparatively small erratic boulders, and a small diameter for the ring. Apart from a large centre stone, this would not have been the case at the Wren's Egg if the surviving pair of standing stones are anything to go by. The nearest stone circle to the Wren's Egg lies some 15 km. to the north

at Torhousekie (fig. 1). Here a flattened circle, 21.40 by 20.00 m. composed of 19 large rounded granite boulders surrounds an unusual setting of three larger boulders arranged in a line. The affinities of this site with the recumbent stone circles of North-East Scotland and South-West Ireland have recently been discussed (Burl, 1972, 1976, 211-212), but apart from the use of large granite boulders, there are no other points of similarity between this site and the Wren's Egg.

A further piece of evidence against the notion of a stone circle can be seen in the field immediately to the south of the Wren's Egg. At a distance of some 400 m. south-south-east of the Wren's Egg standing stones, there is an almost identical pair of granite standing stones on the north slope of Milton Hill. Both stones are over a metre in height and just over 2 m. apart. They were noted by the Royal Commission, but there is no suggestion that they ever formed part of a stone circle (RCAHMS, 1912, 12). Standing stones are, after all, a not uncommon feature of the Wigtown District, occuring singly, or in a line of two or three. At At Drumtroddan, 2.3 km. north of the Wren's Egg, there is an alignment of three tall standing stones, the centre one of which has now fallen. There is an alignment of three large granite boulders close to the Torhousekie stone circle, and a single standing stone a little further away. Single standing stones can be seen at Longcastle (fig. 1), near Whauphill, whilst another, the Carlin Stone, is situated to the north of Elrig Loch, near Mochrum. There is a tradition that at this latter site the standing stone "formerly stood in the centre of a circle or ring, 12 feet in diameter, formed of granite stones which were used for building a dyke." (RCAHMS, 1912, 85). At Laggangairn (fig. 1) in the north of the Wigtown District, there is a pair of tall standing stones set less than one metre apart. Both stones now have Early Christian crosses carved on their faces, but there is also a strong tradition that originally there were at least 13 stones, 11 of which were removed in the early 19th century to make gate-posts and lintels. Thus it can be seen that in common with other areas (Stewart, 1966, 140-45), standing stones are a feature of the Wigtown landscape, albeit in some cases with evidence similar to that for the Wren's Egg, of stone circles around them.

In the writer's opinion the balance of the evidence favours a classification for the Wren's Egg as a pair of standing stones which happen to have been placed in close proximity to a large glacial erratic. The documentary evidence, such as it it, is susceptible to a number of different interpretations. The topography around the erratic would produce a unique stone circle if the Wren's Egg acted as a centre stone, and there was no evidence from the limited areas excavated for any additional stone holes. It is also disappointing that no archaeological evidence was forthcoming for any prehistoric activity around the stones. A number of standing stones have cremation deposits at the base, as at the pair of standing stones at Orwell, Kinross-shire (Ritchie, 1974, 8, 27-9). There was certainly no cremation deposit at the base of stone 2 and, so far as could be seen, there was nothing in the stone hole of stone 1. Only the flint knife (fig. 7, 1) might be invoked as evidence of late third and second millennium activity in the area, this being the period during which such stones were likely to have been erected.

The growing awareness that some stone circles and standing stones may have

been set up to mark alignments for astronomical observations of the sun, moon and first degree magnitude stars has recently been reviewed by a number of authors following the pioneer work of Professor A. Thom (1967, 1971), (Brown, 1977; Hadingham, 1975; MacKie, 1977). Whilst the Wren's Egg cannot be said to be in the forefront of prehistoric astronomical activity, it is included by Thom in his list of observed lines (1967, 98). Professor Thom considers that an alignment might exist between the Wren's Egg itself and the island of Big Scare, 13.25 km. to the south-west in Luce Bay (fig. 1). With a declination of -23.6° and an azimuth of 227.5°, this may be taken as indicating a line towards the setting sun at the mid-winter solstice. There has been some confusion with regard to the backsight, for the grid reference given by Thom for the Wren's Egg actually refers to the pair of standing stones 400 m. south of the Wren's Egg (1967, 137). In his description of the Wren's Egg, MacKie points out the error in Thom's grid reference, but then goes on to suggest that Thom meant the pair of standing stones on Milton Hill to be used as the backsight for the midwinter solstice observations (1975, 64).

Professor Thom has very kindly informed me that the Wren's Egg itself was considered by him to be the backsight, but that he had not taken any astronomical measurements at the site, and the estimates were made from map co-ordinates. Because of this it would seem best to defer any consideration of the possible astronomical significance of the site until after a full theodolite survey has been undertaken. In view of Professor Thom's discoveries elsewhere concerning pairs of standing stones, the group near the Temple Wood stone circle, Argyll, for instance (1971, 45-51), a full survey of the two pairs of standing stones and the Wren's Egg might well prove to be of interest.

A final word may be said concerning the name of the site. The calling of this enormous boulder "The Wren's Egg" is surely an intentional antiphrasis. There is however, a reference to a custom of a ritual hunting of a wren, the traditional day for this pursuit being around the time of the midwinter solstice (Hole, 1976, 110). This custom was apparently widespread in parts of France and England, but it is only recorded in Scotland at Kirkmaiden in Galloway. There are two places in Galloway called Kirkmaiden, one being a small village at the south end of the Mull of Galloway, whilst the other is the ancient parish name for the area in which the Wren's Egg is situated. The Kirkmaiden ceremony was called "The Deckan' o' the Wren" and usually took place on New Year's morning, when gangs of boys would search for wrens. When they had caught one, its neck and legs would be adorned with ribbons, and the bird then set free. Whether this ceremony ever took place around the Wren's Egg itself is not recorded, but perhaps some early 19th century wren-hunting humorist could have been responsible for giving the site its name!

Disposal of Finds

Subject to the approval of the Finds Disposal Committee of the Ancient Monuments Board for Scotland, the finds together with the site plans, etc., will be deposited with the Stranraer Museum.

Acknowledgements

The writer would like to express his thanks to Mr C. Tabraham, Inspectorate of Ancient Monuments (Scotland) for the invitation to excavate at the Wren's Egg, and for making all the preliminary arrangements. Mr R. McMaster and his son, Blairbuy Farm, readily gave permission for the excavation, and very generously back-filled the excavated areas. I should also like to thank those who assisted on the excavation — Mr C. Provan (site assistant), Misses C. Dean, B. Gerdes, A. Jackson (Mrs A. Yates), Messrs G. Crawford, D. Dethlefs, M. Yates and D. Ross, who was responsible for the contour survey on which fig. 2 is based. Mr H. A. W. Burl provided much information and discussion both before and after the excavation, and Professor Thom kindly supplied astronomical information concerning the site and Dr. A. J. Hayes identified the wood specimens. I have drawn heavily on the expert knowledge of Mr W. F. Cormack in discussing the flints, and Mr J. Cowley, Information Officer, Department of the Environment, provided the reference for the "Deckan' o' the Wren". The full cost of the excavation was covered by a grant from the Department of the Environment.

REFERENCES

BROWN, P. L., 1977 **Megaliths, Myths and Men,** London.

BURL, H. A. W., 1972 "Torhousekie Stone Circle, Wigtownshire: A Link between Aberdeen and Cork", **Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc,** XLIX (1972)24-34. 1976 **The Stone Circles of the British Isles,** New Haven and London.

CHILDE, V. G. and SIMPSON, W. D. 1961 **Illustrated Guide to Ancient Monuments,** Volume VI, Scotland (4th ed.), London.

CORMACK, W. F. 1970 "A Mesolithic site at Barsalloch, Wigtownshire", **Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc., XLVII** (1970) 63-80.

——— and COLES, J. M. 1968 "A Mesolithic site at Low Clone, Wigtownshire",**Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc. XLV** (1968) 44-72.

GREIG, D. C. 1971 **British Regional Geology, the South of Scotland,** (3rd ed.), Edinburgh.

HADINGHAM, E. 1975 **Circles and Standing Stones,** London.

HOLE, C. 1976 **British Folk Customs,** London.

MacKIE, E. 1975 **Scotland: An Archaelogical Guide,** London.

——— 1977 **Science and Society in Prehistoric Britain,** London.

PRO/MW/1/775 File on "The Wren's Egg" (SC 23443/3A) Public Records Office, Edinburgh.

RITCHIE, J. N. G. 1974 "Excavation of a Stone Circle and Cairn at Balbirnie, Fife", **Archaeol. J.** 131, 1-32.

RCAHMS, 1912 **Royal Commission on the Ancient and Historical Monuments of Scotland: Fourth Report, Vol. I, County of Wigtown,** London.

STEWART, M. E. C. 1966 "Excavation of a Setting of Standing Stones at Lundin Farm, near Aberfeldy, Perthshire", **Proc. Soc. Antiq. Scot.** XCVIII (1964-66) 126-49.

THOM, A. 1967 **Megalithic Sites in Britain,** Oxford.

——— 1971 **Megalithic Lunar Observations,** Oxford.

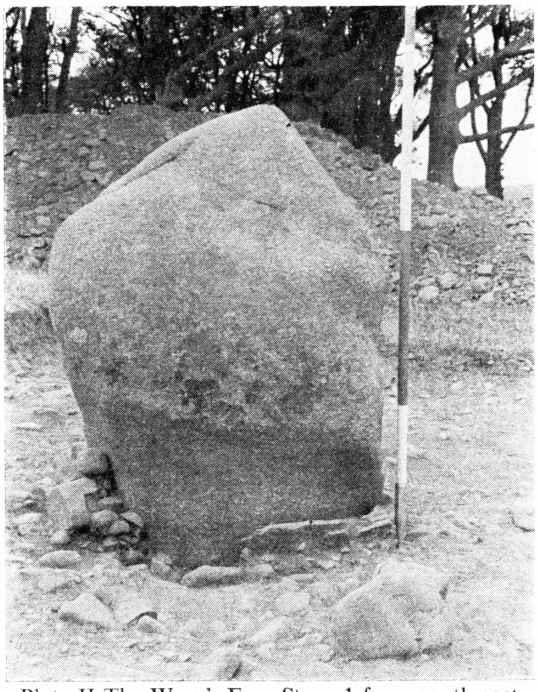


Plate II The Wren's Egg: Stone 1 from south-east.
(Scale 0.50 m. divisions)

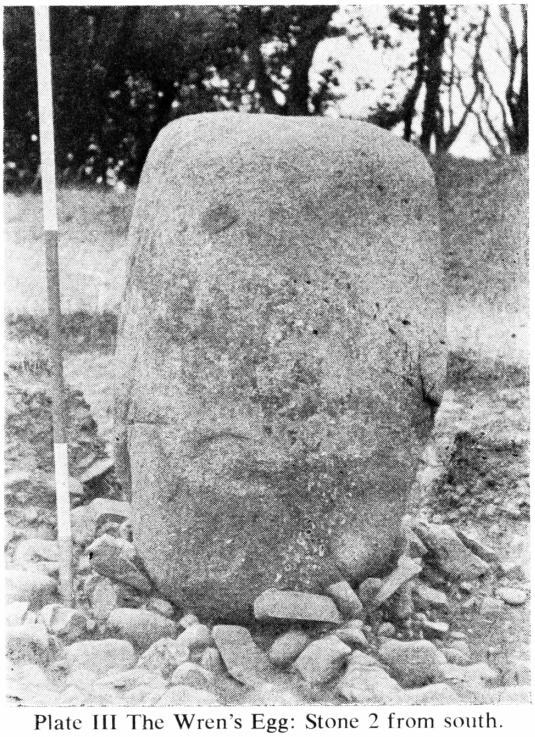


Plate III The Wren's Egg: Stone 2 from south.
(Scale 0.50 m. divisions)

EXCAVATION OF THE CARLOCHAN ROUND CAIRN, CROSSMICHAEL, STEWARTRY DISTRICT

by Lionel Masters, M.A., F.S.A., F.S.A.Scot. and Michael Yates, B.A.

On the summit of Carlochan Hill, some 5 km. north of Castle Douglas, and on the lands of Halferne Farm in the Parish of Crossmichael, which now forms part of the Stewartry District of the Dumfries and Galloway Region, were the remains of a once substantial round cairn (fig. 1) (NGR: NX 75776747). The hill itself, which rises to a height of 170 m. above O.D., commands extensive views over the Dee valley to the west, and across to the south-east the Solway and Lake District are clearly visible. Only to the north is the view restricted. The surrounding countryside is characteristic of the glacially modified lowland topography of Gal-

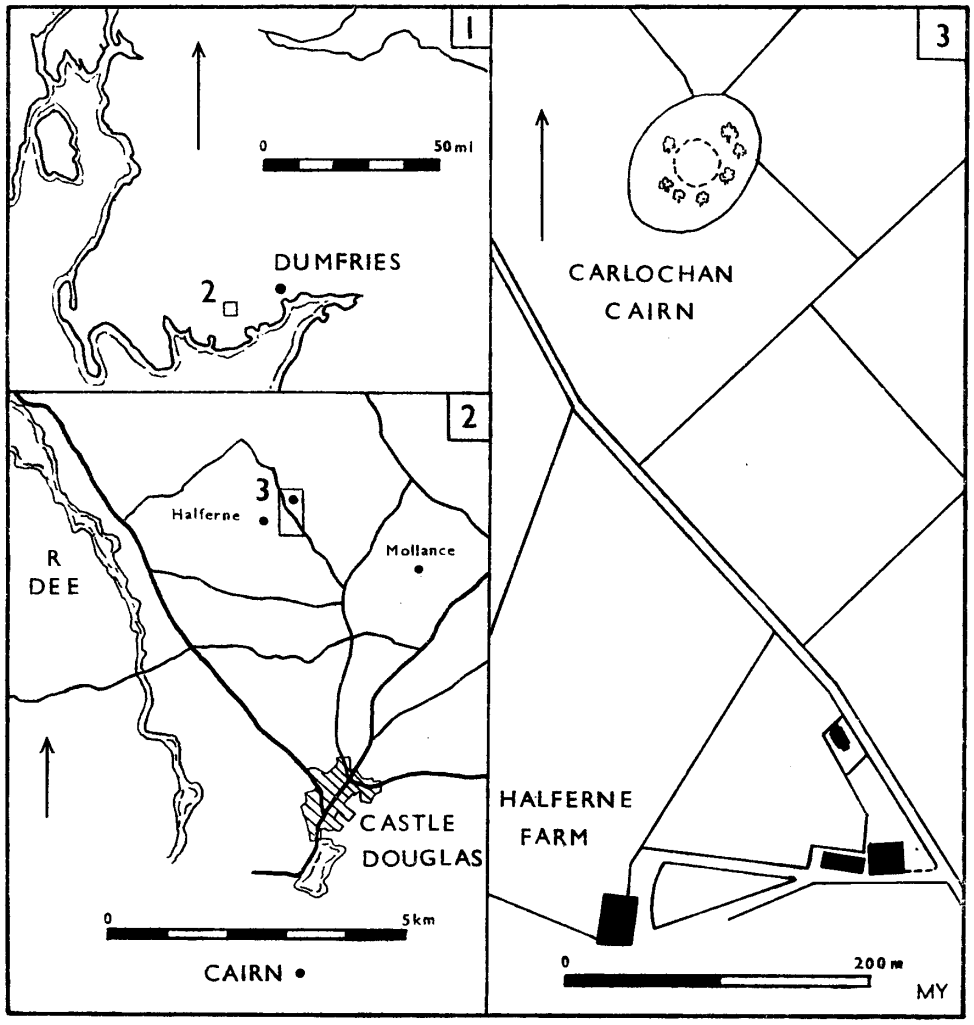


Fig. 1. Location map.

loway, consisting of rounded hills, drumlins and fluvioglacial features covered, for the most part, by a layer of glacial till. The underlying rocks are predominantly Silurian greywackes of the Llandovery series (Greig, 1971).

Round cairns of the earlier second millennium are not particularly numerous within the immediate area of Carlochan, but there are the remains of a large cairn, about 32 m. diameter, at Halferne, some 600 m. to the south-west of Carlochan itself. At Mollance, 4.50 km. north-north-east of Castle Douglas, excavations revealed that the cairn 16 m. in diameter, covered a cist containing a Food Vessel and possible Beaker sherds. (Wallace, 1952, 159-65) fig. 1).

History of the Site

Carlochan Cairn first came to notice as the result of the presentation to the Society of Antiquaries of Scotland of a bronze dagger blade. The original entry in Smellie's **Account of the Society of Antiquaries** provides much useful information on the site, and is here quoted in full:

> "June 25th., 1782. By Alex. Copland, Esq. of Collieston: A piece of a Roman sword of fine brass, with a round pin of the same metal, found in Carlochan Cairn, on the top of a high hill in the lands of Chappelerne, and parish of Crossmichael, in the year 1776, when the remains of this cairn, once the largest in Galloway, were removed for enclosing a plantation round it. In the middle of this cairn, at the bottom, was found a coffin composed of large flat stones, but there were no bones in it."

This account was also quoted by F. R. Coles in his paper on "Antiquities from the Stewartry", and the author has several trenchant comments to make on the depredations wrought on this cairn in the 18th century. (1899, 36). The site is mentioned briefly in the Kirkcudbright **Inventory** (RCAHMS, 1914, 82), and more recently the bronze dagger blade has been described in detail by Coles (1965, 71) and Henshall (1968, 190-92). Prior to the present excavation the site appeared as a low and somewhat indistinct artificial mound of **circa** 27 m. diameter, covered over most of its area by a thick layer of agricultural rubbish and animal dung. A ring of mature beech trees and the foundations of the plantation wall, presumably those mentioned in the 1782 account, still surrounded the cairn.

Circumstances and Method of Excavation

In 1974 the Dumfries and Galloway Water Board indicated that they wished to construct a water storage tank on Carlochan Hill and, after digging three test pits within the area of the cairn (fig. 2), decided that the most suitable position for the tank would be within the ring of beech trees. As this work would require the excavation of a pit 2 m. deep and 25 m. in diameter, it was obvious that any surviving remains of the cairn would be totally destroyed. In February, 1975, the Inspectorate of Ancient Monuments (Scotland) invited the writers to excavate as much as possible of the site, which was a Scheduled Monument under the Ancient Monuments Acts. Construction work for the storage tank was due to start on 1st May, 1975, so a rescue excavation was mounted at short notice. Work took place

from late March to the middle of April, with occasional weekends both before and after this period.

Due to the limited time available, it was decided that excavation should be

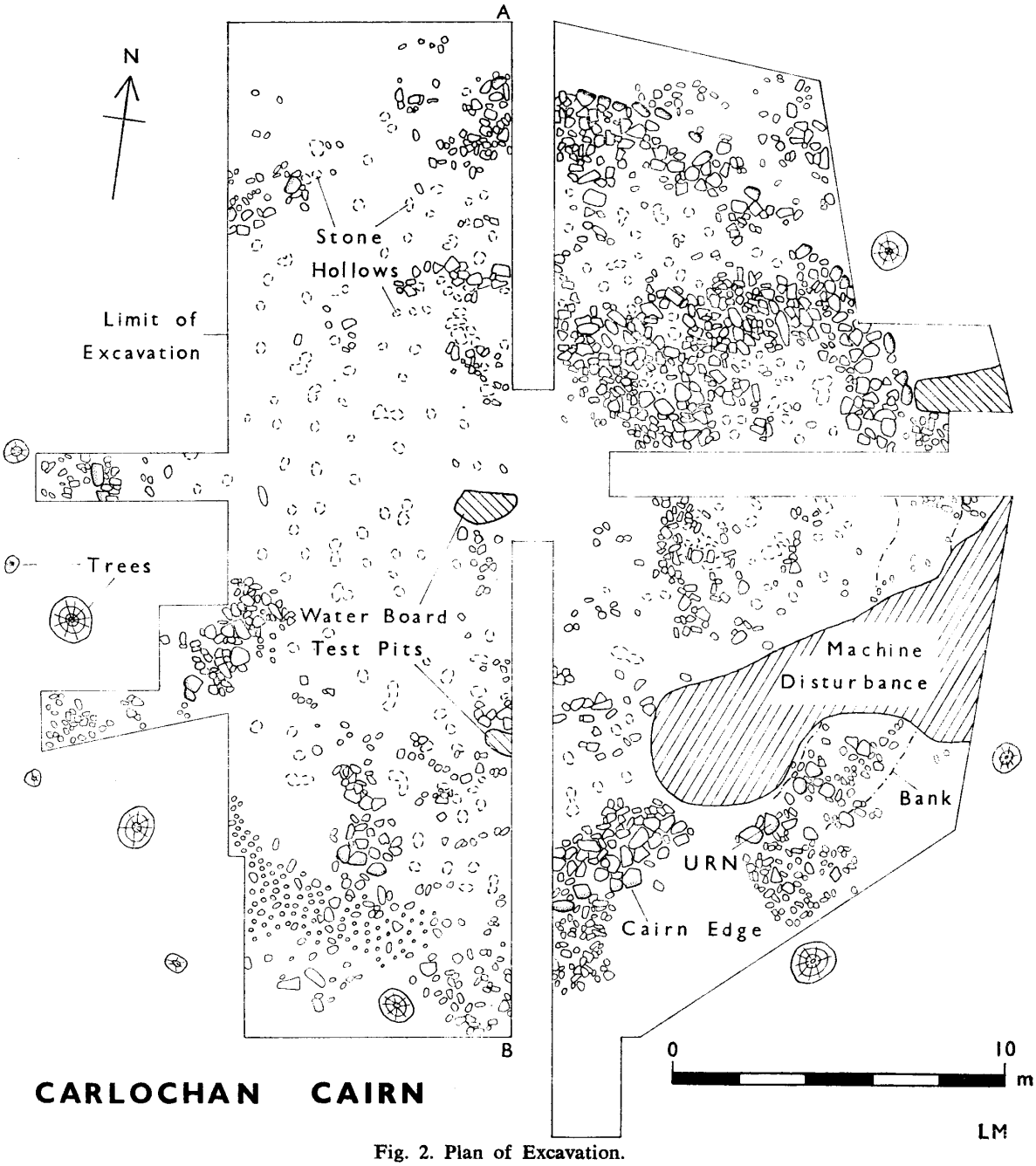


Fig. 2. Plan of Excavation.

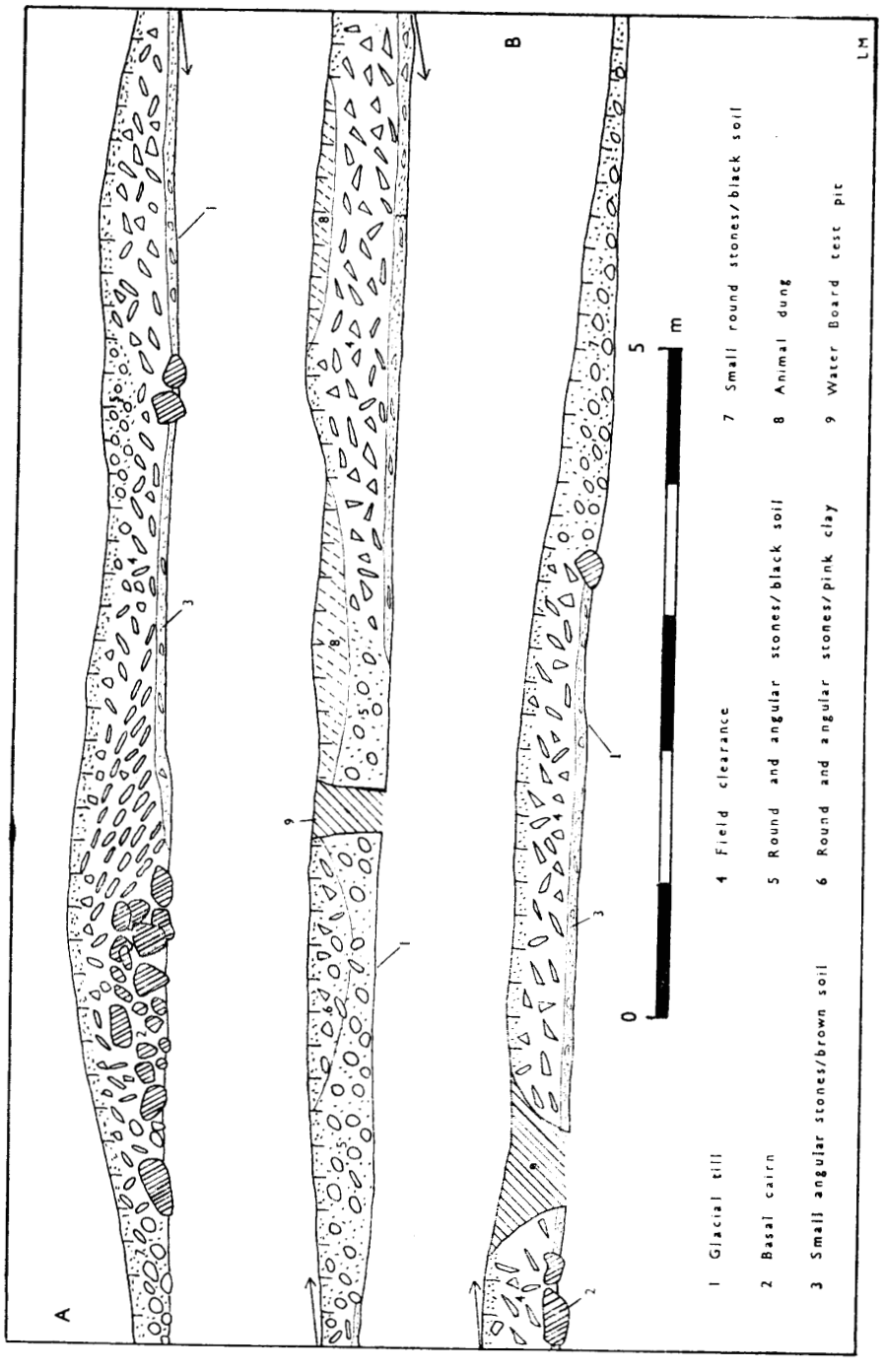


Fig. 3. Carlochan Cairn — North/South section (West face).

concentrated on the ground surface beneath any surviving remains of the cairn but, at the same time, to leave any substantial areas of surviving cairn material for excavation by hand. Surface inspection suggested that the most promising area of surviving cairn was in the north-east quadrant. In order to examine the pre-cairn land surface under the western half of the cairn, earthmoving equipment had to be employed. Because of the extremely soft and wet conditions prevailing over most of the cairn area, a hydraulic digger-loader would have been unable to cope with the work. It was necessary therefore to use a tracked-loader with multi-purpose bucket, which proved to be satisfactory for the removal of the overlying debris from the cairn. To ensure that damage to the pre-cairn surface was kept to a minimum, the machine was worked backwards scraping material from the centre of the cairn outwards. This way it was not necessary to run the tracks repeatedly over the cleared areas, and compaction and churning of the pre-cairn surface was largely avoided. Unfortunately there was little overburden to protect the pre-cairn surface in the south-east quadrant, and some disturbance occurred (fig. 2). As there was always the possibility of additional cists within the cairn, care was taken to ensure that all areas of large or earthfast stones were left **in situ.** A section was left from north to south across the cairn, and a radial section from the centre to the eastern edge (fig. 2). The areas scraped mechanically were trowelled, and later the north-east quadrant, parts of the south-east quadrant and two sections on the western edge were excavated by hand. Finally the centre of the cairn beneath the sections was examined to see if any traces remained of the cist discovered in 1776.

The Excavation

Removal of the overlying debris by the tracked-loader left a thin layer of small angular stones over most of the western half of the cairn, in parts of the south-east quadrant, and in smaller pockets in the north-east quadrant (fig. 3, layer 3). In the latter quadrant the tracked-loader had been used to remove the overlying agricultural debris and dung. Large greywacke boulders were evident in clusters, particularly around the edge of the cairn in the south-west and south-east quadrants, and over most of the north-east quadrant (Plate IV, fig. 2, fig. 3, layer 2). These appeared to be all that remained of the original basal layer of the cairn.

Excavation of the cairn edge at a number of points revealed that there was no regularly built kerb. The perimeter could best be defined as the limit of the large greywacke boulders. Outside the cairn, particularly in the south-west quadrant, there was a layer of small rounded boulders set in a black soil (figs. 2 and 3, layer 7). These did not continue beneath the basal layer of the cairn. In a few places beneath the edge of the cairn and extending out from it, there was the tentative suggestion of a slight bank, between 1.5 and 2 m. wide, and at no point more than 70 mm. in height. It was distinguishable from the underlying yellow glacial till by its more orange colour and less compacted structure. In an attempt to locate a slot or other feature from which this bank material could have been derived, a cutting was extended to 7 m. from the external limit of the cairn at the south end of the north/south section (fig. 2). No traces of any external features were discovered here, or indeed anywhere else within the excavation. There was however,

considerable tree root disturbance around the cairn edge, and in places this extended well into the subsoil beneath the cairn.

Only in the north-east quadrant was there a substantial area of unrobbed basal cairn material. The large greywacke boulders averaging over 0.5 m. across their major axes were packed close together, apparently with no admixture of soil (Plate IV, figs. 2 and 3). It was thought during a preliminary examination of the boulder cluster on the extremity of the cairn immediately east of the north/south section and at the south end of it, that there was evidence for an inner kerb. This consisted of a few boulders with a putative inner face some 1.5 m. from the outer limit of the cairn (fig. 2). The possibility that this represented an enclosing wall of ring-cairn type, which had been subsequently infilled, was considered. This theory had to be discounted however, because no trace of an inner kerb could be detected amongst the better preserved area of cairn material in the north-east quadrant. The presence of a few flatter boulders at various places within the cairn suggested the possibility of cist or pit covers. Of those examined, all proved to be merely part of the cairn construction.

Over much of the cairn area where the basal layer had been robbed, there was a thin spread of small stone fragments mixed with a fibrous brown soil (fig. 3, layer 3). Removal of this revealed a number of hollows within the glacial till, which contained a filling identical to the overlying layer. The hollows measured between 0.2 to 0.5 m. across, with a depth no greater than 90 mm. (fig. 2). These hollows may be interpretated as the depressions resulting from the cairn robbing around 1776. The removal of the basal cairn material in the north-east quadrant confirmed this interpretation, as hollows of a similar size and shape were produced. It was noticeable in the north-east quadrant that the cairn had been built directly on the glacial till, there being no indication here of a turf-line or pre-cairn soil layer. Investigation of the central area of the cairn failed to reveal any traces of the cist discovered in 1776. Indeed, the central area contained a considerable amount of modern rubbish, including pieces of concrete and iron, extending down to the surface of the glacial till (fig. 3, layer 5). The area had also been disturbed by the digging of a test pit by the Water Board.

The features described so far relate in the main to the prehistoric round cairn. However, the bulk of the cairn as it appeared before excavation, proved to consist of small angular stones, quite distinct from the larger rounded boulders of the cairn (Plate V, fig. 3, layer 4). This material, which varied in thickness from 0.2 to a maximum of 0.65 m., covered almost the entire area of the cairn. Around the outer area of the cairn this small stone material was relatively soil free, but in the centre it had become mixed with considerable quantities of modern humic material (fig. 3, layer 5). At the north end of the main north/south section, the slanting alignment of these small stones suggested deposition by tipping over the remaining rim of cairn material (Plate V, fig. 3). The fact that these stones overlay the late 18th century robbing hollows, would suggest that these were land-gathered stones associated with the clearing of nearby fields in the late 18th and 19th centuries. Even at the present day stones of a similar size and shape could be seen on the surface of a ploughed field adjacent to the cairn..

At the end of the excavation the overlying field clearance and original cairn material had been removed to expose the glacial till over approximately two-thirds of the cairn area. These areas comprised the whole of the north-east quadrant, and the area between the clusters of basal cairn material in the south-east quadrant. The whole of the area exposed by the mechanical excavator on the western half of the cairn was excavated to the surface of the glacial till, apart from the two small sections on the western edge. Here full excavation was inhibited by considerable deposits of field clearance and the proximity of trees subject to a Tree Preservation Order. For the same reasons it proved impossible to examine the remaining portion of the western edge. Despite the comparatively large area examined, no prehistoric features were found on or in the glacial till.

It was unfortunate therefore that during the construction of the water storage tank an inverted cordoned urn containing a pygmy vessel was exposed by a mechanical excavator. This occurred during the destruction of an unexcavated area of the cairn edge in the south-east quadrant (fig. 2). The base of the urn was broken by the machine, but as the surrounding ground was relatively undisturbed, it was possible to carry out a controlled excavation.

The urn (fig. 4, 1) had been placed in a circular pit cut into the glacial till to a depth of approximately 0.45 m. The diameter of the pit was 0.44 m. at the bottom, and 0.48 m. level with the broken wall of the urn. The fill of the pit was similar in texture and pebble content to the glacial till, but could be identified by its slightly darker colour and small flecks of charcoal. Apart from a single rectangular block of stone in a vertical position within the filling, there appeared to be no attempt at deliberate stone packing around the urn. To allow examination of the contents under laboratory conditions, the urn was removed intact on a column of glacial till. The urn was first covered with several layers ot aluminium cooking foil, both externally and internally, and then encased in bandages dipped in liquid "Polyfilla". The pygmy cup had been removed from the urn, but the finder was able to give an exact description of its original location, which indicated that it had been inverted on top of the burial deposit within the urn.

Small Finds

1. The upper portion of an urn bearing two cordons (fig. 4, 1). The fabric is hard, well fired but coarse and contains many large angular grits up 9 mm. across. The hard external surface is light buff in colour, whilst the inner surface is soft and light pink/orange. The core of the fabric varies from grey to black. Above the upper cordon the surface of the vessel is rough with many large grits visible, in contrast to the area below which has apparently been smoothed by hand. The urn survives to a maximum height of 285 mm. and was probably about 390 mm. when complete. The diameter at the rim varies between 348 and 366 mm., and there is an internal, undecorated rim bevel. The thickness of the wall is about 14 mm. Between the rim and the upper cordon is a zone of decoration consisting of impressed circular hollows, 3 mm. in diameter, and about the same in depth. The impressions are arranged in oblique lines 20 to

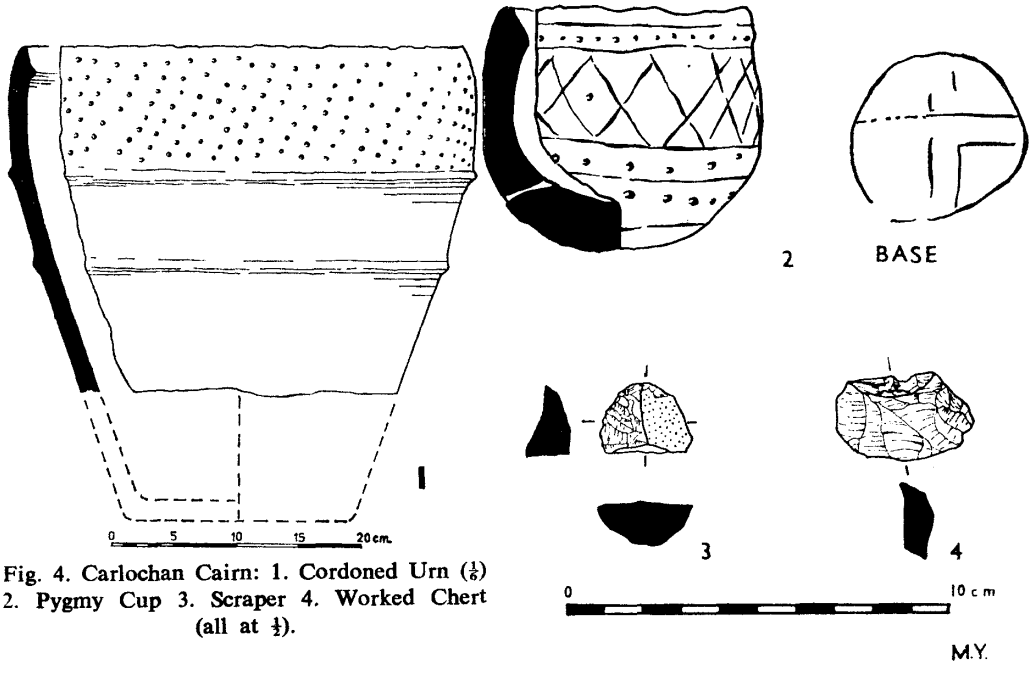


Fig. 4. Carlochan Cairn: 1. Cordoned Urn ($\frac{1}{6}$) 2. Pygmy Cup 3. Scraper 4. Worked Chert (all at $\frac{1}{2}$).

30° from vertical. Parallels for the shape and size of the urn are not difficult to find as, for example, at Luce Sands (Morrison, 1968, no. 62). The decoration by means of impressed dots is a little more unusual, although its position and arrangement is not.

2. A round based pygmy vessel of fine, lightly gritted but poorly fired orange/brown fabric. (fig. 4, 2). It measures 66 mm. in diameter and is 64 mm. high. The wall thickness varies from 8 to a maximum of 12 mm. at the base. There is an internal undecorated rim bevel. Both the outer surface of the wall and base carry decoration. This comprises two horizontal incised lines containing a single row of dot ornamentation immediately beneath the rim. This is followed by a zone in which there is an irregular pattern of incised lines forming a lattice. At one point within the design the lattice pattern has produced two larger diamond shapes which each contain a single impressed dot. This zone is succeeded by an incised line executed as a spiral, which forms two zones. The upper zone contains a row of impressed dot ornament, whilst the lower zone has 15 impressions, irregularly placed and 3mm. in diameter. 12 of these impressions have perforated the wall of the pot. The base carries a decoration which appears to consist of an equal-armed cross surrounded by an incised spiral line. Several pygmy vessels are known from this Region, including the perforated, but undecorated example from Whitestanes Moor, Nithsdale District, with a radiocarbon date of 1360 b.c. plus/minus 90 (Gak-461) (Scott-Elliot, 1965, 52). There are no really close parallels to the decoration of the

Carlochan example, but the pygmy vessels from Knockman (Dalry), Palmerston (Dumfries) and Culter all have decoration on their bases (Morrison, 1968, nos. 82, 89 and 109).

3. Part of a burnt flint scraper, 18 x 24 mm., from disturbed black soil near centre of the cairn (fig. 4, 3). Half of the dorsal face retains a white cortex, while the other half has been carefully pressure flaked. The flint has been crazed by the action of heat, which may also have caused it to fracture.
4. Rough worked flake of dark grey chert, 36 x 21 mm., from basal layer of cairn (fig. 4, 4). Although the material is poor, the regular flakes removed from the dorsal face suggest use as a tool.
5. Small unworked flake of pitchstone from surface of glacial till.
6. Rough angular fragment of burnt flint, 31 x 24 x 10 mm., from disturbed area within basal layer of cairn.
7. Small thin flint flake, 9 x 8 mm., from disturbed area within basal layer of cairn.
8. Small thin fragment of honey coloured flint, 11 x 9 mm., from disturbed area within basal layer of cairn.
9. Pitchstone flake, 21 x 17 mm., from surface of glacial till. Faint traces of working on one edge, perhaps suggesting use as a scraper.
10. Angular unworked fragment of light grey chert, 24 x 23 x 21 mm., from basal layer of cairn.

Discussion

Although little remained of the prehistoric cairn, sufficient was found to confirm that it had once been a substantial monument. It was probably not "the largest in Galloway" as claimed in the 1782 account, as less than a kilometre to the south-west are the remains of what appears to be an even larger cairn. Within the surviving basal material at Carlochan, there were no indications that the cairn was of multi-period construction. However, it must be borne in mind that less than one-third of the basal cairn survived the late 18th century robbing. It is not known if other cist or pit burials were found during the course of the 18th century robbing, in addition to the centrally placed "coffin composed of large flat stones". With this in mind, some comparison can be made with the cairn at Cairnpapple Hill, Lothian Region (Piggott, 1948, 92-100). Excavations here revealed that within a henge monument a cairn of about 15 m. diameter with a well built kerb had been constructed to cover two cist graves and an earlier rock-cut grave. The cairn was subsequently enlarged to 30 m. diameter, and covered two inverted urn cremations, both contained within pits. With the provisos given above, however, it is not possible to say if a similar sequence occurred at Carlochan.

The following account of the contents of the Carlochan cordoned urn is based on the laboratory report by Mr Norman Robertson, Technician, Inspectorate of Ancient Monuments, Edinburgh:

> "The upper layer consisted of debris and a few sherds of the urn introduced when the base of the urn was broken by the mechanical excavator.

> The main filling consisted of a mixture of friable soil, minute pot fragments and small stones, interspersed with flecks of charcoal and cremated bone. The skeletal remains did not appear to be lying in any distinct arrangement,, though many of the longer pieces of bone were found in small clusters sloping inwards around the edge of the deposit. There was also a thin layer of powdered bone at the bottom of the infill, within the pot and level with its rim. The urn rested immediately on top of a thin layer of dark soil, which appeared to spread out beyond the perimeter of the urn and overlay the glacial till."

At the time of writing, a specialist report on the cremation had not been obtained, but when available it will be published in a subsequent volume of these **Transactions.** A preliminary examination indicates that there is a total dry weight of 950 gm. of bone. Virtually all of the pieces are fragmentary, but there are some long bone fragments measuring up to 100 mm. and pieces of skull. The amount of charcoal contained with the bones is very small, and insufficient even for a single radiocarbon date. Laboratory examination failed to provide any evidence that the mouth of the cordoned urn had been covered before inversion into the pit. The presence of the thin layer of dark soil, mixed with root fibres, is more difficult to interpret. The dark soil recalls the occurence of a deposit of sooty earth around and under Urn 2 at Cairnpapple (Piggott, 1948, 100). At this site the deposit also contained fragments of charcoal and worked flint chips which had been burnt. This was interpretated as occupation material piled over the burial. At Carlochan there was neither charcoal nor flint in the dark soil, which may simply have been introduced immediately prior to the deposition of the urn. The description of the contents of the urn suggest that the cremated bones had been placed in a heap at the bottom of the pit, with the pygmy vessel inverted on top of this burial deposit. The cordoned urn must then have been lowered into the pit, and the small space around the urn and the edge of the pit backfilled. It cannot be determined whether this was followed immediately by the building of the cairn, but subsequently the pit was covered by a stone forming part of the cairn edge.

It has already been stated that nothing survived of the central cist, although it may be significant that the only recognisable artefact, a burnt flint scraper (fig. 4, 3) was found in disturbed material close to the centre of the cairn. The rest of the lithic small finds, although not fabricated into recognisable artefacts, nevertheless show some signs of utilisation.

The account accompanying the presentation of the dagger to the Society of Antiquaries of Scotland fortunately provides an almost contemporary account of the robbing of the cairn and the reasons for it. The cairn was robbed to build an "enclosure wall", presumably to protect the new plantation of trees from grazing animals. This is not an uncommon occurrence in Galloway and may be seen at many other cairns including Conchieton, near Twynholm (RCAHMS, 1914, 48) and at two of the cairns in Kirroughtree Park, to the east of Newton Stewart (RCAHMS, 1914, 192). The foundations of the plantation wall still survive as a low bank of large boulders, some 1.5 m. in width. It is oval on plan, and encircles

the top of the hill at distances varying between 23 and 40 m. (fig. 1). Many of the Galloway dykes are of considerable size, with a height around 1.6 m. and occasionally 1.8 m. (Rainsford-Hannay, 1972, 50). Given that the perimeter of the Carlochan wall is some 270 m., it would not be surprising if the majority of the cairn had been robbed to build this wall. The present pattern of field-dykes might either be contemporary, or post-date the plantation wall. In any case, further robbing of the cairn could have taken place to provide stone for the field dykes. Land improvements in the late 18th and 19th centuries would account for the deposition of large amounts of land-gathered stones into the cairn area. Although it cannot be demonstrated with certainty, it seems likely that the small rounded stones lying beyond the edge of the southern arc of the cairn could also be the result of field clearance, rather than a deliberately constructed platform relating to the prehistoric cairn, or slip from the cairn itself (fig 2 and 3, layer 7). In more recent times the cairn had been used as a general dumping ground for agricultural debris and animal dung.

Whilst nothing now remains of the prehistoric cairn, the concrete dome which now covers the water storage tank has at least a superficial resemblance to a round cairn — when viewed from a distance.

Acknowledgements

The writers would like to thank Mr P. Ashmore, Inspectorate of Ancient Monuments (Scotland), for making the preliminary arrangements for the excavation, and for arranging for the contents of the urn to be examined. Mr J. D. Rae, Halferne Farm, kindly gave permission for the excavation, and much cooperation during our sojourn on Carlochan Hill. We are also grateful to him for his prompt reporting of the discovery of the urn. Many people took part in the excavation, but most for only a short period. This may have had something to do with the weather, which was atrocious throughout the course of the excavation, with gale force winds, rain, sleet and snow. To all who took part, we offer our thanks, and particularly to Miss B. Gerdes and Miss A. Jackson (Mrs A. Yates), and to Messrs G. Crawford, P. Neville, D. Pollock, C. Provan and D. Ross.

The Department of the Environment supplied financial assistance from their Rescue funds to cover the cost of the excavation.

The finds have been generously donated to Kirkcudbright Museum by Mr J. D. Rae, and the site plans, notes etc. have also been deposited in the same Museum.

Summary

A 2nd millennium round cairn of 25 m. diameter at Carlochan, Castle Douglas, was partially excavated prior to destruction by the Dumfries and Galloway Water Board. The cairn had been robbed in the late 18th century, when a cist and bronze dagger had been found. Excavation failed to reveal any further burials, and demonstrated that the mass of the cairn, as it appeared before excavation, was made up of field clearance. During destruction of an unexcavated part of the site a cordoned urn, inverted over a cremation deposit and pygmy vessel, was discovered and excavated.

REFERENCES

COLES, J. D. 1965 "Bronze Age Metalwork in Dumfries and Galloway", **Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc. XLII** (1965) 61-98.

COLES, F. R. 1899 "Annotated List of Antiquities from the Stewartry of Kirkcudbright now preserved in the National Museum", **Trans. Dumfriesshire Galoway Natur. Hist. Antiq. Soc.** (1898-99) 32-45.

GREIG, D. C. 1971 **British Regional Geology, the South of Scotland,** (3rd ed.), Edinburgh.

HENSHALL, A. S. 1968 "Scottish Dagger Graves" in Coles, J. D. and Simpson, D. D. A. (Eds.) **Studies in Ancient Europe,** Leicester.

MORRISON, A. 1968 "Cinerary Urns and Pygmy Vessels in South-West Scotland" **Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc. XLV** (1968) 80-140.

PIGGOT, S. 1948 "The Excavations at Cairnpapple Hill, West Lothian, 1947-48" **Proc. Soc. Antiq. Scot.** (1947-48) 68-123.

RAINSFORD-HANNAY, F. 1972 **Dry Stone Walling,** (2nd ed), Gatehouse of Fleet.

RCAHMS, 1914 Royal Commission on the Ancient and Historical Monuments of Scotland: Fifth Report, **Vol II — Stewartry of Kirkcudbright,** Edinburgh.

SCOTT-ELLIOT, J. 1965 "Whitestanes Moor, Sites 1 and 80", **Trans Dumfriesshire Galloway Natur. Hist. Antiq. Soc. XLII** (1965) 51-60.

WALLACE, J. C. 1952 "Bronze Age Cairn and Cist with Food Vessel at Mollance, near Castle Douglas, Kirkcudbrightshire", **Trans. Dumfriesshire Galoway Natur. Hist. Antiq. Soc. XXX** (1951-52) 159-65.

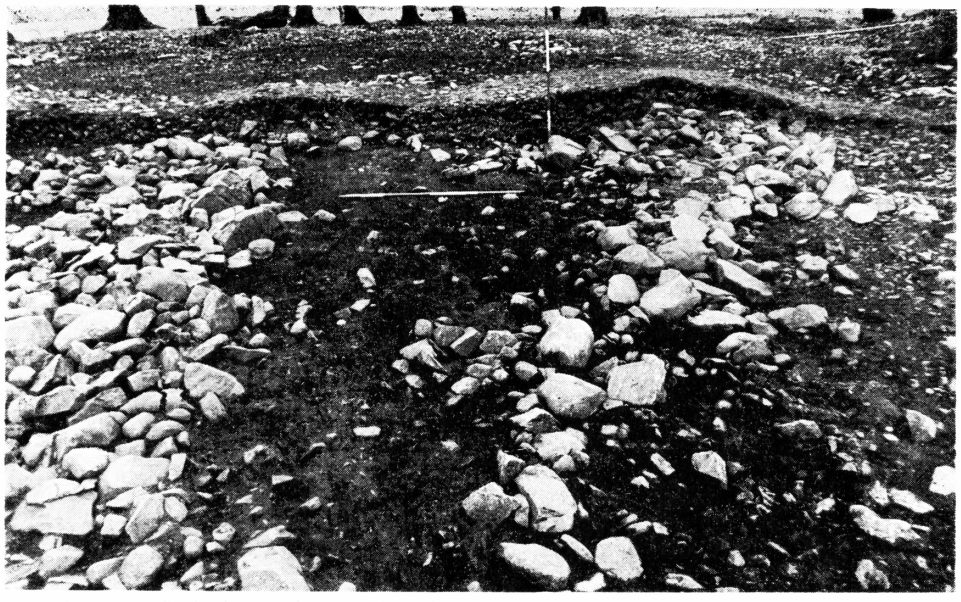


Plate IV—Carlochan Cairn: NE Quadrant, from East; basal cairn stones and robbing hollows. (Scale 0.5 m divisions). Photo: M. Yates.

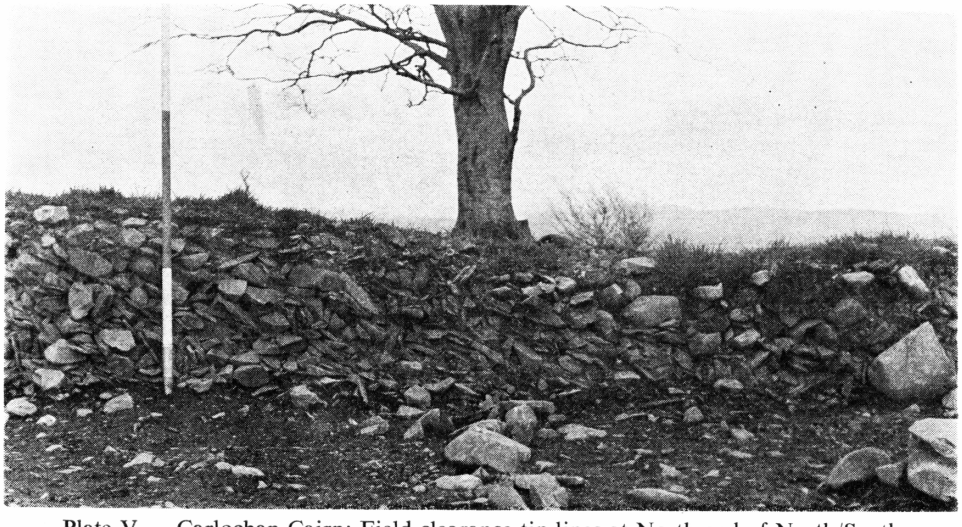


Plate V — Carlochan Cairn: Field clearance tip-lines at North end of North/South section (west face). (Scale 0.5 m divisions). Photo: M. Yates.

A DUG-OUT CANOE FROM CATHERINEFIELD FARM, LOCHARBRIGGS, DUMFRIESSHIRE

By W. Graham Jardine and Lionel J. Masters

Introduction (LJM)

During the course of fieldwork in the Lochar Moss area in September, 1973, Dr Graham Jardine discovered part of a dug-out canoe on the edge of the Lochar Water (Old Course) some 5 km. N.E. of Dumfries at N.G. Ref. NY 0013 8011. Recent work in the vicinity of the find spot had been concerned with major improvements to the drainage of the Lochar Moss area, and had involved the recutting by mechanical excavators of the Lochar Water (Old Course) and an adjacent drainage channel (Figs. 1 and 2). So far as can be ascertained, the driver of the excavator noticed a larger than usual piece of wood and instead of depositing it in the spoil dump, threw it on one side. There is no accurate information on the original location of the canoe, except that it was in close proximity to the find spot.

It seems likely that the canoe had been exposed for some three weeks or more before Dr. Jardine found it. During this time the canoe had dried out and had started to deteriorate. As there was no immediate prospect of any conservation work being undertaken, the canoe was covered over with a mound of peat to prevent further deterioration. In August, 1974, Imperial Chemical Industries (Dumfries) kindly made available a large metal tank in which the canoe could be immersed. Advice was sought from the conservation staff of the National Museum of Antiquities of Scotland, and on their recommendation the canoe was immersed in water mixed with a solution of Topane WS to prevent the growth of algae.

Acknowledgements

I am grateful to the many people who assisted with the preservation and transport of the canoe. I have to thank Mrs Henderson for gifting the canoe to the Dumfries Museum; Mr J. Henderson kindly arranged transport of the canoe from its find spot to the nearest track and Mr Donald Urquhart, formerly Burgh Surveyor for Dumfries, and his workmen skilfully transported the canoe to I.C.I. (Dumfries). I am particularly grateful to Mr Brian Turner, Works Manager, I.C.I. (Dumfries), for making available the storage tank. Funds were generously made available by the University of Glasgow for a radiocarbon date.

The environmental setting (WGJ)

The site where the dug-out canoe was found is located in an area in which there occurs a great variety of Quaternary sediments, the variety reflecting a series of environmental changes in the course of the last twenty millennia. The oldest deposit, glacial till or boulder clay, occurs as a veneer on the ridge of New Red Sandstone rocks which underlies Dumfries and extends south-south-eastwards to Bankend and Caerlaverock, and on the parallel ridge of Lower Palaeozoic rocks which extends from Amisfield by Torthorwald to Clarencefield (Fig. 1). The till was deposited by a large lobe of ice which moved down Nithsdale in the course of the

last glaciation of the Quaternary sub-era. The maximum of the glaciation, when ice covered most of Scotland and extended southwards into England and Wales as far as Yorkshire and the borders of the Bristol Channel, has been shown to

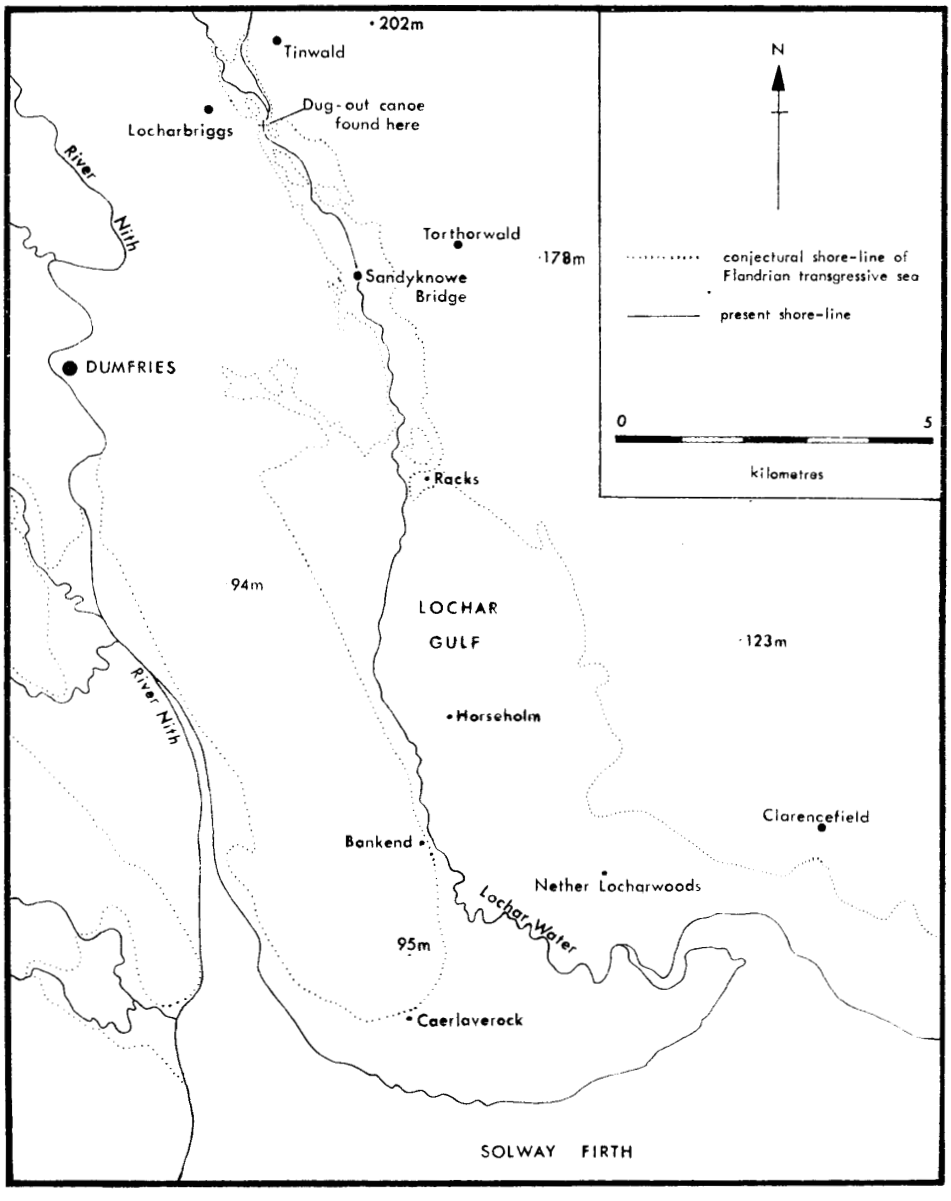


Fig. 1

Map of the Dumfries area showing the conjectural shore-line at the maximum extent of the Flandrian marine transgression, the site at which the dug-out canoe was found, and the main locations mentioned in the text.

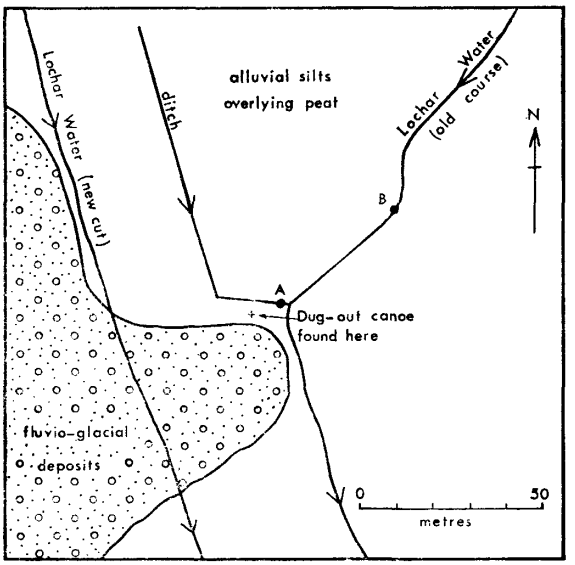


Fig. 2
Detailed map of the area in the vicinity of the site where the dug-out canoe was found.

have been at approximately 18,000 to 20,000 radiocarbon years B.P. (before present, i.e. before the datum for radiocarbon ages, A.D. 1950).*

When the ice mass melted in the environs of Dumfries and in the shallow valleys between Dumfries and Glencaple and between Locharbriggs and the mouth of the Lochar Water large quantities of englacial debris were deposited by the melt waters. The debris now constitutes many of the mounds, ridges and flat-topped or gently-sloping spreads of sand and gravel which floor the above-mentioned valleys. Several categories of these sediments — collectively termed fluvio-glacial deposits — are recognisable, differences in origin being responsible for the differences in topographic form which are displayed. The most distinctive geomorphological features are eskers, discontinuous long sinuous ridges, mainly of gravel, which are to be found in the vicinity of Locharbriggs (Fig. 3). A particularly good example is the narow ridge, close to the canoe site, which extends for more than one kilometre from near Catherinefield farm along the west bank of the Lochar Water (new cut) between Tinwald Isle and Tinwald Downs farm.

Tinwald Isle itself, and Glenclair Hill (Fig. 3), are flat-topped features composed mainly of sand and gravel. Their location on the floor of the valley of the Lochar Water, together with the flatness of their surfaces, suggests that they are kame terraces, accumulations of fluvio-glacial material which were deposited by melt-water streams flowing between stagnant ice masses on the valley floor and the valley sides composed of glacial till and solid rock. Less distinctive areas, mainly ridges and mounds of sand and gravel such as those occurring near Sandy-

*In this section all dates are given in radiocarbon years B.P. The writer believes that, in the present state of knowledge, radiocarbon years should *not* be converted to calendar years.

knowe Bridge, also are products of fluvio-glacial deposition (Fig. 3). Possibly these features are poorly-developed eskers and kames, ridges and mounds which accumulated as ice-contact stratified debris deposited under or adjacent to stagnant ice masses. The surface of the vast expanse of sand and gravel (partly overlain by the northern part of Lochar Moss) between Dumfries, Sandyknowe Bridge and Locharbriggs, slopes gently downwards from north to south. The smoothness of the surface is interrupted in places by large and small hollows of irregular shape

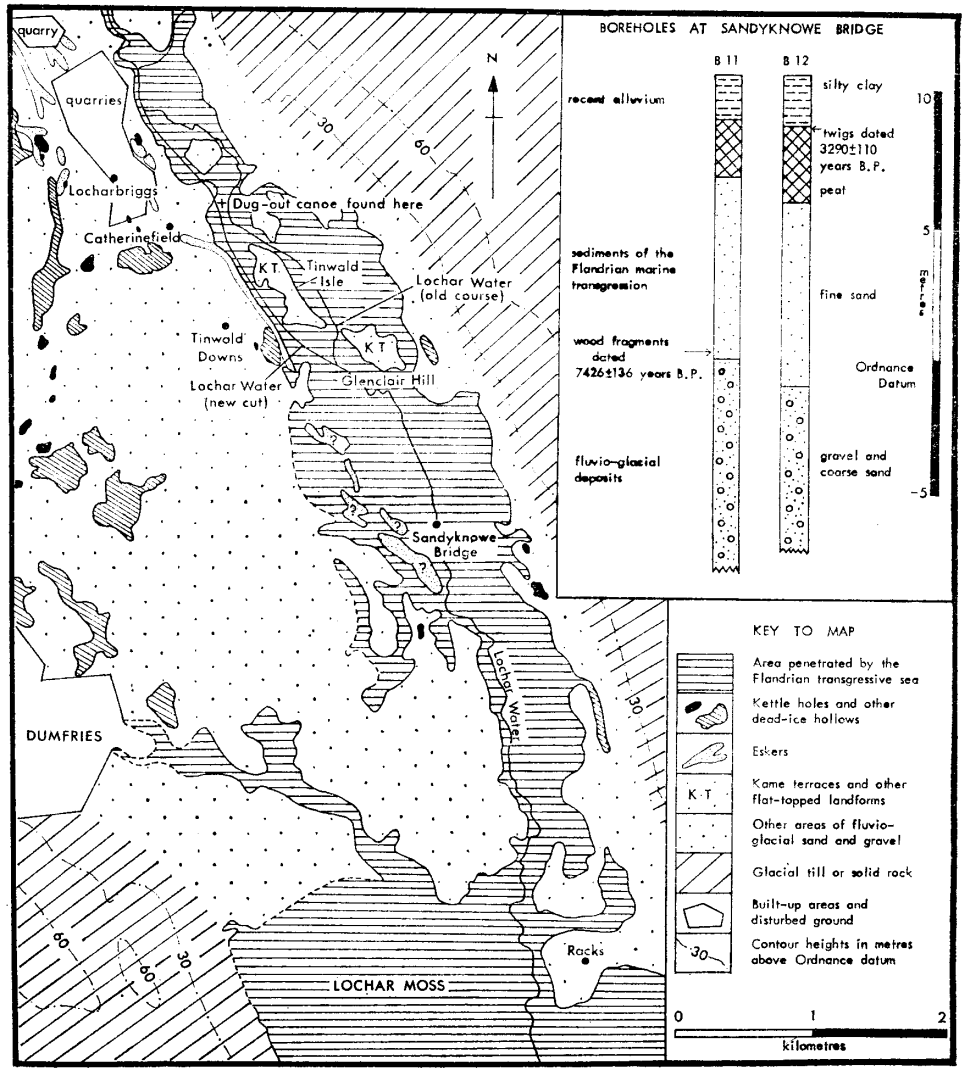


Fig. 3

Map of Quaternary deposits and associated topographical features adjacent to the Lochar Water, north-east of Dumfries.

(Fig. 3), and site investigation for the construction of new gasworks at Heathhall in 1965 revealed a number of other hollows which apparently had been covered when the Tinwald Downs airfield was made during World War I. The hollows, generally called kettles or kettle-holes are located where masses of ice stagnated whilst contemporaneously stratified sediments accumulated around them, and sometimes on top of them. The vast expense of sands and gravels between Locharbriggs and Dumfries represents outwash sediments deposited by glacial melt waters. It was laid down when the ice-front of the wasting Nith glacier had receded to a position north of Dumfries but was stationary or slowly receding in the vicinity of Locharbriggs, or just to the north of the village.

The melting of the last ice sheet in northern Britain was accompanied by two approximately simultaneous effects. One of these was the return of water to the seas and oceans of the world by the melting of large ice sheets in North America, Scandinavia, Antarctica and Greenland, and lesser ice caps in areas such as Spitsbergen and northern Britain. As a result, world-wide sea level rose. The other effect was more local in its influence. With the removal of the ice load from northern Britain the land surface of that region gradually rose. Modification of the coastline of northern Britain by penetration of the sea or withdrawal of the sea during this period of concurrent rise of world-wide sea level and regional land level depended largely, at any one time, on the relative rates of rise of sea level and of land level. Because of a lag in land rebound after removal of the ice load, and the continuation of ice melting in large ice sheets in other parts of the world after ice had completely disappeared in northern Britain, the effects mentioned above influenced the coastal configuration of northern Britain until approximately 5,000 radiocarbon years B.P., i.e. until after man first occupied sites along the northern shore of the Solway Firth (**cf.** Cormack 1970).

Evidence of penetration of the sea into the Dumfries area is preserved in sand and fine sand deposits, several metres in thickness, which overlie the fluvio glacial sands and gravels of the valley of the Lochar Water between Locharbriggs and Racks (Fig. 3, inset) and which occur also in the former Lochar Gulf which underlies Lochar Moss between Dumfries and the mouth of the Lochar Water (Fig. 3). The presence of wood fragments, dated 7426 ± 136 years B.P. by radiocarbon assay (Baxter **et. al. 1969, p. 51),** near the base of the marine deposits at Sandyknowe Bridge (Fig. 3, inset), indicates that penetration of the sea into the narrow inlet to the north of the Lochar Gulf, in the course of what is known as the Flandrian transgression, commenced about 7,400 years B.P. The transgressive sea may have been present in the Lochar Gulf for some considerable length of time prior to this (Jardine and Morrison, 1976, 184). The marine nature of the sediments which overlie the fluvio-glacial deposits at Sandyknowe Bridge was proved by the presence in the upper group of sediments of abundant remains of calcareous skeletons of microscopic unicellular animals belonging to the Order Foraminifera, and occasional remains of valves of Mollusca and Ostracoda, and spines of Echinoidea. Remains of shell fragments of Mollusca, and of skeletons of Foraminifera, Ostracoda and Echinoidea, and occasionally of sponge spicules, have been found in

boreholes sunk in the area of the former Lochar Gulf, and in exposures created recently by dredging along the course of the Lochar Water.

Overlying the marine sands throughout much of the area of the former Lochar Gulf and its northern offshoot is a variable thickness of up to five or six metres of peat (indicative of terrestrial conditions), Peat growth did not begin simultaneously throughout this area: at Nether Locharwoods (Fig. 1) basal layers of the peat were radiocarbon dated 6645 ± 120 years B.P. (Goodwin and Willis 1962, p. 59); at Horseholm (Fig. 1) basal layers were radiocarbon dated 5410 ± 160 years B.P. (Shotton and Williams 1973, p. 3). It is thought that comparatively sudden exclusion of the sea from the Lochar Gulf, and the northern inlet which extended to Locharbriggs, occurred about 6,600 radiocarbon years B.P. because of growth of gravel bars and sand bars near the mouth of the gulf, although the Flandrian marine transgression may not have ended until about 5,000 radiocarbon years B.P. in other parts of the Solway Firth (Jardine 1971, 1975). About the same time as the sea was excluded from the Lochar Gulf, or perhaps slightly later, man first occupied coastal and near-coastal sites in Dumfriesshire and Galloway.

Over a large part of the area of the former marine inlet between Sandyknowe Bridge and Locharbriggs the surface deposits comprise a variable thickness of up to approximately three metres of silts. These sediments are thought to have been deposited in a number of lakes (some of them perhaps occasionally temporarily joined to each other to form larger lakes), and it was in one of these lakes that the dug-out canoe must have been used. In places the lakes were bordered by and floored by inorganic deposits, mainly the fluvio-glacial deposits already discussed. Elsewhere the floors of the lakes appear to have consisted of organic debris, now in the form of peat. Near the location where the canoe was found (National Grid reference NY 0013 8011) the thicknesses of the peat and the associated alluvial silts are very variable, and the two deposits frequently are interstratified (Fig 4). Here, therefore, the change from conditions dominantly of peat formation to those mainly of deposition of alluvial silts appears to have been gradual, and interrupted from time to time. In contrast, at Sandyknowe Bridge the boundary between peat (below)

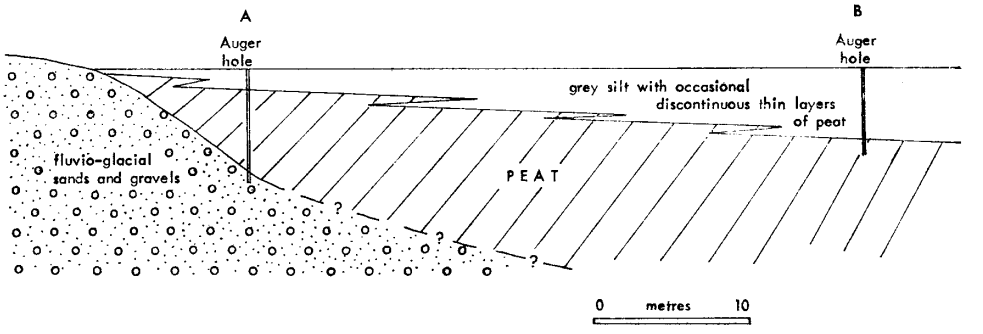


Fig. 4

Section of the peat and silt deposits in the vicinity of the site where the dug-out canoe was found, based on augering and exposures in the banks of the Lochar Water (old course). Locations A and B are those shown in Figure 2. Vertical exaggeration approximately 1.3x.

and alluvial silts (above) is sharp (Fig. 3, inset), and radiocarbon dating of twigs from the uppermost 50 mm of peat gave 3290 ± 110 years B.P. for the age of the boundary (Shotton et al. 1974). The radiocarbon age of the canoe, SRR-326, 3754 ± 125 years B.P. is somewhat older. This, together with the great thickness of peat in close association with alluvial silts in the vicinity of the spot where the canoe had been laid on the bank of the Lochar Water by the excavator (Fig. 4) suggests that the canoe had been abandoned in, or had drifted of its own accord into, a swamp which bordered a lake. At the time that the canoe was being used, the conditions of peat formation, at least locally, had not given way fully to conditions in which inorganic lake silts and clays were the main materials being deposited. Early man, occupying areas on either side of the long valley between Locharbriggs and Sandyknowe Bridge, used dug-out canoes to solve his problems of crossing the swamp-bordered lakes which occupied the floor of the valley.

There is evidence that at approximately the same time as the canoe was being used in lakes in the Lochar valley there was human occupation of somewhat different kind of environment at sites on the Solway Firth coast at Newbie (Jardine and Morrison, 1976). Forest clearance in the vicinity of Racks probably was somewhat earlier (Nichols 1967, pp. 178-181).

The Canoe (LJM)

The find at Catherinefield Farm can best be interpretated as the stern half of a monoxylous dug-out canoe. The maximum surviving length is 2.42 m., and the width varies between 0.75 m. and 0.81 m. (Fig 5 and Plate VI). There is a fresh diagonal break, in close proximity to a large knot, across the floor of the canoe. This suggests that the rest of the canoe is either still **in situ** somewhere in the bank of the Lochar Water (Old Course) or alternatively, it might have been removed by the mechanical excavator and buried in the over 2 m. high spoil heap nearby (Fig. 3). An attempt was made to find the rest of the canoe, but work was hindered by the coating of clay spread on the sides of the steep "V" shaped channel of the Lochar Water (Old Course), which obscured the sides and could not be disturbed. It also proved impractical to do much more than make a superficial examination of the spoil dump. A few pieces of wood were found, but none could be said to be unequivocally part of the canoe, and some were obviously modern including fence stobs. Nevertheless, if the rest of the canoe is still **in situ** in the present bank of the Lochar Water (Old Course), it may well be revealed when future cleaning-out operations take place in the area.

The canoe had been hollowed out from a split tree-trunk, probably of about 1 m. diameter. The wood has kindly been identified as oak (Quercus) by members of the staff of the Forestry Commission at Moffat. In general the surviving portion is moderately well preserved, although the rather fragile nature of the remains on both sides prevented a thorough examination of the canoe before its removal to I.C.I. (Dumfries). The following description is based on observations made at the find spot and during the removal operations.

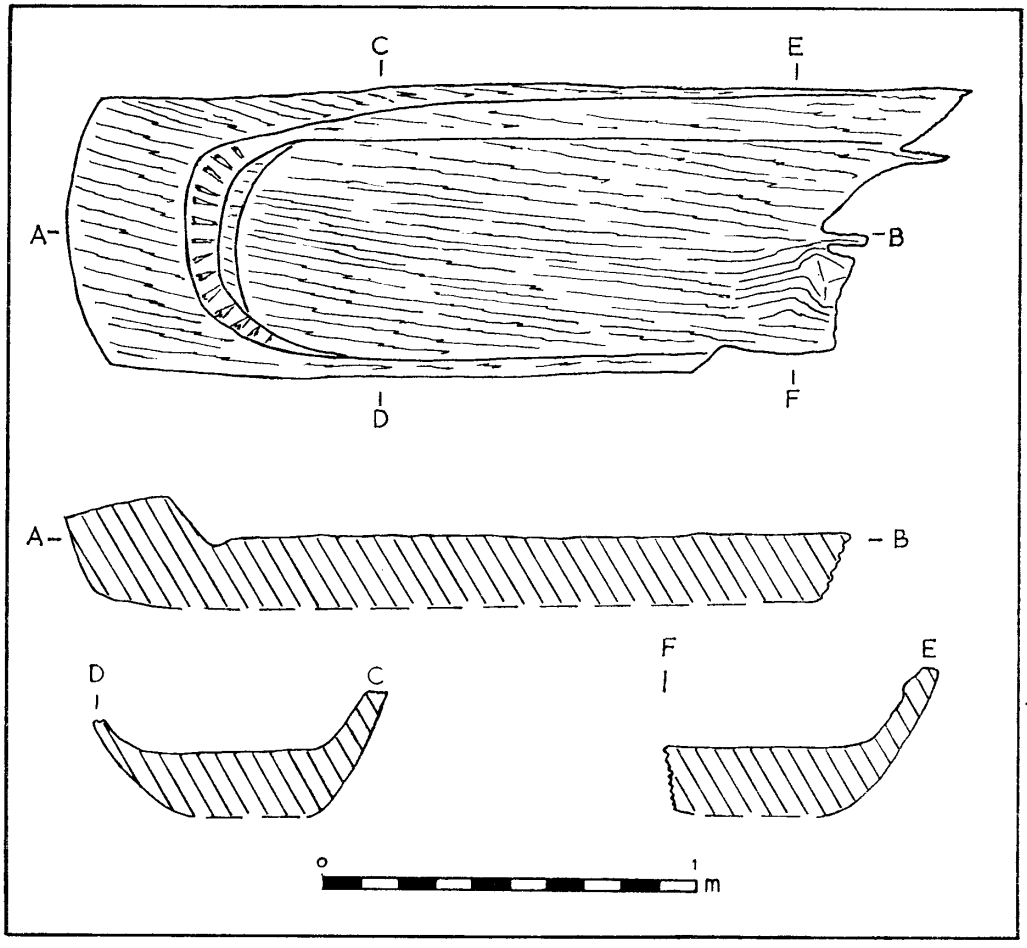


Fig. 5
Plan and sections of dug-out canoe, Catherinefield Farm, Dumfries.

The port side is quite well preserved on both its inner and outer faces. At 1.86 m. from the stern there is a small portion surviving which may well represent the original height of the gunwale. The starboard side is less well preserved, and decreases in height from the stern to the diagonal break. Here the side of the canoe has broken away, possibly in antiquity. The grain of the wood is clearly visible in the floor of the canoe, but the floor itself has suffered some damage, particularly near the diagonal break where, around the large knot, the surface of the wood has lifted and split. The stern block is slightly convex externally and has a smooth exterior and interior surface. There is a shallow channel in the floor of the canoe around the bottom of the interior concave face of the stern block. The top surface of the stern block is very badly decayed, but might originally have been a flat surface extending across the width of the canoe and for some 0.32 m. along its

length (Plate VII). Tool marks are clearly visible on the lower part of the starboard side and, when the canoe was removed, further tool marks could be seen on the underside.

The small surviving portion of the gunwale on the port side allows some consideration to be given to the original section of the canoe. It was possibly some 0.23 m. deep internally, and the sides were slightly flared rather than vertical. The width of the sides varies from 0.03 m. near the gunwale, to 0.08 m. The thickness of the floor could only be measured at the broken end, where it is considerably distorted. Here it measured some 0.18 m., but elsewhere it is probably less than this.

A sample of the wood was taken for radiocarbon assay from the outside surface of the port side. This position was chosen in order to obtain a sample as close as possible to the surviving outer surface of the canoe. The sample was examined before radiocarbon assay, and was found to contain at least eight closely spaced annual growth rings (M. Lang and S. Robertson, Forestry Commission, Moffat, pers. comm.). As stated above, the date for the sample is 3754 B.P. ± 125 (SRR-326), which would give a date of 1917 b.c. ± 125 when corrected for the new half-life of C14. In his report on the sample, Dr D. Harkness of the Scottish Universities Research and Reactor Centre states that "only the wood cellulose was used for dating, thus I am confident that we have avoided all possible natural contamination in the original sample." (pers. comm.).

Despite Dr. Jardine's warning above on the calibration of radiocarbon dates to calendar years, many archaeologists now believe that some form of calibration is necessary if radiocarbon dates are to mean anything in terms of calendar years (Renfrew, A. C., 1973, 69-83). It is, perhaps of no great significance to calibrate the single date for the canoe, but reference to the MASCA curve (Ralph, E. K., 1973) would give a calibrated date of 2180 B.C. If, however, the curve proposed by R. M. Clark is used, the calibrated date would be 2230 B.C. (Clark, R. M., 1975, 251-266). This serves to show that the tree from which the canoe was made was growing during the third millennium B.C. and that the canoe was probably made and used during the latter part of the third millennium and beginning of the second millennium B.C. in calendar years.

The environmental conditions of shallow lakes and marshy borders in which the canoe was used, as described above, and the relative thickness of its floor, suggest that it would have been propelled by punting rather than the use of a paddle. No doubt the fresh water environment of the Lochar area provided supplies of both fish and wild fowl, which would have been exploited by the late Neolithic inhabitants of the area. Although there is no definite evidence, it can be conjectured that the numerous hummocks of fluvio-glacial material would have provided well-drained, if limited, areas for settlement within the general marshy environment..

REFERENCES

BAXTER, M. S., ERGIN, M. and WALTON, A. 1969 Glasgow University Radiocarbon Measurements I. **Radiocarbon** 11, 43-52.

CLARK, R. M. 1975 A calibration curve for radiocarbon dates. **Antiquity** XLIX (1975) 251-266.

CORMACK, W. F. 1970 A Mesolithic site at Barsalloch, Wigtownshire. **Trans. Dumfriesshire Galloway Natur. Hist. Antiq. Soc.** XLVII, 63-80.

GODWIN, H. and WILLIS, E. H. 1962 Cambridge University Natural Radiocarbon Measurements V. **Radiocarbon** 4, 57-70.

JARDINE, W. G. 1971 Form and age of late Quaternary shore-lines and coastal deposits of south-west Scotland : critical data. **Quaternaria** 14, 103-114.

JARDINE, W. G. 1975 Chronology of Holocene marine transgression and regression in south-western Scotland. **Boreas** 4, 173-196.

JARDINE, W. G. and MORRISON, A. 1976 The archaelogical significance of Holocene coastal deposits in south-western Scotland. **in** Davidson, D.A. and Shackley, M.L. (eds.) **Geoarchaeology : Earth Science and the Past,** 175-195 (London).

NICHOLS, H. 1967 Vegetational change, shoreline displacement and the human factor in the late Quaternary history of south-west Scotland. **Trans. R. Soc. Edinb.** 67, 145-187.

RALPH, E. K. 1973 **MASCA Newsletter,** August, 1973.

RENFREW, A. C. 1973 **Before Civilization** (London).

SHOTTON, F. W. and WILLIAMS, R. E. G. 1973 Birmingham University Radiocarbon Dates VII. **Radiocarbon** 15, 451-468.

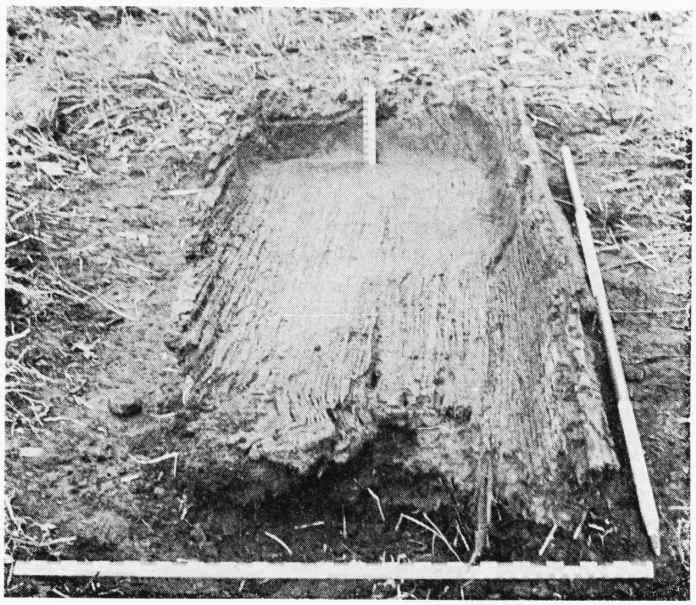


Plate VI. Catherinefield Farm dug-out canoe, after removal of protective peat covering, August, 1974. (Scales: 2m; 1m; 0.20m).

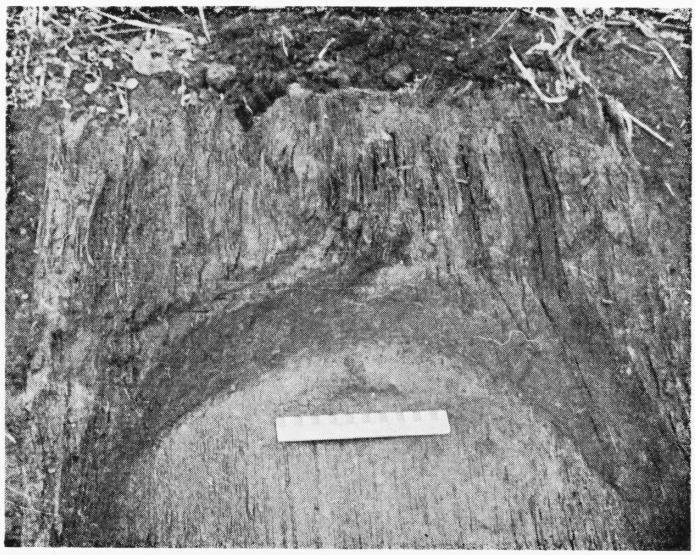


Plate VII. Catherinefield Farm dug-out canoe — detail of stern block (Scale: 0.20m).

SOILS AND 'LATER PREHISTORIC' SETTLEMENT IN SOUTH-EAST SCOTLAND

by W. B. Kerr

Summary

The distribution of archaeological settlement sites dating from the period 700 BC to 400 AD was examined in relation to major soil sub-groups in south-east Scotland. In Roxburghshire the relative frequency of settlement sites was highest on brown forest soils, skeletal soils and combinations of these occurring as complexes. One settlement type, the fort, was studied in relation to major soil sub-groups over a wider area of southern Scotland. Brown forest soils, skeletal soils and complexes with these soils as major components again had high numbers of fort locations. The role of soil in influencing the settlement pattern is discussed.

Introduction

The purpose of this study was to test for a possible correlation between the spatial distribution of 'Later Prehistoric' settlement and the major soil sub-groups in Roxburghshire and to examine the relationship between one particular settlement type, the fort, and soil in a wider area of southern Scotland.

The term 'Later Prehistoric' includes the later part of the first millennium B.C. and the Roman Period. The date of this period is likely to be from 700 B.C. to 400 A.D. Later Prehistoric settlement sites may be classified as forts, homesteads, settlements, enclosures, hut circles, field systems or earthworks of undefined form.

The idea of past settlement patterns being correlated with soil distribution is not new. Fox (1923) showed that the shift from primary to secondary areas of settlement in the Cambridge region was a shift from easily worked soils to difficult, waterlogged clayey soils. Walton (1969) drew attention to the correlation between deep fertile soils in the Insch Valley of Aberdeenshire and the distribution of population there in 1696. In Wales, Crampton and Webley (1960) mapped Neolithic, Bronze Age and Early Iron Age sites in relation to soils. They concluded that little ingress had been made by early Iron Age times into areas of soil with impeded natural drainage. Grimes (1945) working with small scale soil maps suggested that early man favoured medium textured soils in Anglesey. Woolridge and Linton (1933) also used soil texture in attempting to explain the distribution of antiquities in south-east England. Fahy (1969) in south-west Ireland showed a concentration of early Christian ring forts on brown forest soils.

Soils

The information regarding soils was extracted from the published maps of the Soil Survey of Scotland (Fig. 1). Soils are classified by Soil Survey into major soil groups and major soil sub-groups of which brown forest soils, gleys, podzols and peat are most extensive. Each major soil sub-group consists of a number of soil series, which are the primary mapping units. The series has been defined as, "soils with similar profiles derived from similar materials under similar conditions

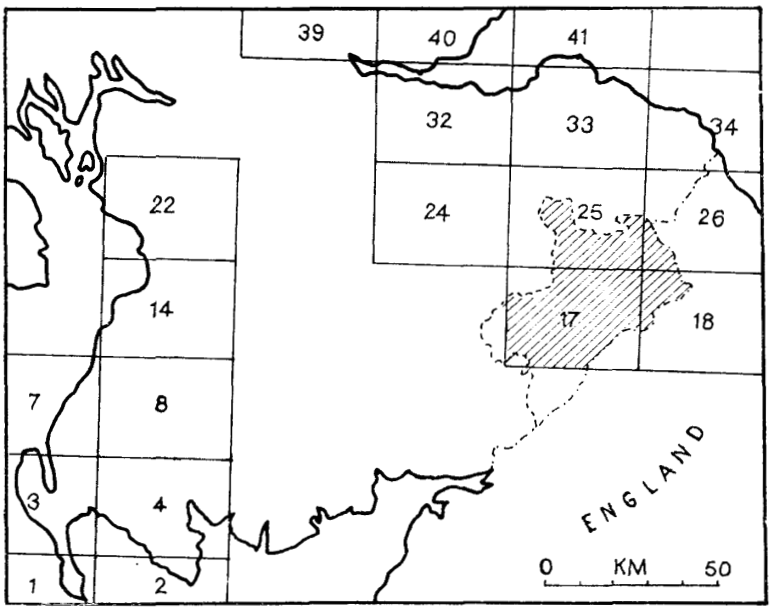


Fig. 1 Roxburgh in relation to published (and completed) 1 in. Soil maps.

of development", (Robinson 1949). In this context the soil profile is a vertical section through the soil to a depth of 1 or 1.5 metres and is characterized by the sequence of horizons (layers) differentiated from each other by weathering and other soil-forming processes. Under natural conditions soils may drain freely or may be partly or wholly waterlogged for periods of the year. These drainage conditions give rise to important differences of profile morphology characteristic of major soil sub-groups. On this basis the brown forest soils with free drainage are distinguished from brown forest soils with impeded drainage. For the purpose of this study, soil map units have been grouped as follows:— brown forest soils with free drainage, skeletal soils normally shallow and well drained, soil complexes with skeletal soils an important component, and other soils comprising all the remaining major soil sub-groups.

A soil complex is a mapping unit used when two or more soil types are so intimately intermixed geographically that it is undesirable or impracticable to separate them. The Ettrick complex (Muir, 1956) which has a high concentration of settlement sites includes brown forest soils (Linhope Series), skeletal soils and soils developed on colluvium. The Achie and Glenlee complexes are of generally similar character. As the combination of brown forest soil and skeletal soil appears to be important for settlement, the Ettrick, Achie and Glenlee complexes have been grouped together in the analysis of settlement site locations.

Agriculturally, brown forest soils and skeletal soils are very different in quality. Below 900 feet (275m) brown forest soils are suitable for arable agriculture and are capable of a high standard of fertility when well managed. Above 900 feet

(275m) they carry good pasture for hill cattle and sheep. In south-east Scotland the Linhope series, a typical brown forest soil, is developed on a stony drift of loam texture and is acid in reaction. The surface horizon is generally 6-10 inches (13-25 cms) in depth and has a well developed crumb structure, Muir (op. cit.). The natural vegetation characteristics of this series is a form of **Agrostis-Festuca** acid grassland which provides healthy hill pasture.

In contrast skeletal soils are of negligible agricultural value. The soils are extremely stony and often shallow, with some organic material incorporated in a thin surface layer and intimately mixed with the stones. Particularly on steep slopes the material may be scree, but it is more often a stony rubble over shattered rock, Muir (op. cit.).

Methods

The investigation was carried out in three parts. In the first part all 'Later Prehistoric' structures in the county of Roxburgh were considered. This area was selected for detailed study on account of:

(a) a high density of 'Later Prehistoric' settlement sites.
(b) availability of recent information on settlement sites from the Royal Commission on Ancient Monuments.
(c) availability of soil maps.

Only one settlement site occurred in the 14 per cent of the county for which a soil map has not yet been published. The Archaeology Division of the Ordnance Survey made available a list of sites in the county and their classification of sites into forts, homesteads, settlements, enclosures, hut circles, field systems or earthworks has been followed.

The sites were plotted on overlays of the published soil maps and the soil series or soil complexes on which the structure occurred was recorded.

The areas occupied by the various soil map units are taken from the soil maps and accompanying memoirs (Muir, op. cit. and Ragg and Futty, 1967). The relative frequency with which settlement sites occur on various groups of soils is expressed as the number of settlement sites per square mile of soil type. This gives a measure of settlement density. The Chi-square test was applied to compare statistically the actual distribution of settlement sites with the distribution to be expected if sites occurred randomly with respect to soil.

The second part of the investigation concerned the distribution with relation to soil of one type of settlement site, the fort, in the counties of Roxburgh and Selkirk. The information on forts was taken from the reports of the Royal Commission on Ancient Monuments for Scotland.

The locations of all Iron Age forts recorded were plotted on overlays of the soil map as previously. A number of forts occurred on soil boundaries and a record was made of these but for the purpose of this study the dominant soil in the immediate area was taken as the soil type. All forts are taken to be contemporaneous. The distribution of forts in the adjoining areas was not studied on account of the unavailability of comparable data concerning forts in Berwickshire and of soil maps for Peebleshire.

In the third part of the study all structures termed 'fort' by the O.S. on the most recently published map (Seventh series) were taken as a basis for the analysis. The area of study was extended to the area of southern Scotland for which soil information is available (Fig. 1). Fort densities were derived as before and are reported according to soil survey sheets in Table 3.

The altitude of all forts was recorded and Fig. 4 shows the relative frequency of sites according to altitude.

Results

The relative frequencies of settlement sites in Roxburghshire in relation to soils are reported in Table 1 which indicates that sites are concentrated on brown forest soils, skeletal soils and combinations of these occurring as complexes. A high concentration of sites is evident for skeletal soil with 23 per cent of all sites on only 4 per cent of the area. Brown forest soils have a less marked concentration with 53 per cent of all the sites on 32 per cent of the area.

Comparison of the data for brown forest soils, skeletal soils, complexes of brown forest soil with skeletal soil and all other soils shows that densities are in the proportion of 9:33:13:1 respectively. The Chi-square test showed that the observed distribution of settlement differs significantly from the expected random distribution at the 0.005 level of significance.

TABLE 1

Site Type	Brown Forest Soil (B.F.S.)	%	Skeletal Soil (SK)	%	Complex with Brown Forest and Skeletal Soil (B.F.S. + SK.)	%	Other Soils	%
Fort	38	(16)	18	(7)	23	(10)	8	(3)
Homestead	12	(5)	14	(6)	2	(1)	—	
Settlement	31	(13)	14	(6)	1	(⩽1)	3	(1)
Enclosure	32	(14)	6	(2)	1	(⩽1)	11	(5)
Hut Circle	2	(1)	1	(⩽1)	—		—	
Field System	1	(⩽1)	1	(⩽1)	—		—	
Miscellaneous Earthworks	6	(3)	—	—	4	(2)	3	(1)
TOTALS	122	(53)	54	(23)	31	(13)	25	(11)
							232	(100)
Number of Sites	31.8		3.8		5.5		58.7	
Mapped Area %	122		54		31		25	
Sites/sq. mile	0.684		2.57		1.03		0.077	

Number, percentage and frequency of Later Prehistoric sites in Roxburghshire occurring on major soil sub-groups.

TABLE 2

County	Forts on B.F.S.	(%)	Forts on Sk.	(%)	Forts on Complexes of B.F.S + Sk.	(%)	Forts on Other Soils	(%)	Totals	
Roxburgh-shire	37	(36)	19	(19)	27	(27)	7	(7)	90	(88)
Selkirk-shire	2	(2)	—		7	(7)	3	(3)	12	(12)
	39	(38)	19	(19)	33	(33)	10	(10)	102	(100)

Number and percentage of forts occurring on major soil sub-groups using Royal Commission on Ancient Monuments for Scotland Records.

TABLE 3

	BROWN FOREST SOIL				SKELETAL SOIL			
	AREA		Number of Forts	Forts/ Sq. Miles	AREA		Number of Forts	Forts/ Sq. Miles
	Sq. Miles	% of Map			Sq. Miles	% of Map		
JEDBURGH (17) MOREBATTLE (18)	168	37	25	0.148	22	5	11	0.50
KELSO (26) LAUDER (27)	207	38	24	0.115	5	1	4	0.80
HADDINGTON/ EYEMOUTH (33/34)	169	34	29	0.171	3	$\leqslant 1$	0	0

	COMPLEX WITH SKELETAL + B.F.S.				OTHER SOILS			
	AREA		Number of Forts	Forts/ Sq. Miles	AREA		Number of Forts	Forts/ Sq. Miles
	Sq. Miles	% of Map			Sq. Miles	% of Map		
JEDBURGH (17) MOREBATTLE (18)	39	9	12	0.307	221	49	1	0.004
KELSO (26) LAUDER (27)	19	4	5	0.263	309	57	5	0.016
HADDINGTON/ EYEMOUTH (33/34)	4	$\leqslant 1$	4	1.00	319	65	3	0.009

Number and frequency of forts occurring on major soil subgroups, arranged according to Soil Survey of Scotland map sheets.

TABLE 4

O.S. Sheet		Forts on B.F.S.	Forts on Sk.	Forts on Complexes of B.F.S. + Sk.	Forts on all Other Soils	TOTAL
Largs	60	2	—	—	3	5
Edinburgh	62	11	—	—	3	14
Dunbar	63	25	—	—	6	31
Berwick	64	10	—	3	1	14
Ayr	67	—	—	—	1	1
Selkirk	69	7	4	6	1	18
Jedburgh	70	21	11	11	4	47
Girvan	72	4	—	—	2	6
New Galloway	73	—	—	2	2	4
Stranraer	79	—	—	6	2	8
Kirkcudbright	80	—	—	2	2	4
		80 (52%)	15 (10%)	30 (20%)	27 (18%)	152 (100%)

Number and frequency of forts occurring on major soil groups.

The distribution of forts in Selkirkshire and Roxburghshire is set out in Table 2 and again shows a concentration on brown forest soils and skeletal soils. The combination of brown forest soils and skeletal soils in soil complexes is important.

In part three of the study the positions of 152 forts from the south of Scotland were considered. The number of forts in the western part of the Southern Uplands is small and fort density is calculated for the eastern areas only (Table 3). In the Haddington-Eyemouth area (soil map Sheet 33/34), 80 per cent of the forts occur on brown forest soils, which occupy only 33 per cent of the area. Table 4 shows the general distribution of forts, according to soil type, 52 per cent are on brown forest soils, 10 per cent are on skeletal soils and 20 per cent are on complexes of brown forest soil and skeletal soil. The remaining 18 per cent occur on a wide range of soils from brown forest soils with impeded drainage to alluvium. In the Dunbar area (O.S. sheet 63), 60 per cent of forts occur on the Linhope series, (Muir, op. cit.). Only two forts in all the areas studied were found to occur on brown forest soils of coarse texture, such as Yarrow, Eckford and Innerwick series, (Ragg and Futty, op. cit.).

Twenty forts were located on boundaries between brown forest soils and skeletal soils and 30 on complexes of these soils, 13 per cent and 20 per cent respectively of those recorded.

Fig. 4 shows that forts tend to be sited in the 750-1150 feet (230-350 metres) altitude range.

Discussion

It has been shown that 'Later Prehistoric' peoples constructed forts and other settlement sites on brown forest soils, skeletal soils or combinations of these. The factors influencing this preference may be the nature of the soils themselves, or landform, climatic, vegetational or other features associated with these soils.

Reference has already been made to the agricultural character of these soils and there is little doubt that brown forest soils present few drainage problems and are easy to cultivate. Few examples of the Celtic fields of Southern Britain are to be found in the south of Scotland and strip lynchets are of a much later date. The presence of saddle querns and flat querns of pre-Roman date and Romano-British rotary querns is ample evidence however of arable grain growing, which may also have been combined with pastoralism. At Tamshiel Rig, Carter Bar (NT 643062) long fields of Iron Age date have been recorded. These occur on small patches of brown forest soil surrounded by peaty gley soil.

Brown forest soils may have been exhausted quite quickly in the absence of nutrient recycling by the forest, but low pressure of population would allow clearing of new ground and long fallow. Gleys, peaty podzols, peaty gleys, alluvium or even brown forest soils with impeded drainage would have increased the difficulties of cultivation considerably by presenting drainage problems. The agricultural utilization of large areas of soils with impeded natural drainage today is made possible only by drainage systems, many of which were installed in the mid-nineteenth century and are now being renewed and extended.

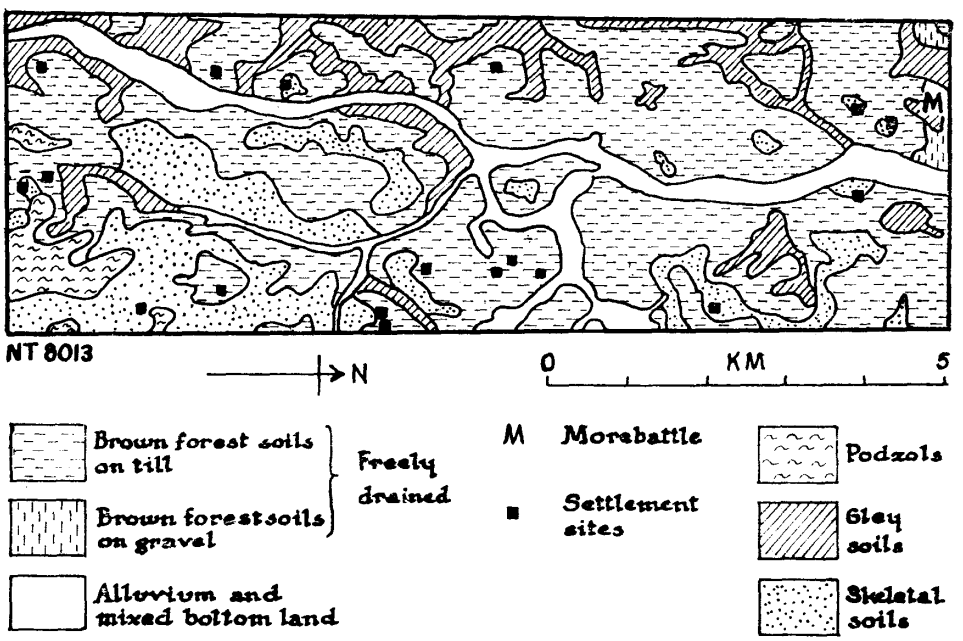


Fig. 2. Distribution of later Prehistoric Settlements and Major Soil Sub Groups around Morebattle.

Mention has already been made of forts which occur on soil boundaries or complexes of brown forest soils and skeletal soils. In some areas forts are sited on 'islands' of skeletal soil surrounded by brown forest soil as shown in Fig. 2. Fahy (1969) in mapping early Christian sites on a soil map of Skibberean Rural District, County Cork, also shows a high proportion of sites on complexes of brown forest soil and skeletal soil.

The absence of settlement sites on coarse textured soils such as Yarrow series has already been noted. It may be significant, however, that these soils occur only in valley or low-lying situations. While modern intensive cultivation will have destroyed some sites the concentration on soils of loamy texture rather than sandy texture was also noted by Fahy (1969), Grimes (1945), Crampton and Webley (1960). Fahy suggests that gravels were unsuited to ditch and bank construction techniques.

Landform may have contributed to the selection of sites. Brown forest soils are generally associated with moderate to steep slopes, which are necessary for the defence of sites. The availability of rock as a building material is of less importance, as archaeological structures of this period are usually of earth bank and ditch construction. A hill-top site often coincides with skeletal soils as illustrated in Fig. 3. Areas of rock outcrops and associated skeletal soils would probably also have carried a distinctive vegetation pattern easily recognised in a region largely forested in 'Later Prehistoric' times.

Today recognition of the soil types is greatly assisted by an appreciation of the vegetation communities occuring on major soil sub-groups. Birse in a discussion of the vegetation in Ragg and Futty (op. cit.) writes :— "There is a distinct relationship between the major soil groups and their sub-divisions and the vegetation communities which occur on them, although this may be obscured by the intensity of the biotic factors and by past history".

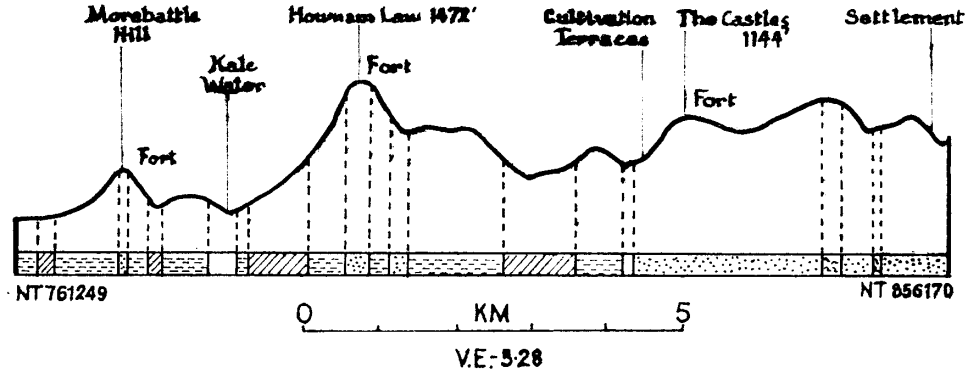


Fig. 3 Section showing relation of topography, settlement sites and soil.
(For key to soils, see fig. 2)

The brown forest soils of the middle slope, on which there are many sites, are acid in reaction and often have a grassland community dominated by bent and

fescue grasses (**Agrostis-Festuca** acid grassland). Bracken is abundant on these slopes and its distinctive appearance is characteristic of the brown forest soils.

On the upper hill slopes above 1000 to 1300 feet (300-400 metres), the soils are generally peaty podzols and peaty gleys having a peaty or raw humus surface layer, relatively wet conditions and a vegetation cover of purple moor grass (**Molinia caerulea**) or heather (**Calluna vulgaris**). In the lowlands where settlement sites are less common the wetter soils such as gleys and brown forest soils with impeded drainage carry a characteristic community with meadow grassland and rushes (**Juncus spp.**).

In semi-natural situations, therefore, brown forest soils are relatively easily distinguished according to vegetational characteristics from the wet gleyed soils, peaty-topped soils and peat.

Although the present day soils are characterized to a considerable degree by their vegetation it is difficult to envisage the vegetation and soil relationships in the period 700 B.C. to 400 A.D., when the area with the majority of settlement sites would have been part of the Ettrick Forest. Pliny mentions that a well known fund of plant lore existed, by which good soil could be recognized.

Feachem (1966) recognized a vegetation soil influence on settlement when he produced a map with vegetation zones superimposed on the distribution of Iron Age structures. His map showed a concentration of sites on what he termed, 'Dry Grass Moors', 'Heather Moors' and 'Improved Land'. It is probable that much of the Dry Grass Moors and Improved Land were on brown forest soils.

Soil development is a continuous process and the soil pattern today may differ somewhat from that in 'Later Prehistoric' times. The subsequent removal of tree cover is likely to have led to an increase in the rate of leaching of minerals, an increase in soil acidity and the development of raw humus surface layers.

It is possible that there may have been some deterioration in fertility consequent upon the destruction of the forest but it is highly probable that the soils mapped today as brown forest soils have altered little since the 'Later Prehistoric' period.

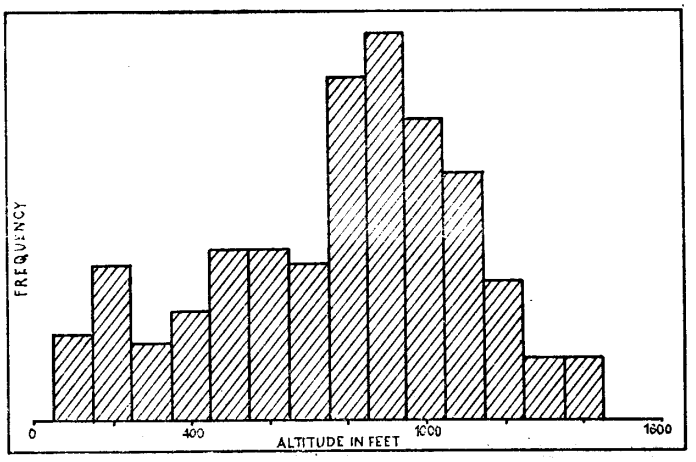


Fig. 4 Distribution of Forts by altitude.

The predominance of forts at moderate altitudes as shown in Fig. 4 confirms their absence from areas Feachem termed 'Arctic, Alpine Vegetation and Sub-Alpine Moors' at heights in excess of 2000 feet (600 metres). In south-east Scotland most forts are located below the level at which peaty upland soils occur. Hill peat in the area begins to form at 1200 feet (370 metres).

The relief elements of slope and altitude (through its effect on climate) are important soils forming factors. In the 750 to 1150 feet (230-350 metres) range the relief features of moderately steep slopes and elevation are coincident with the occurrence of brown forest soils. If altitude is an important influence on settlement then recognition of the preferred zone would depend on a knowledge of vegetation and soil.

The availability of systematic soils information in the form of soil maps allows a close examination of past settlement patterns in relation to soil types. The realization that a number of factors such as relief, climate, vegetation and cultural practices influence settlement has replaced the former emphasis on single factor control of settlement. Soil must be considered as one of these factors.

ACKNOWLEDGEMENTS

The research for this article was completed while the author was employed by the Soil Survey of Scotland, Macaulay Institute for Soil Research, Aberdeen. The author wishes to thank Mr C. J. Bown of the Soil Survey of Scotland who patiently corrected the manuscript and made many helpful suggestions; Mr W. Shirreffs who drew the diagrams; Dr R. Glentworth and Mr R. Grant also of the Soil Survey of Scotland who gave valuable advice and encouragement; Mr L. Masters of the Extra Mural Department, Glasgow University who assisted in the archaeological content of the article; the Ordnance Survey, Archaeology Division who allowed access to their index of sites.

REFERENCES

1. Archaeology

CRAMPTON, C. B. and WEBLEY, D. (1960). The Correlation of Prehistoric settlement and soils in the Vale of Glamorgan. Bull. Board Celtic Studies 18, 387-96.

FAHY, E. M. (1969). Early Settlement in the Skibbereen Area. Cork Historical and Archaeological Society.

FEACHEM, R. W. (1965). The North Britons. Hutchinson. Lond.

FEACHEM, R. W. (1966). The Iron Age in Northern Briton Ed. A. L. F. RIVET, Edin. University Press.

GRIMES, W. F. (1945). Early Man and the Soils of Anglesey, Antiquity XIX, 169-74.

Royal Commission of Ancient Monuments (Scotland) (1955-56). County of Roxburgh Inventory of the Ancient and Historical Monuments (1956) and Selkirkshire (1957). Edinburgh: H.M.S.O.

WALTON (1950). The Distribution of Population in Aberdeenshire in 1966. Scot. Geog. Mag. 67.

WOOLRIDGE, S. W. and LINTON, P. L. (1933). The Loam-Terrains of South-east England and their relation to its Early History, Antiquity VII 297-310.

2. Soil

BOWN, C. J. and HESLOP, R. E. F. (in preparation). The Soils of the Country around Stranraer and Wigtown. (Sheets 1/4). Mem. Soil Surv. Scot. Edinburgh: H.M.S.O.

GRANT, R. (in preparation). The Soils of the Country around Ayr. (Sheet 14 and part of 13). Mem. Soil Surv. Scot. Edinburgh: H.M.S.O.

MITCHELL, B. D. and JARVIS, R. A. (1956). The Soils of the Country around Kilmarnock. Mem. Soil Survey Scot. Edinburgh: H.M.S.O.

MUIR, J. W. (1956). The Soil of the Country around Jedburgh and Morebattle. Mem. Soil Surv. Scot. Edinburgh: H.M.S.O.

RAGG, J. M. (1960). The Soils of the Country around Kelso and Lauder. Mem. Soil Surv. Scot. Edinburgh: H.M.S.O.

RAGG, J. M. and FUTTY, D. W. (1967). The Soils of the Country around Haddington and Eyemouth. Mem. Soil Surv. Scot. Edinburgh: H.M.S.O.

SOME "MEDIAEVAL" OBJECTS FROM LUCE BAY SANDS IN THE MANN COLLECTION

by James Williams, F.S.A.Scot.

The extensive area of sand dunes at the Northern end of Luce Bay is well known to readers of these Transactions as a source of archaeological finds of all periods. In general terms the pre-historic periods are well represented by all classes of find and although objects of later date do exist they are by no means so common. This state of affairs is mirrored in the extensive collection of finds made by the late Ludovic McClellen Mann in the early years of the present century. He was an avid collector of all types of object and period : the diversity of his collection may be judged by a perusal of the numerous entries against his name in the printed catalogue of the "Scottish Exhibition of National History, Art and Industry" (Glasgow 1911). It is obvious that he made extensive use of professional collectors, a not inconsiderable number of whom "preyed" upon the Sands at this particular time, and it would appear that they were instructed to bring back everything and anything found. As a result he acquired a not inconsiderable number of objects of the Mediaeval period, in the widest sense of the word, at a time when they were not so sought after as they are today. One of the adverse aspects of this form of collecting is that much of the material is poorly provenanced and descriptive tickets bearing the legend "Luce Sands" are common and even "West Scottish" is not unknown. Some material from the collection, of possible mediaeval date (iron bloomery waste), has already been mentioned in these Transactions[2] and the finds of numismatic significance have been incorporated in a summary article on the coin-finds of the region[3].

On a volume basis pottery forms the bulk of the material from the period under examination. A few small scraps of E-ware exist (and have been adequately dealt with by Thomas and others), but in general terms the remainder is dateable to the 13th-16th centuries. Most of the sherds are small and frequently possess little or no glaze — wind-blown sand is an efficient abrasive and will reduce the hardest of glazes in a surprisingly short time. Fortunately however, the main body of the pottery remains and in a large number of instances the rim-forms, which could be of considerable diagnostic value, have been obtainable. It has not been possible, in the majority of cases, to give an assessment of the body forms but it may be significant that approximately 60% of the measureable rim-fragments fall within the range 10-14 cms (diameter). Some handles exist in the collection and undoubtedly those of the strap-type predominate.

A considerable number of bronze objects are represented in the collection — due, no doubt, to their characteristic bright-green patina. A few small nonde-

1. This present article is the result of an examination of the Ludovic McL. Mann Collection during October 1968. It is retained in the Collections of the Department of Archaeology, Ethnology & History of the Glasgow Art Gallery & Museum. I am indebted to Mr J. G. Scott who made the material available for study. My thanks are also to be extended to Mr R. Roddan by whom the photographic illustrations were prepared.
2. These Transactions III/44/126.
3. Coin Finds and Hoards from Dumfriesshire and Galloway (mediaeval material only), Williams, Spinks Numismatic Circular, July-December, 1970.

script fragments of early mediaeval penannular brooches are extant, but none are worthy of description here, as opposed to some very fine examples of buckles from a later period (as also a few (?) 17th century examples). Also deserving mention are some very fine strap-tags in bronze and base silver, one of which bears interlacework decoration, and an exceptional gilt-bronze interlace-decorated mount in "chip-carving" technique of the 9th/10th centuries. There is also a small selection of finger-rings, two belt chapes, and an intriguing scallop-shaped mount which conjures up associations with the cult of St. James the Greater at Compostella — what may be a second example of such "signaculae" are two small leaden crosses.

With ironwork we are less than fortunate in that much of the material in the collection has suffered severely since it was found. This is partly due to the inherent instability of the material itself but has been greatly aggravated by Mann's practice of impregnation with candle-wax: All objects from the sand-dunes are, when first found, heavily contaminated by salts and the pressure of their subsequent efflorescence has, in many cases, reduced what were once recognisable objects (Exhibition catalogue of 1911) to formless masses of oxide. In spite of such disruptive processes it is still possible to record the presence of fragments of horse furniture (shoes, harness and spurs — including several rowels), a small iron casket with (?) bronze decoration, an arrowhead, fragment of a dagger, knives, nails, and at least two "barrel" padlocks.

The final group of material to be described is markedly less coherent but includes a few small items in stone and bone : spindle whorls, a toggle and fragment of a (?) whistle. Being unchanging in their application over long periods of time such unpretentious objects are very difficult to date in the absence of significant decorative features but are included here in order that a record might be made.

POTTERY

"Slate Hollow, Luce Sands"

Disc of pottery, 2.3 x 2.5 cms x 0.9 cms in thickness, cut from a fragment of grey-red buff fabric: little dull yellow glaze remains.

"Luce. pre-war"

thirty two small and nondescript fragments of coarsely gritted brown-red buff ware with a thin yellow glaze. One small fragment of rim might be noted — diameter not determinable. Fig. iv/1.

"Lodney"

Fragment of mediaeval pottery with carinated rim. Diameter approximately 8 cms. Fig. ii/2.

"East of little yellow bead site. (Rec. Aug. '03)".

Eighty two miscellaneous fragments of wall in a fine grey-white finely gritted ware — a little of the material has a definite pink colouration and appears to be tempered with fine sand. Some fragments of base represented but the following might be particularly noted :—

a. Rim fragment, reddish brown ware with flecks of orange brown glaze, 11 cms in diameter. Fig. ii/4.
b. Rim fragment, in a very white coarsely gritted unglazed ware, 19 cms. in diameter. Fig. iii/5.
c. Three fragments of soot-blackened rim, finely gritted cream fabric, unglazed, 10 cms. in diameter. Fig. iv/6.
d. Two fragments of rim, white finely gritted unglazed ware (not as in 'c' above), 12 cms. in diameter Fig. iii/7.

e. Small rim fragment, buff-white unglazed ware, 12 cms. in diameter. Fig. iii/8.
f. Two small fragments of rim in an unglazed finely gritted white ware; heavily burnt; diameter not determined. Fig. iv/9.
g. Small rim fragment, white heavily gritted unglazed ware, 13 cms. in diameter. Two finely rouletted lines on interior. Fig. iii/10.

"Glenluce Sands"
Pottery skillet handle; very thin oxidised yellow glaze on a very soft coarsely gritted red-brown ware. Fig. iii/11.

"Slate Hollow Luce Sands".
Rim fragment in a coarsely gritted red brown ware with decorative 'rilled' edge. 11 cms. in diameter. Fig. iv/12.

"Links Hill" ("between 13th century site & where sq. bronze with 4 knobs was found.")
a. Rim fragment; diameter c. 10 cms. Fig. iii/13.
b. Rim fragment, white-grey gritted ware, 14 cms. in diameter. Fig. iii/14.
c. Two fragments of pot wall with cordon decoration. Heavy brown-olive green glaze upon a fine grey ware with few small grits. Fig. iv/15.

"Wet Hollow, Luce"
Nine fragments from one vessel in a dark grey finely gritted ware with dull olive-green glaze. Very similar to material from Blacketlees near Annan. (These Transactions III/44/167.) Includes a rim fragment bearing a handle-scar; no fragments of base; rim diameter 8 cms. Fig. ii/16.

"Luce Sands".
Twenty three small fragments, the majority of which, are in a gritted white ware with thin yellow glaze. The following should be particularly noted :—
a. Rim fragment in a fine red-brown fabric; unglazed; 6 cms. in diameter. Fig. ii/17.
b. Rim fragment; creamy white ware with pale grey unoxidised core, heavily and coarsely gritted, no glaze. Diameter not determinable. Fig. iv/18.
c. Rim fragment in a red-brown finely gritted ware with black unoxidised core. No glaze. Decorated with roulletted lines around the upper side of the rim. Fig. iv/19.
d. Rim fragment in a pale grey heavily gritted unglazed ware with heavy soot staining. Diameter not determinable. Fig. iv/20.

"Luce Sands"
Ten small nondescript fragments of material except one fragment of rim in a very soft, finely gritted, unglazed ware. 8 cms. in diameter. Fig. ii/21.

"Luce."
Rim fragments as detailed below:—
a. Brown-grey-orange ware with fine grits and traces of a very thin translucent glaze. 7 cms. in diameter. Fig. ii/22.
b. Very coarse gritty ware of orange-brown colour — unglazed. 12 cms. in diameter. Fig. ii/23.
c. Very fine bright orange ware; few grits; particles of yellow-green glaze. 12 cms. in diameter. Fig. ii/24.
d. Fine gritted unglazed cream coloured ware. 12 cms. in diameter. Fig. ii/25.

"Luce."
Three joined fragments of rim from a vessel with a recessed rim; orange-red finely gritted ware with yellow-green patchy glaze externally — more or less completely covered by glaze internally. Where the glaze has flaked away the underlying fabric is grey in colour. 11 cms. in diameter. Fig. ii/26.

"Mid Torrs, near Horse Hill."
Thirty nine fragments from a vessel in cream-white finely gritted ware with splashes of yellow-green glaze; fragments of rim and body but nothing remains of the base; rim diameter 11 cms. — greatest diameter 18 cms. Fig. ii/27.

"Drochduil, Dunragit."
Fragment of a base from a small thick-walled vessel in grey-ware — orange where unglazed and oxidised. Found in a ditch. Diameter of base 5.5 cms. Fig. ii/28.

"Luce."
Fragment of a base from a (?) pirlie pig (Compare with find from Kirkcudbright in Dumfries Museum. These Transactions III/44/163); dark-grey gritty fabric completely covered inside and out with a dull yellow brown glaze. Base trimmed by knive chops. Greatest diameter 12 cms. (?) 15th-16th century. Fig. iv/29.

(?) **"Luce."**
Base from a vessel in a white gritless fabric, grey internally, bearing traces of a translucent colourless glaze. Heavily burnt and soot covered. 8 cms. diameter at base. Fig. iv/30.

"Knockdoon, Luce."
Nine fragments of pottery of which the following might be particularly noticed :—

a. Small rim fragment in a brown-orange micaceous ware, unglazed. Diameter not determinable. Fig. iv/31.
b. Rim fragment in a very coarsely gritted brown ware with traces of pale brown glaze. 11 cms. in diameter. Fig. iii/32.
c. Fragment of a very thin strap handle in brown coarsely gritted ware, grey where originally glazed — no glaze remains. Fig. iv/33.

"Horse Hill."
Fragment of a base from a large diameter (19 cms.) vessel in a predominantly grey ware although the exterior has fired to a brown colour and bears flecks of brown glaze. Fig. ii/34.

"South of Horse Hill near old fire. 2/10/05."

a. Rim fragment in an unglazed grey ware. Rim diameter 10 cms. Fig. iii/35.
b. Fragment of a rim in a white heavily gritted ware which has been burnt buff-coloured on the external surfaces. Unglazed. 10 cms. in diameter. Fig. iv/36.
c. Very small rim fragment from a narrow-necked bottle-like vessel in a dull brown heavily gritted ware. No glaze but may have had a brown slip finish. 4 cms. in diameter. Fig. iii/37.

"Mid Torrs."

a. Small fragment of wall of a vessel in a very coarse dark brown burnt ware bearing "combed" decoration. No glaze. 0.6 cms. in thickness. Fig. iv/38.
b. Rim fragment in a very coarse heavily gritted unglazed ware — slightly burnt. 12 cms. in diameter. Fig. ii/39.

"Lodney."
Rim fragment in a burnt white-cream ware with the occasional fragment of coarse grit. Unglazed. Diameter not determinable but certainly greater than 15 cms. Fig. iii/40.

"Luce."
Ten fragments of pottery of which the following might be particularly noted :—

a. Rim fragment in a very fine reddish-orange unglazed ware. 9 cms. in diameter. Fig. ii/41.
b. Small rim fragment in a darkish brown-red finely gritted unglazed ware. 13 cms. in diameter. Fig. iii/42.
c. Rim fragment in a soft powdery orange-brown unglazed ware; rim shows kiln-stacking marks. 12 cms. in diameter. Fig. iii/43.

"Luce Sand Hills. 1900-02."

a. Rim fragment from a small vessel in a finely gritted reddish-brown ware; greyish glaze on exterior edge of rim. 8 cms. in diameter. Fig. iv/44.
b. Small fragment from the wall of a vessel in a pinkish-grey finely gritted ware with olive green glaze. Bears cable-moulding decoration highlighted in dark brown glaze. Fig. iv/46.
c. Fragment from the wall of a large diameter, thick-walled, vessel in a dark grey ware

with good lustrous apple-green glaze. Decorated by heavily incised waving lines. Fig. iii/47.

METALWORK

"Low Torrs, Luce Sands, from Miss Broadfoot, J.B.C. site (Jet Bangle Corner)".

Small lead cross cut from a sheet of metal some 0.2 cms. in thickness; 2.5 cms. across the arms which measure 0.4 cms. in width. Fig. v/3. Found in association with three miscellaneous fragments of lead, fragment of rolled sheet bronze, portion of a penannular brooch, a 17th century button, a billon penny of James IV and a typical "black farthing" of James III. With this material was also found a very fine blue-green patinated bronze buckle which is completely paralleled by a specimen in the London Museum Mediaeval Catalogue (pl. LXXVII, No. 16.) 4.4 x 1.7 cms. See Fig. v/45.

"Luce."

Heavily corroded rowel from a spur. Not dateable with any degree of certainty but probably not before the mid 14th century.

"Luce" (—possibly Lodney in 1904).

Miscellaneous fragments of bronze, including the pin and fragment of the ring from a penannular brooch, and portion of a (?) 17th century buckle as illustrated in Fig. v/48. It bears a patina, measures 5.7 x 3.5 cms, and represents approximately half the complete artifact.

"Low Torrs."

A fine buckle in green-brown patinated bronze: Closely paralleled by a specimen in the London Museum (cf. Mediaeval Catalogue, pl. LXXVII, No. 9.). Fig. v/49.

"West Scottish."

Some of the specimens in this small group are labelled "Torrs" and "Luce" and it is presumably from that area also that the following derive.

a. very heavily corroded fragment of a spur rowel — traces of the ratchet just visible among the corrosion and impregnating wax.
b. Heavily rusted and waxed ring from a (?) snaffle bit.
c. Heavily corroded iron D-shaped ring: Probably associated with a & b above.

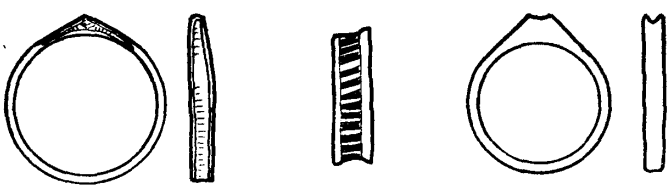


Fig. i. Finger Rings — Natural size.

"Lodney."

Small finger-ring in base-silver or billion. 2.0 cms. in diameter, 0.3 cms. in breadth. See Fig. i/50.

"Found at J.B.C. (Jet Bangle Corner) site, Luce, 1912. Miss Broadfoot."

Undecorated bronze finger-ring. 1.8 cms. in diameter x 0.4 cms. in breadth.

"Horse hill, Mid Torrs."

From a box labelled "West Scottish" but bearing the following note in Mann's hand.— "Recd. from Tounley 29th Nov. '01, all from same locality (area within a 40 square yards abt. 200 yds. South of Horsehill, Mid Torrs." The material includes fragments of pottery (of no particular significance) and spindle whorls and small scraps of worked bronze. Also present is an iron horse-shoe made from a bar of metal 2.4 x 0.5 cms. in section. Heavily corroded and difficult to date as the terminations to the shoe are absent.

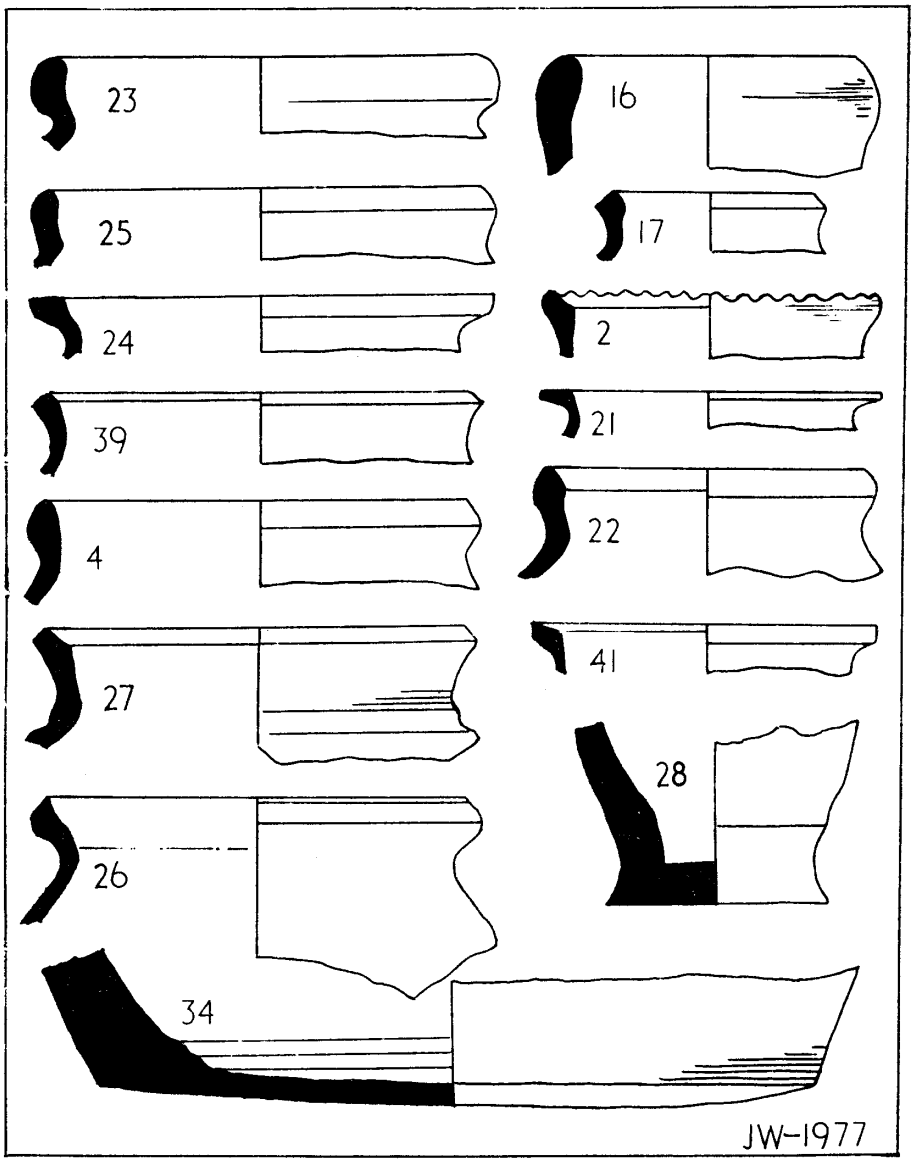


Fig. ii. Pottery — Scale: one half.

(?) "Lodney."

From a box labelled "West Scottish" but some of the individual specimens bear the legend "Lodney".

a. Fragment of a gilt-bronze finger-ring with chip-carving decoration. 1.8 cms. in diameter x 0.5 cms in breadth. Fig. i/51.
b. Bronze protective mounting from a rod — iron rivets still attached. 2.6 x 0.7 cms. Fig. v/52.
c. Bronze belt chape, 1.7 cms. in length x 2.2 cms. in breadth x 0.6 cms. in thickness. Fig. v/53.

"Early Mediaeval site in S.W. Scotland."

Collection of material which once included "Ball of fossilized butter (adipocre); rubber of haematite, fragments of casket (or Reliquary) coated with bronze; iron key, ring, nails, knives, rivit-heads and horseshoe." The horse-shoe is still recognisable and although heavily corroded would appear to be of a latish type. The remains of the iron casket are, as mentioned in the introduction, extremely fragmentary and until such time as conservation takes place it is virtually impossible to make any meaningful assessment. The major dimensions are, as previously indicated, 7.2 x 5.6 cms. (At the time of examination it was impossible to confirm the presence of Mann's bronze coating).

Although not mentioned in the original list of finds this small collection contains the remains of two heavily corroded iron arrowheads. One is very fragmentary but the other is sufficiently complete for it to be seen as an example of the socketed and barbed arrowheads used for hunting purposes in the 14th/15th centuries. It measures 5.4 cms in length and is illustrated in Fig. v/72.

"Bronze Plate Hill."

Collection of material, apparently found "all together," which includes a silver styca of Ethelred I (moneyer Ceobald) and a bronze sceat of Ethelred II (moneyer Eardwulf). Also present are three small lead spindle whorls (very similar to those found at Lochrutton crannog, Kirkcudbrightshire), fragment of a jet ring, and a small heavily patinated bronze buckle measuring 1.5 x 2.5 cms and illustrated in Fig. v/54. Finger rings are represented by two specimens: One, of bronze, is fragmented but had measured 2.0 cms in diameter x 0.15 cms in section. The other is more interesting in that it shows a now vacant setting for a cut-stone —it also measures 2.0 cms in diameter and is 0.2 cms section (oval). See Fig. i/55.

A second box of material from the same site was supposed to contain, according to the label, "clay moulds for the casting of bronze ornaments" but these unfortunately have not been traced. The collection however does contain, over and above some very miscellaneous ironwork, two quite exceptional strap-tags and a no less worthy gilt-bronze mount.

a. Heavily patinated bronze strap-tag measuring 6.1 x 1.2 cms. Although heavily covered in Mann's ubiquitous candle-wax it appears to be decorated by a circular ornament upon one side — see Fig. v/56.
b. Corroded (?) base-silver strap-tag with interlace decoration. 3.8 x 1.4 cms. See Plate VIII.
c. Bronze mount, with a fragmented, centrally-placed rivet, decorated with "chip-carved" interlacework and gilt upon the upper side. In shape the mount may be said to be hexagonal with two of the opposing faces curved — the interlace is set within four panels. 2.9 x 3.9 cms. See Plate IX. This object has been previously recorded in P.S.A.S. XLVII, 457 & XXXVII, 71. According to some attached notes this gilt mount was "found with a bronze padlock and part of a whorl and other objects of phyllite." The padlock is still extant and is a typical example of a mediaeval "barrel" padlock and measures 8.0 cms in length by 3.5 cms in depth. It is illustrated in Fig. v/57. (Fragment of a second similar padlock is recorded in the collection as coming from "Luce").

"Horsehill, Luce."

a. Small, 1.8 x 1.8 cms, lead cross cut from sheet metal. Fig. v/58. (cf. with Fig. v/3.).

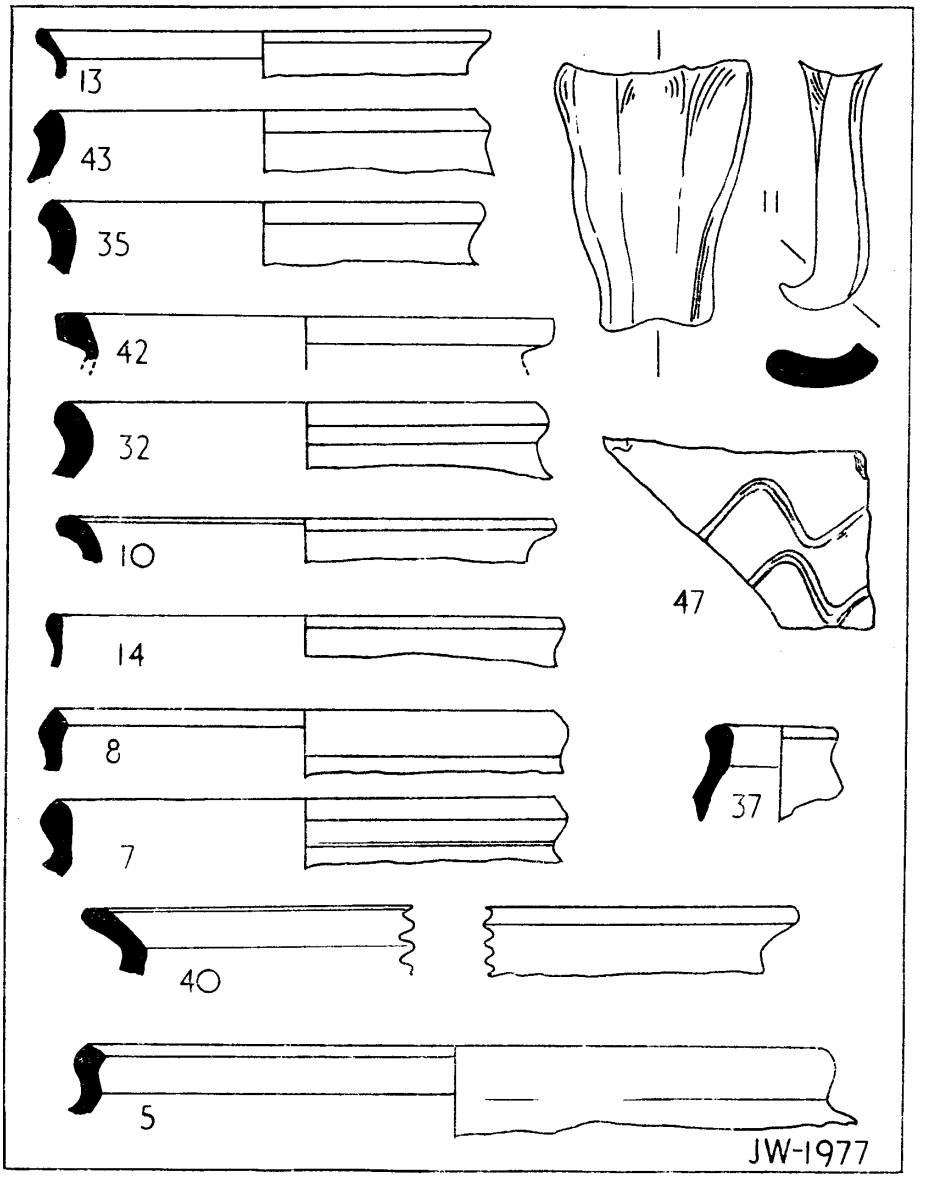


Fig. iii. Pottery (continued) — Scale: one half.

b. Lightly patinated bronze buckle — lacks pin. 1.7 x 1.9 cms. Fig. v/59.
c. Patinated bronze buckle, lacking pin, 5.2 x 4.6 cms. Probably 17th century in date. See Fig. v/60.

"Mid Torrs".

Heavily patinated lead sinker; 3.2 cms in length x 1.6 cms in diameter. Prepared by rolling from sheet lead and closely paralleled by a specimen from Tynron Doon, Dumfriesshire.

Unprovenanced — (?) Luce Sands.

Fragment, approximately half, of a lightly patinated bronze buckle. 3.8 cms in width. Fig. v/61.

"Luce".

Strap-tag in unpatinated bronze: Very thin metal measuring less than 0.1 cms in thickness. Impressed chevron decoration. Attachment rivet still extant. Fig. v/62.

"Luce".

Fragment of an unpatinated bronze buckle approximately 3.8 cms. in width. Fig. v/63.

"Luce".

a. Heavily patinated bronze buckle. 3.2 x 3.9 cms. Fig. v/64.
b. Scallop-shaped (?) mount in patinated bronze: 0.8 mms. in thickness, and measuring 2.9 x 3.2 cms. Retains one complete rivet hole and possible traces of a further two. As previously mentioned this object could represent a pilgrim's badge or commemorative plaque from the shrine of St. James the Greater at Compestella. Fig. v/65.

"Lodney. 10. 5. '04."

Heavily rusted fragment of a spur rowel — no significant details.

"Wigtownshire".

Fragments from a spur of (?) 14th/15th century date. Heavily corroded and coated with candle-wax. Found associated with small fragments from a bronze mounted leather strap and a small bronze buckle: Under the bronze tang of the buckle a little of the original leather remains. (A similar spur, from the Gennoch Sands, is lodged in the Collections at Stranraer Museum.).

OSSEOUS & LITHIC REMAINS.

"Luce"

Fragment from a (?) button mould — 2.6 x 1.4 x 0.4 cms.

"Torrs".

a. Fragment from the stem of a bone (?) Whistle: 3.0 cms. in length x 1.9 cms. in diameter. Fig. v/66.
b. Doubly perforate bone toggle or button: 2.1 x 1.9 x 0.7 cms. Fig. v/67.

"Bronze Plate Hill. (November 1913.)"

a. Wheel-turned spindle whorl, 3.3 cms. in diameter x 1.4 cms. in thickness, in a pale-grey slate. Fig. v/68.
b. Wheel-turned spindle whorl, 3.1 cms. in diameter x 1.5 cms. in thickness, in dark-grey/black shale: Decorated with "line & spot" ornament. Fig. v/69.

From some notes in Mann's hand it would appear that the above whorls were found associated with the interlaced strap-tag and mount described earlier.

"South of Horse-hill"

Fragment of a roughly turned grey slate spindle whorl measuring 2.5 cms. in diameter and 0.5 cms in thickness. Fig. v/70.

"Luce".

Spindle whorl in pale buff fine-grained siltstone; 3.5 cms. in diameter x 1.1 cms. in thickness. Fig. v/71. (Compare with possible Early Mediaeval whorls described in these Transactions, III/43/149.).

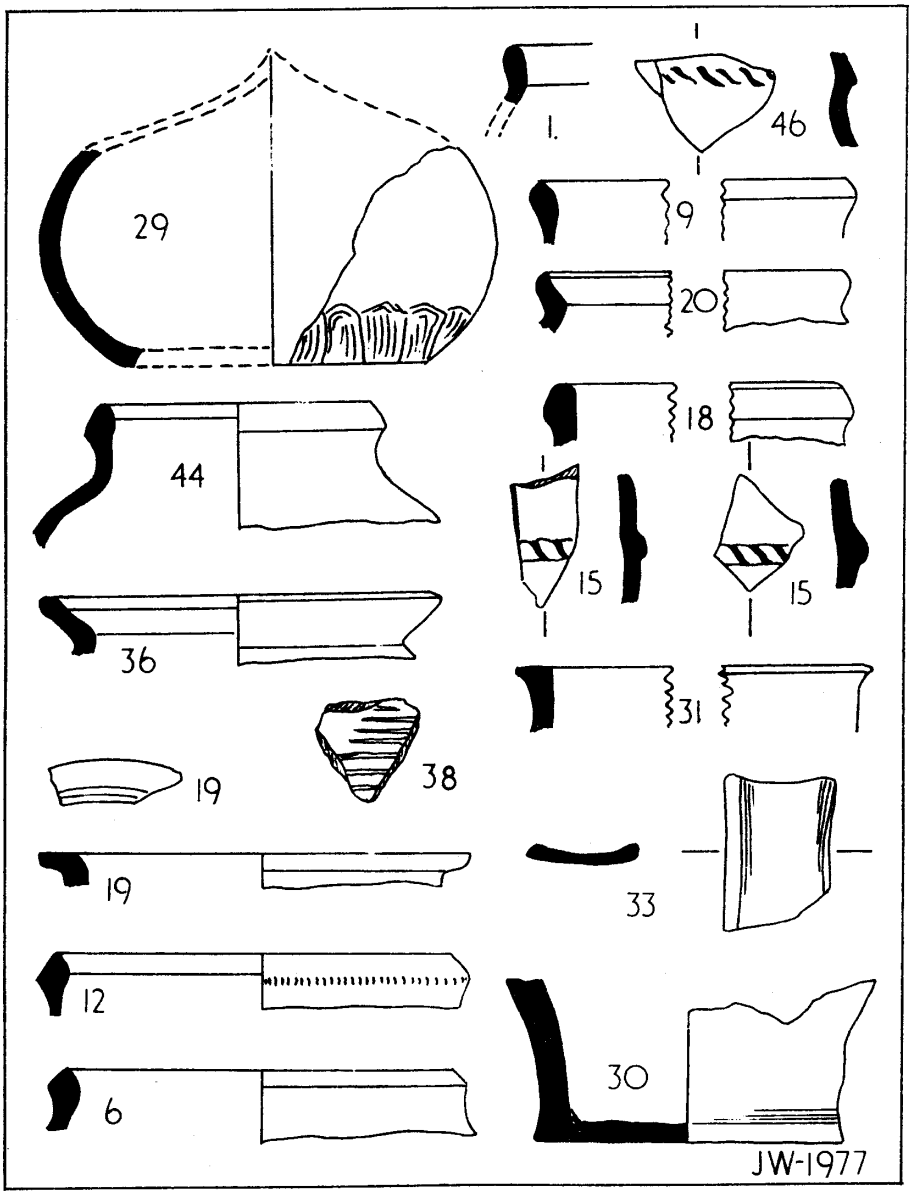


Fig. iv. Pottery (continued) — Scale: one half.

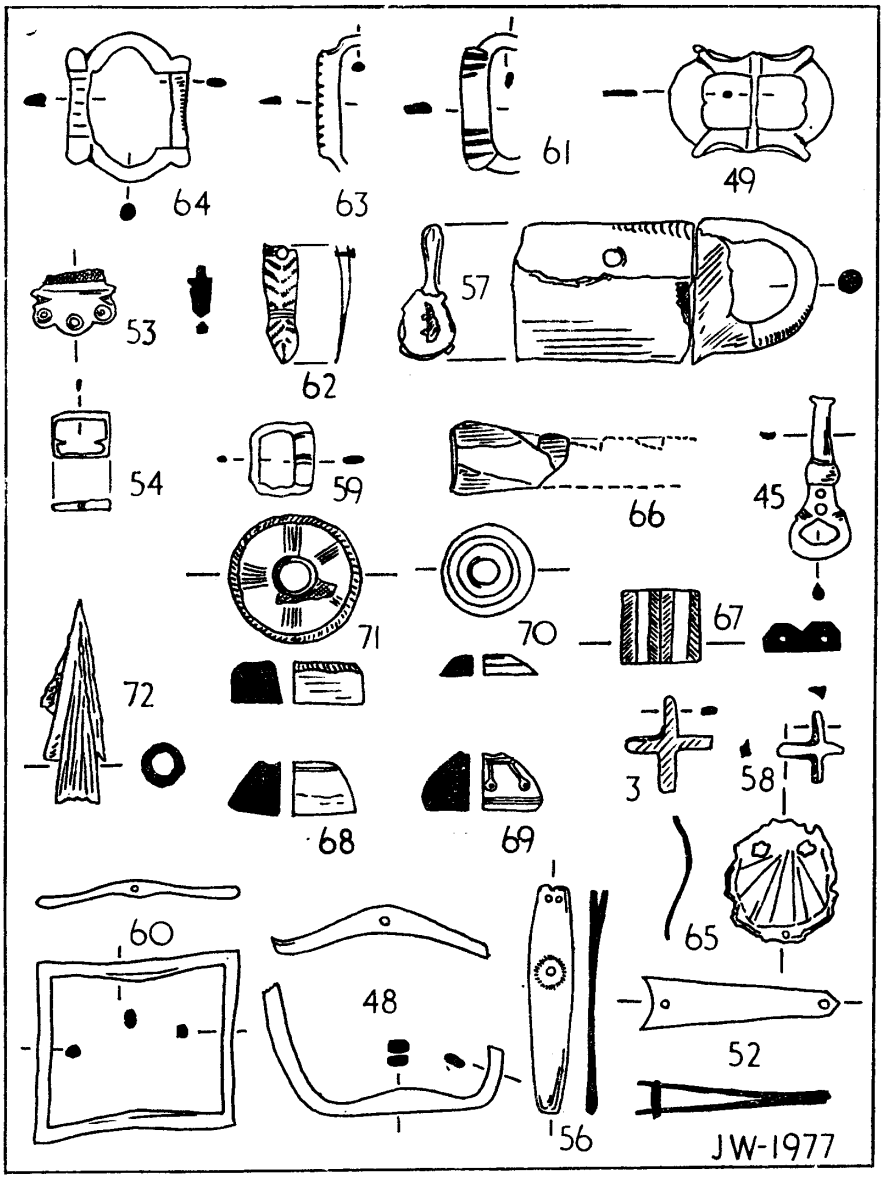


Fig. v. Metalwork — Scale: one half.

Plate VIII — Base silver strap-tag from Luce Bay Sands — Natural size. (Photo R. Roddan).

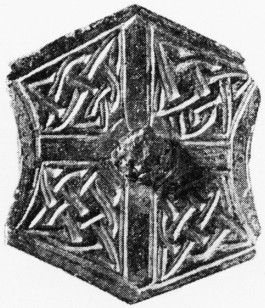


Plate IX—Bronze mount from Luce Bay Sands — Natural size. (Photo R. Roddan).

EXCAVATIONS AT KIRKCONNEL, WATERBECK, DUMFRIESSHIRE, 1970

by L. R. Laing and E. J. Talbot

Summary

A short season of excavation was carried out in August 1970 on the site of the deserted medieval village at Kirkconnel (N.G.R. NY 250755). Excavation in 1968 had uncovered the remains of a structure interpreted as a sixth-century hall, but

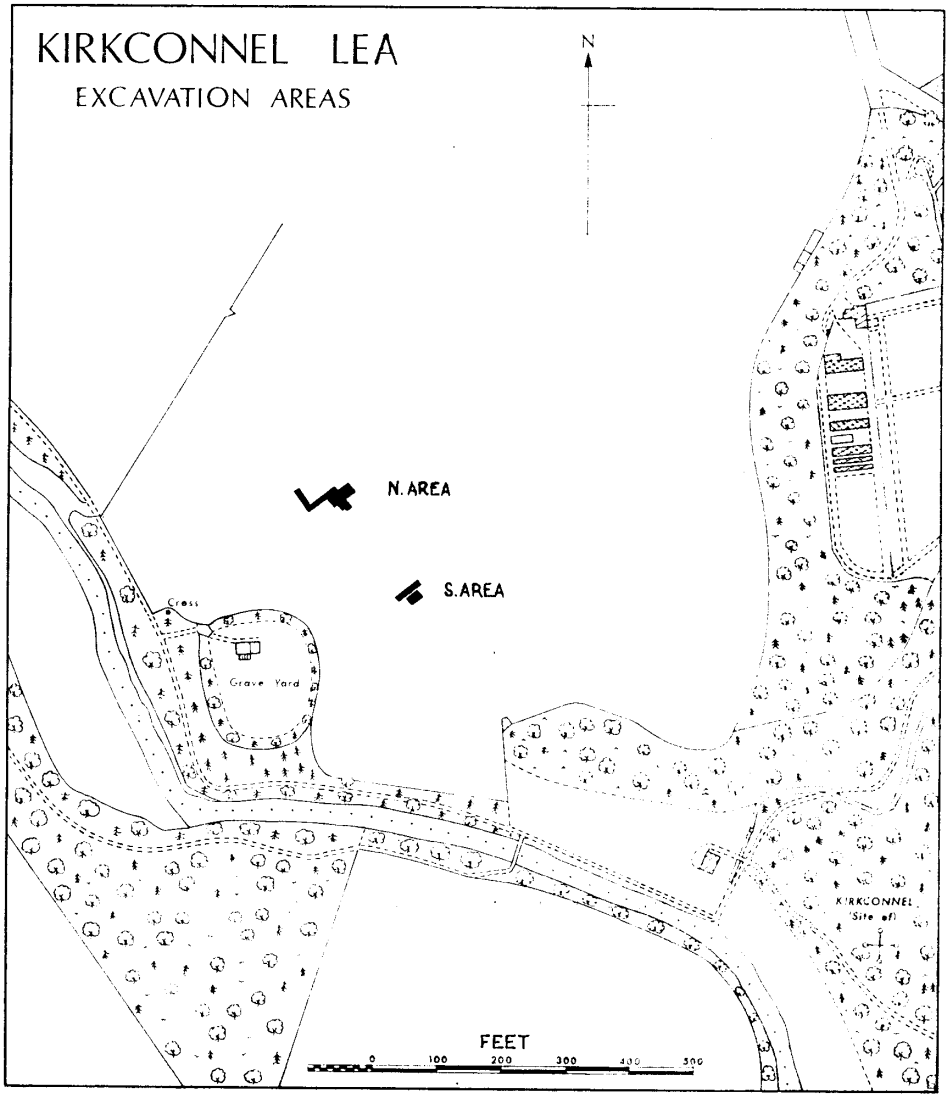


Fig. 1. 1970 Excavations at Kirkconnel.

had produced no certain evidence of medieval occupation. The 1970 excavation showed that there were no adajacent structures to the hall, and confirmed medieval occupation on the site. An area of cobbles and a stone drain were examined, which may represent the slight remains of medieval structures.

Introduction

The site of Kirkconnel has been described and the historical evidence for the medieval village summarized in Clough and Laing, 1968. In 1970 excavation was carried out in two areas (Fig. 1) in order to investigate two differing concentrations of surface traces. In the northerly area study was aimed at the location of a house

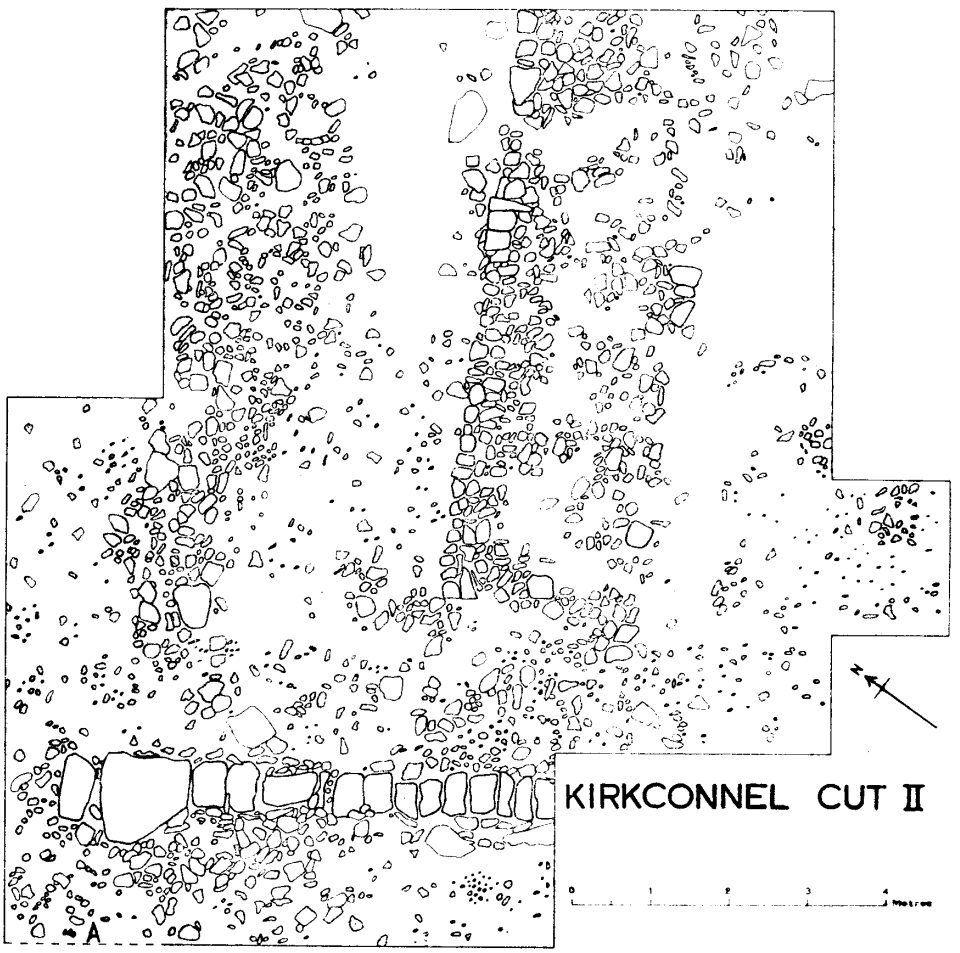


Fig. 2a. Part of the northern excavated area; the portion marked A is continued at A on fig. 2b.

site. Two adjacent cuts, in the southern sector, were made across a feature which had the appearance of a road with a NW/SE alignment. Neither excavation, in

fact, produced evidence to substantiate the original interpretations. The excavation was carried out by kind permission of the landowner, Sir Neil Johnson-Ferguson, by a team of students from the universities of Glasgow and Liverpool, and a party of American students from the Association of Cultural Exchange. Our site supervisor was Miss Jennifer Johnson. To all these people, and to the Society of Antiquaries of Scotland, the Dumfriesshire and Galloway Natural History and Antiquarian Society and the Mouswald Trust who financed it our thanks are due.

Northern Area (Figs. 2a and 2b)

Initial work involved digging an L-shaped cut with 10m arms (Fig. 2b). Layer 1 consisted of brown humus and layer 2 was a mixture of small stone (producing no meaningful pattern) and soil. Upon natural was an overall cover of cobbling (layer 3) but even with the discoveries in the extension of this area it was impossible to interpret it and even to say whether it was internal or external.

Three features were recognized in the extension, to the NE, of the L-shaped cut (See plate X and Fig. 2a).

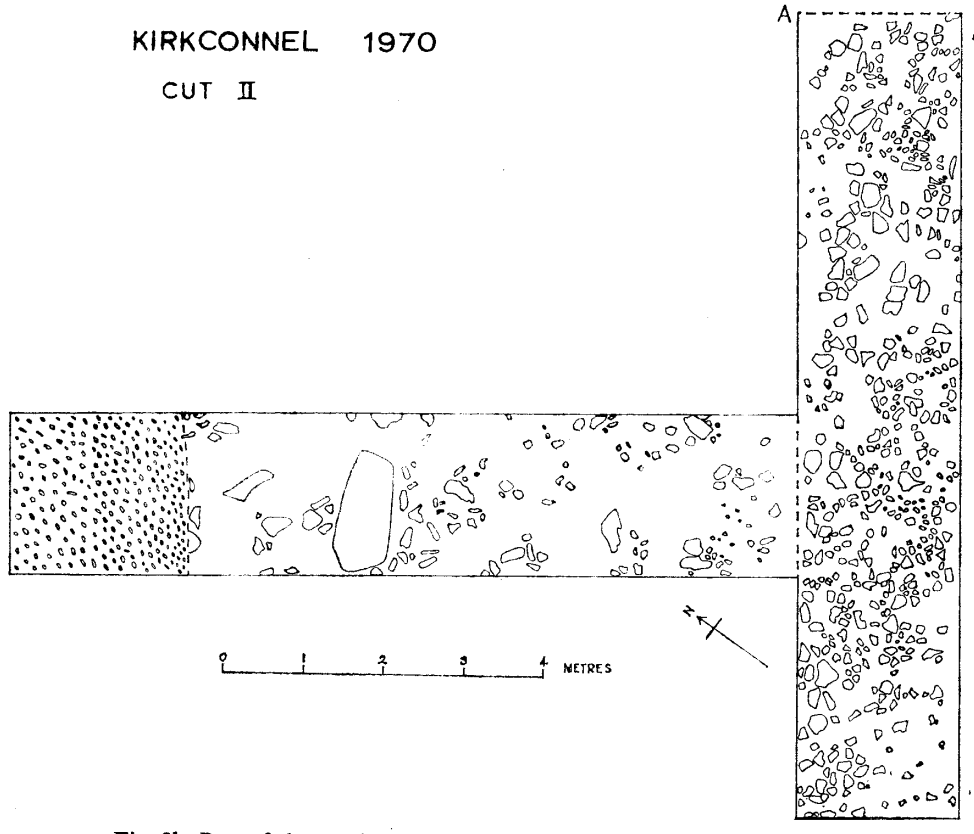


Fig. 2b. Part of the northern excavated area; continued at A from fig. 2a.

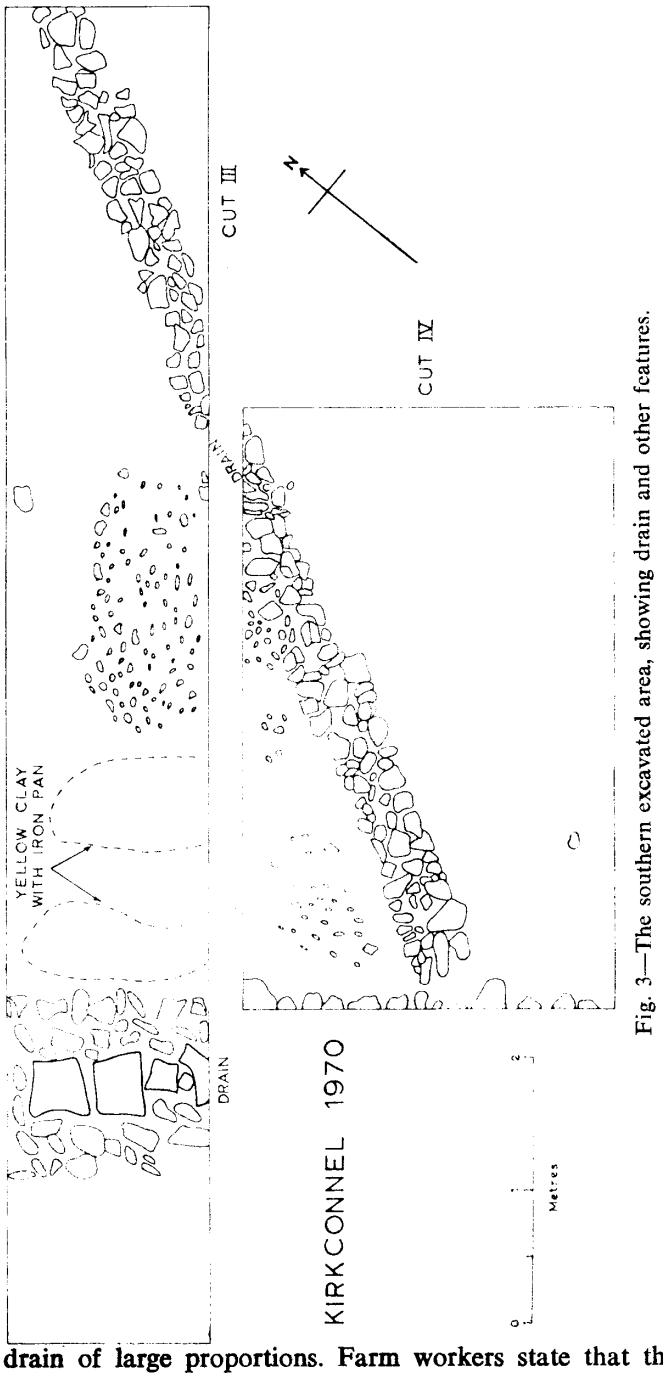


Fig. 3—The southern excavated area, showing drain and other features.

Feature 1 A drain of large proportions. Farm workers state that they regarded this drain as of 'great antiquity' and that it did not accord in nature and size with modern field drains.

The cobbling located in the L-shaped cut did not extend beyond the drain into the extension. Instead there was a spread of stone of varying size. Some stones revealed traces of plough marks. Ridge and furrow can be seen in the field and particularly down the slope at the base of which the village remains lie.

Feature 2 A wall, running roughly NE/SW, terminating close to the drain. Facing stones were identifiable on the NW side of this wall. No SE face could be traced and it is, therefore, impossible to see whether Feature 2 was an isolated wall parallel to Feature 3 or whether it formed part of a more complex arrangement.

Feature 3 A wall parallel to Feature 2, but, as stated above, it proved impossible to relate the two. A heavy concentration of stone on the SE side indicated collapse.

The excavation results in this northern area did not answer any of the questions posed. The features located could not allow an interpretation concerning nature and usage. Plough damage seems to have been extensive and has either destroyed structures or left only foundation levels.

Southern Area (Fig. 3)

Two cuts were made to investigate the supposed road. The stratification consisted of a brown humus which was divided intermittently by a thin layer of stones from a brown soil which became more gravelly as it went down. (Plate XI).

Feature 1 A line of stones running NS. It was originally thought that this was a drain, but no channel was present. No foundation cut could be seen and due to the fact that there was much recent disturbance this was felt to be an ancient feature—possibly a slight medieval boundary wall.

Feature 2 Drain. This is, seemingly, the continuation of Feature 1 in the northern areas of excavation.

Feature 3 Layer of gravel which proved impossible to interpret. A patch of orange clay was found at its S side.

A modern drain pipe was located at the NE end of the narrow cut. The ridge, which had suggested the presence of a road, may be the result of upcast from drainage operations.

Dark Age Hall Area

The cutting made in 1968 was extended along its NE edge, opening up an area 25 ft. by 20 ft. No significant features were encountered.

THE FINDS

1. Socketed iron spud, with rivet in place (Fig. 4). These small digging tools remained little altered from the iron age until medieval times. For a similar medieval example, see Clough Castle, Co. Down. (Waterman, 1954, Fig. 11/4).

2. Flake of honey coloured chert 25 mm long, with secondary retouch along one edge. Worked flakes appear to have been used in medieval times for a variety of purposes — one was found at Lochmaben Castle, Dumfriesshire. There is also a flake from the Kirkconnel 1968 excavation (Clough and Laing, 1968, Fig. 6a). It is however possible that there was some mesolithic settlement in the area, as both

Fig. 4. Kirkconnel — socketed iron spud — scale ½.

finds are typical of the Dumfries and Galloway mesolithic industries, and can be compared with finds from Barsalloch and Low Clone (Cf. Cormack, 1970).

3. Small rod handle from jug. Buff ware, worn green glaze. This would appear to be one of the shoulder handles that appear on local types of fourteenth century jugs, intended for a string support—they occur for example at Caerlaverock Castle, Dumfries.

4. Base sherd of dish with light green speckled glaze. Orange sandy fabric. Probably thirteenth century.

5-10. Body sherds of jugs. Unglazed, thirteenth-fifteenth century, two from the same jug and two corrugated.

11. Body sherd of green glazed jug with distinctive Dumfriesshire fabric. This compares closely with the fourteenth-century Lochmaben Castle pottery.

12-13. Sherds from two late medieval jugs in grey fumed ware with dark green glaze. Fifteenth-sixteenth century.

14. Indeterminate orange sherd with large grits. Much weathered, probably medieval.

15-17. Body sherds of nineteenth century date.

18-19. Two fragmentary roof slates.

Conclusions

Although no firm evidence for the presence of medieval buildings and roads emerged from the excavations it may be possible to suggest that the village of Kirkconnel lay to the north of the church and not to the east as indicated on large scale maps. This does not, however, rule out the possibility that some buildings may exist in that area for the possible earthwork castle site (NY 260748) lies to

the SE of the church. The range of finds indicate an occupation in the area extending from the thirteenth to the sixteenth centuries.

References

Clough, T. H. McK & Laing, L. R., 1968 — 'Excavations at Kirkconnel, Waterbeck, Dumfriesshire, 1968', **Trans. D.G.N.H.A.S.** XLVI (1969), 128-139.

Cormack, W. F., 1970 — 'A Mesolithic site at Barsalloch, Wigtown' **Trans. D. & G. N.H.A.S.** XLVII (1970), 63-80.

Waterman, D., 1954 — "Excavations at Clough Castle Co. Down', **U.J.A.** 17, (1954), 103-63.

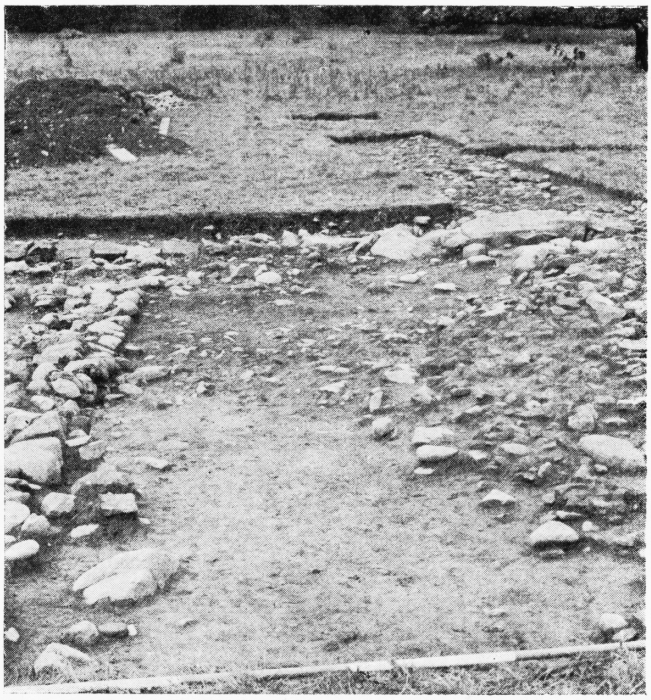


Plate X — Kirkconnel. View of northern area looking SW, showing cobbles, Stone alignment and drain.

Plate XI — Kirkconnel. View of southern area looking NE, showing features described in text.

UNPUBLISHED WITCHCRAFT TRIALS — PART 2

By A. E. Truckell, M.A., F.M.A., F.S.A.Scot.

The trial of Janet McMuldroch and Elspeth Thomsone in Dumfries in 1671 contrasts in some ways with the Dumfries witchcraft evidence gathered in 1650 by the Presbytery in being rural, and in including two sets of evidence—that gathered by the Presbytery, and that considered by the Justiciary Court. The whole thing gives a good picture of how trials were organised. Being rural, squabbles over grazing rights, witches putting spells on stockyards, illness of livestock, such practices as taking three "rugs" (pulls) of thatch from above the witch's door, interfering with butter-making or milking (a clear case of mastitis), throwing a dog thrice on a bed to absorb the force of a curse meant for the baby about to be placed in it so that its hindquarters became paralysed and it had to be hung to put it out of its misery, the murmuring hollow under the witch's hearthstone, loom large, giving a vivid picture of life in the hardworking, sickness-wracked, quarrelsome country community.

The language has been left as near as possible to the original.

An appendix has been added on an interesting and unpublished case of suspected witchcraft from the Dumfries Kirk Session Minutes of 1697.

Place-names and surnames suggest Girthon as the parish of Janet McMuldroch: Elspeth Thomson was in Screel about five miles S.S.W. of Dalbeattie.

Depositions agt. Janet Mackmuldroch

Johne Moor of Barley aged about fourtie zears marid suorne depones yt about four zears since he having poyndit the sd Janet she promised him ane evill turne and yr efter one of his oxin died therupon he challenged her and she told him he should gett ane worse turne and yr efter his chyld died of ane exterordinarie sickness sueeting to death And farder depones that in May 1665 he having poyndit her for bypast rent belonging to the laird of Brughtone that within a short tyme yr efter one of his oxen a Cou and a calfe died and yt she hes bin reputed a witch and hes bein under ane evill report this many years bygone.

Johne Muir

J. F. Preston.

Johne Murray of Laik about the adge of 60 zears maried suorne depones that about ane zear since he being at the Clyn wt the sd Janet wher by ane accidentall tuitch of the deponers feet she gott ane fall and went away cursing and within the spaice of fyve or six weiks yr efter he had tuo calffs ran wood and ramished to death and lykwayes he had ane horse ramished to death and that she hes bein under ane evill report this long tyme.

J. F. Preston.

Rot Broun the adge of 40 zears maried suorne depones yt about 3 zears since or yr by he having turned the sd Janets goods off his grass she in anger told him yt he should not have soe many nolt to eat the nixt zears grass and within a Moneth yr efter his wyf died of ane strange and sudden dissease and within ane quarter of ane zears spaice yr efter fyftein Nolt and thrie horse of his died which were all his stok except tuo kye and yt she hes bein under ane evill report this long tyme bygone.

Robert broune.

J. F. Preston.

Johne Cairnes aged 60 zears maried suorne depones yt about 3 zears since Rot Cairnes having found in his barne-yaird the sd Janet upon the sabboth day with a Taill of Corne one of bear and ane other of Hay for qch he reproved her whereupon she wt anger bad

the devill pyk out his eyn and upon the fryday yr efter at midnight he contracted ane sudden dissease and died upon sunday yrefter early in the morning and the tym of his siknes he sent for her to restore him to his health by saying those words god send you your health and the sd Robert left his death upon her and ordained his friends to perseu her.

J. F. Preston.

Jean Sprut aged 41 zears maried suorne depones that about 7 zears since or yr by that Janet Mackmuldroch came to borrou some meall from her which becaus she refused the sd Janet told her she should rue it more then the worth of the meall and yt same night she milked her cou the Milk was mixed with blood and flesh And furder she depones yt about six zears since because the sd Janet had a lamb worried that day which was Rot Cairnes hearding day she sd to the deponet that it sould be as dear a lamb as ever was tupit of ane yeu and yr efter nyne of her lambs took ane trimbling and sweetting upon yr near foir leg and soe died and nether foul nor beast would eat yr flesh Item at the tyme forsd she declaires that when she challenged the sd Janet for the loss of her lambs she said unto her think ze any thing of wordly geir thank god that you keip zour oun health and that same day she contracted ane strange dissease and was sore tormented with vehement sueet and pain for the spaice of thrie dayes untill the said Janet came unto her and asked a drink from her and efter she had tasted a little of it she bad god send her her heall and said she should warrand her frae yt siknes at yt tyme and within ane hours tyme she greu verry much better and soe recovered Item about four zear since the sd Janet folloued the deponent and alledged upon her she had stollen her grasse And went and plukit out of her cous mouth and yr efter the Cou did not choull her Cuid but died and the deponent having salted the sd cou when she putt the leist peace yr of it in the pot it did suoll soe big till it filled the pot and the broth was lyk beastings and the flesh lyk lights and her husband and her selff and sundrie vthers having eat yr of did suell lykwayes wherupon the deponent wes forced to cast it out in ane peatt pott but nether dogg nor foul would eat of it.

J. F. Preston.

Christiane Gordoune depones ut supra.

Johne Harreist aged 30 zears suorne maried depones that about nine zears since he poyndit the sd Janet her horse being eating his corne and becaus he would not render them bak wt out a wad or els compryse the skaith wherupon she went away discontent and murmuring but the deponent kneu not what he sd and the nixt day befor tuelve a clock his chyld drouned in ane Peit Pott and that she is under ane evill report.

John Harries.

J. F. Preston.

Wm. Gordoune of Miniboui 26 zears aged or yrby maried suorne depones yt about 3 zears since finding the sd Janets guids upon his gras he turned ym off wherupon she folloued him scolding and told him that she hoped that he should not have soe many geir as he had then to eat the nixt grasse And this being about the latter end of Harvest befor the nixt May ther wes tuelve of his oxin and ky zoung and old and sevin or eight of his horse died befor Beltoun next and that she hes bein under ane evill report this long tyme bypast.

W. Gordone.

J. F. Preston.

Margrat Maclellan aged 51 zears maried suorne depones That about thrie zears since that Issobell Tagit daughter to the sd Jonet being her servant upon a sabboth day went to see her mother and upon the Monday yr efter the deponent sent her to muck the byre and thinking yt she stayed too long she went out to see what she was doeing and fund her goeing about some dung and putting her finger in the midst of it wherupon the deponent sd unto her fye upon zou are ze playing some of zour mother the divill triks and strak hir which ye sd Issobell told to her mother Jonet upon the Sunday yr efter And upon ye nixt Thursday the sd Janet cam to the deponents hous and said why called you me and my daughter witches for ze shall gett some vther thing to think upon and wt in ane moneth yr efter her husband took ane exterordinarie sickness and contenued yr in for the spaice of 17 dayes and at lenth

greu sensles till the sd Janet cam to her hous undesyred and sat doun and asked hou des the Goodman and then the dependent fetch her meat and drink Wherupon the sd Janet said That this meat and this drink hes comforted my heart god comfort you and send you confort of your husband and the lord strenthin him and send him his strenth and Immediatlie he greu better in soe much as he turned himself in the bed wheras formerlie he was vnsensible and could not stir himselff but as he was lifted be four men and at yt tym his best meir dyed Item in the tym of his sickness befor he begane to recover he cryed what had Janet done wt his horse for his best mear was blaun away and that she is reported to be a witch and sorcerer.

Extract of the process Given in wpon oath againes Jannet McMilroch the 16th of Appryll 1671.

Compeired John Muire of Barclay being Ceitit about the age of fourtie zeires, qo deponed upon oath yt Jannet McMilroch having comitit tuo bloods being fyned by him as baron bailzie at that tyme and he poynding hir stot for the same she promised that he should get ane ill turn and his oxe dyed yrafter as also he chalenging hir for the same she declared that he should get ane worse turne zett and after that his Chyld sueit to death John Murray in (laicke or luicke) about the age of sixtie zeires being ceided deponed upon oath that Jannet McMilroch ?Snoipering upon his foot at the clean she went away Cursing him and yr after his tuo Calves routed to death.

Rott Broun in Cussitoun about the age of fourtisix zeires deponed upon oath that Janet McMilroch hir goods being upon his grass he turning the same she declaired that he should not have so many Nolt to eat the nixt grasse and that before John Cannones in airds and Jean Sprot and Cristian gordon which was found to be too trew for before hir sett tyme all his goods to his great lose dyed.

John Cairnes in airds deponed upon oath that his broyr lying on his deathbed desyred James hendrie to bring in the sd Jannet to pray god send him his helth and she refuised it and the sd Rott left his death upon hir and ordained him to persue hir to the death. As also the sd John deponed that Rott Cairnes had ane kow which dyed which being throuen out naither beast nor foull would teast the same As also that she Cursed him upon the sabboth and upon the morow he fell Seick and lay all the lent quarter As also the sd John deponed that the sd Janet dreue thrie teats of Stuff on of Corn another off beare and a third of hay and that his brother depairted this lyfe the same day eight dayes as also he deponed that the sd Janet tooke thrie skepfulles of manure and that they had noe Increse that yeare.

Compeired Cristian Gordon who deponed as followes that Rott Cairnes desyred the sd Jannet McMilroch to Cum in to him to forgive and be forgiven before he depairted this lyffe which she refussed to doe so he left his death upon hir.

Cristian gordon deponed morover that the sd Janet stoll the milk that Jean Sprot milked from her Kye after that that she had promist hir neightboure ane ill turn and yt the sd milke was all reid lyke blood and tares of flesh unto it and also that she went to Janet McMilroch and desyred hir to Cum in to Jean sprot who was at the poynt of death and the sd Janet bade hir bring hir in to hir tho Creiping upon a stafe but Cristian declaired yt he was not able thrugh extreame sickness she came along wt hir to the sd Jean Sprot and when she came in she askit for some drink which She put to hir oune heid and sd putlie that she would warand hir at that time and so soone yrafter the sd Jean roase and put on hir Close and walked to the great admiration of the sd Jean sprot Jean Sprot deponed as folloues that Rott Cairnes hir husband left his death upon Janet McMilroch and charged his brother to persue hir to the death As also yt qn she Came first to the toune she went thryse withershines round about all the zeards bare-footed After that she went thryse withershines round about the Stockzeard

as also In harvest she came to the sd Jean to borow meill qo refuised it in regaird the sd Rott Cairns bade hir have no dealling in borrowing and lending wt the deauell so the sd Janet promist hir ane ill turn because she would not lend hir the meill and said she should repeint it and the same night the sd Jean went to milk hir kye and qn she returned home she hade nothing but lyke blood and flesh in steid of hir milke As also the sd Jean and hir husband building ane dame Jannet Mcmilroch asked him and hir husband geive they would have helpe hir husband anssred he would be ctent of good helpe Replyed the sd Janet take it as yea find it so she would have the dame throuen doun but was obstructed by the sd Jean Sprot and hir husband so pnttlie she folloued the sd Jean to the lone and stoned hir and hir Kye so that she gott noe milk for that yeare As also the sd Jean deponed yt upon a certain day Jannet Mcmilroch folloued hir and aledged that she had stoln hir meidoue grase which grase she went and plucked out of hir Coues mouth and after that the Coue did neither eat meat nor Chewe the Cude till she dyed which beast the sd Jean salted and Iff she had put the quantatie of ane handfull of the sd beiffe in the pott it wold have suelled that it wold have filled the wholl pott and became lyke the lights of a beast and if ane man or woman had eatten ane bytt or tuo it wold have suelled thaim also so that it being cast out naither beast nor foull wold teast it As also when the sd Jean went to soum the sheip Jannet Challenged hir anent Sum wooll which She alleged to have appertained to hir selff So she promist hir ane ill turn which she found to be treue for hir lambs tooke ane Crook in the fore foot and dyed So that the sd Jean went to hir and told hir that she had made out hir words and the sd Janet replyed that she sould take no caire for wordes geire She might thank god that she was free hirself and the same night she was Cast into ane exteame Seicknes So that Cristian gordon my neightboure went to hir and desyred hir to Cume to me befor I expyred the sd Jannet bade the sd Cristine gordon bring me in to hir thoch Creiping upon ane staife but Cristine declareing that I was not able she came in hir selff at last and So asked for drink which she put to hir oune heid and declared that she would warrand me at that tyme So that the sd Jean putlie rose and walked not wt standing that she was lyke to expyer before in all humman expeirance.

John Naires in Clean deponed that when he poynded hir horse for eiting his grasse and his corn the sd Janet Comm and desyred the horse from the sd John Naires but he wold not exept she had geiuen him ane wed or promist that they should not Cume againe which she would not doe but went away Murmoring but he kneue not qt she Spake and he neuer gat rest nor sleipe afteruard till his Chyld drouned in ane peit pot Margerat Mccleln in boghall is apoyntit to be ceitit etc. Mr. Rott. more minister examined the sd Janet she declared that Jean Sprot ought not to be receaued a witnes in regaird she was a witch alse weill as she hirself for she could tell geive a person set out first at the dure the right or left fit formest whither they wold prosper or not and also the sd Mr. Rott demanded hir why she put not on weill favoured Close she replyed that they were good enough for the hangman and that hir oun Children should weire hir plaid nor the hangman.

[Endorsed on the back as follows]—

I John Mcguimphie Steuart offisr Sumones you Jannet Mcmilroch Spouse to James Hendrie in airds to cpeire gefore his maiestise Justises in ane Justice Court to be halden wt in the burgh of dumfreise upon the tuelff day of may Instant wt Continuatione of dayes to underly the laue for the Poynts of witchcraft Committit wt in wryten and all wyr poynts not herein Includit And yt under all hiest Paine and Charg that after may follow.

Justiciary Processes 1671
Box 38.

Janet McMurdoche prisoner in the tolbuithe of drumfreis.
You ar Indyted and accused that qr. notwithstanding of the divyne law of the omnipotent almightie god set doune in his sacred word especiallie in the 20 chapter of liviticus and 18

chapter of deutronomie All witches sorcerers and vthers and practisers of sorcerie and witchcraft ar to be punished by death As also by the acts of parliat. And municipall lawes of this realme And namelie by the 73 act 9 parl of Queen marie of worthie memorie It is expreslie provydid statute and ordained that no maner of persons nor persones of whatsomever estait degrie or condit, one thay be of tak vpon hand in any tyme heirafter to vse any maner of witchcraft sorcerie or necromancie nor give themselves forthe to any such craft or knowledge theirof their through abussing the people vnder the paine of death As in the saids lawes and acts of parliat. at mair lenth is contenit Nevertheless It is of veritie that ye the said Jonet McMurdoche haveing shaken of all fear of god And reuerence and regaird of the divyne ordinance lawes and acts of parliat. of this kingdome hes those yeires bygane Betaken yor. self to the service of Sathan the enemie of your salvato. ne Ingaged to be his servant And taken his marks vpon yor bodie practised vsed and exercised divers and sundrie devilishe charmes witchcraft and sorcerie And hes yrby hurt and damnified his maj/ subjects in their goods and persones And hes bein the cause of sundrie vther deathes by your sorcerie and witchcraft And also ye have had se. all tyme Carnall dealling or copula. une wt. the devill And so defylled that bodie of yours which should have bein a temple of the hollie ghost by giveing the vse yrof to the devill as sd is And to testifie and manifest your guiltieness of the sd Crymes.

1st Article not proven

John Mure of Barley haveing abour four yeires since or yrby poynded from you se. all goods ye at that tyme threatened and avowed to doe him ane ill turne And Imediatlie yrafter by your sorcerie and witchcraft one of his oxen died qrvpon he haveing challenged you ye affirmed and threatened that he should gett ane worse turne And Imediatlie yreafter his chyld died of ane extraordinar seikness sweating to death And in the moneth of May 1665 The sd Johne haveing again poynded you for some rent due to yor. master ye at that tyme promised and avowed that he should sore think it And Imediatlie yreft. by yo. r sorcerie and witchcraft Ane ox ane Cow and a Calfe perteining to the sd John died suddenlie.

2nd Article not proven

Item About ane yeir since or yrby ye haveing resaved Ane fall by ane accidentall touch of John Murray of laick his fute ye went away curseing and swearing and avowing to doe him harme and Injurie and Imediatlie yrefter by your sorcerie and witchcraft He had a horse and two Calfes rawaged to death.

3rd Article proven be one witness

Item about thrie yeires since or yrby Robert broune haveing turned off some of your goods off his grasse you did then sweare and avow in great anger and wrathe that he should not have so many nolt to eat the next yeires grasse And within a moneth yrefter by your sorcerie witchcraft and necromancie Spouse to the sd Robert died in a most strange and sudden disease And wt. in a quarter of a yeir yrefter ffyften nolt and thrie horse all yed mad in a wonderfull manner.

4th Article

Item About thrie yeires since or yrby Robert Kairnes haveing found you in his barne zeard vpon a saboth day with a tate of Corne and anoyr of Hay and haveing reproved you for being then in that pouster ye out of wrath anger and passione bad the devill pyke out his eyes And vpon the fryday yrefter about Midnight the sd. Robert Contracted a sudden disease And vpon Sunday yrefter airlie in the morneing He depairted this lyfe And he haveing before his death sent for you ye refuised to come And he left vpon you And ordained his friends to persue you as a witch and necromancer.

5th Article proven

Item about seven yeires since or yrby ye the sd Janet came to borrow some meill from Jean Sprott And she haveing refuised ye told her and threattened her that she should rue

it more nor the worthe of the meill And that same night qn she milked her Cow the milk was mixt wt. blood and fleshe And about sex yeires since or yrby ye haveing ane lamb worried ye affirmed and threattened to the sd Jean Sprott that it should be als deare a lamb as evir was Tuped of ane yew And yrefter nyne of her Lambs toake ane trembling and sweeting vpon their neir fore leg and so died And neither foull not beast wold eat their fleshe And when ye wer challanged by the sd Jonet for the losse of her Lambs ye said vnto her think ye any thing of worldlie you thank god that ye keep your oune health And that same day she contracted a strange disease And wes sore tormented with a violent sweat and paine for the space of thrie days till you came to her and asked a drink from her And after ye had teasted a little of it ye said god send her her health And that ye should warrand her for that disease and about four yeires since or yrby ye followed the sd Jean Sprote and alledged vpon her that she had stollen yor grasse And went and plucked it out of her Cowes mouth And Immediatlie yrefter by your sorcerie and witchcraft the Cow ceased from chewing her cude and died And the sd Jean haveing salted the Cow qn. she did put the smallest bit yroff in the pott It did swell so big that the pot would not contein it And the broath was lyke beasting And the fleshe lyke lights And her husband and vyrs persones who eat theirof did all swell And it being casten to the feilds no dogs beasts nor foules wold eat it.

6th Article

Item John Morries about ane yeire since or yrby haveing poynded from you ane horse being eating his Corne because he wold not render him back without a wod or else Compryse his skaithe ye went away discontent threatening and murmurring And the next day his chyld died in ane peit pote.

7th Article

Item about thrie yeires since or yrby William Gordoune of Mennibuy finding yor goods on his grasse He turned them off qrvpon ye followed him scolding and told him that ye hoped he Should nott have so many nolt to eat his grasse the next yeir and this being about the letterend of harvest Before the moneth of May yrefter their wes twelve of his kyne and oxen and eight of his horse died suddenlie.

8th Article

Item about thrie yeires since or yrby Isobell Taggert haveing gone on the saboth day to sie you her mother And vpon the monenday yrefter Mart McClellan her Mistres haveing sent her to muck the byre And thinking that she stayed to long she went out to sie what she wes doeing And fund her goeing about doung And putting her fingers in the midest yrof whervpon the said Mart reproved her and said she wes vseing some of yor her mother devilishe trickes Which being represented be her to you you came to the sd Mart her house and asked the reasons why she had called you and yor daughter witches And that she should get some other thing to think vpon And within ane Moneth yrefter by yor Sorcerie and witchcraft spouse to the said Margaret tooke ane extraordinarie seikness and disease and continewed therin be the space of sevintein dayes or yrby And yrefter grew stupide and sensles vntill ye came to his house vndesyred And his Wyfe haveing given you meat and drink ye said that the same had comforted your heart And god send her comfort of her husband And suddentlie he grew better In so muche as he turned himself in the bed wheras formerlie he was vnsensible and could not doe the same Bot as he wes lifted be foire men And that at the same very instant his best meir died And he Cryed out the tyme of his seikness before he began to recover what had you done with his horse for his best meir was bloune away And this wes before the meir died.

9th Article

You the sd Jonet ar repute and holden ane Comone and nottorius witch sorcerer and necromancer and by whose charmes and malefices the leidges ar highlie prejudged and hes

sadlie and greivouslie groaned these many yeires by gaine which being found by ane asyse ye ought to be punished in yor persons and goods to the terror of others to doe the lyke Conforme to the sds lawes and acts of parliat.

Informatione of the particular points declared by severall witnesses To the session of Rerrick, against Elizabeth thomson, in the sd parish, suspected sorceress thir twelve yeares bygone, being represented by them April 23rd and 30th and May 7th 1671, as followeth

None of the witnesses examined upon oath, but declaired they wold give it when it was required.

Imprimis Elspet Coupland In Skreil, relict of the deceast donald mckghie, declaires yt her husband and Elspet thomson did severall tymes discord, and the she did not blame her for his death, yet she knew he was still on his gaird for her, and constantly after yr outcasts yr followed some mischeife on his guides and children and sickness on himself frequently, qr of at Laste he died, and a chyld of hers lykwayes, and yet her husband often sd, yet he hoped he had as many freinds behind him as wold pursue her for it moreover ye sd Elspet Coupland declaires, yt Wm McKghie husband of ye sd Elspet thomsone did confess to her that yr came one tyme a great heaviness over him, and yt ye devil came like a rat, and bet his left arme.

Declaired lykwayes by James Corkry In Bankend yt ye sd william mcKghie confest to him yt one morning in his bed, he saw ye devil looking in his face, and being terribly affrighted, his wife griped him fast, and sd qt neided him be so feared, for she was not feared for all that, declaired by Richard Corkry in Glenshinoch yt he heard donald mcKghie say often, yt he blaimed none for all the evill yt came on him, but Elspet thomson, John Raphel in Kirkmirrin declaires the very same.

James thomson in Glenshinoch declaires yt ye deceast donald mcKghie sd to him, that he wold help him, and work oftner to him wer not Elspeth thomsons house betwixt them for he never came and returned by her house wt out some hurt or mischeif.

James McKghie In Skreil declaires yt his umqle broyr Donald mcKghie did cast up witchcraft to wm McKghie husband of ye sd Elspet thomson and Morover, yt after his broyr donald mcghie died, wt in the space of 21 houres, Elspet thomson being desired by Rosina mcKghie to touch his Bodie it imediatlie sprang blood, at all ye passages yrof.

Rosin(a) mcKghie spous to John Corsbie in glenshinoch declaires the same, John Raphel in Kirkmirrin the same.

James Coupland in Kirkmirrin declares yt by ye way yr droped blood from the corps, to the churchyeard, and yt many others Saw it as weil as he.

The sd James McKghie in skreil, declaires yt his deceast broyr sd to him five days after he fell sick, yt Elspet thomson had then gotten the sight she desired of him and that ever befor, he was still feared for her, and that they still discorded, and he blamed her for all ye evil yt befell him. And that one tyme on they wer siting togither yr came a cow perteining to him qch pntly ran mad and was lyke to ramish to dead, falling down sundry times, and did sweat long after. further declaires yt because donald mcKghie went not to cast peats to her, who yrfor discorded wt him, qrupon he suddainly fell sick and lost the power of his body, but how soone he came to ye moss and essayed to work, she sd he wold mend soone of it, and befor twelve houres he was in perfect health and strength again. Moreover declaires that because he himself also refuised a dayes work to her, she sd, she hoped not to be cumbred wt his work, for a year after, qrupon he fell sick, and since yt he declaires he was never so able as formerly, declaires also tuo passages of butter, belonging to Elspet Coupland, a pairt of it being given by her to Elspit thomson, the rest wt in ten dayes became like rotten aples, she being challendged for it desired her wash the nixt better, qch she did yet grew like the first, wt in five dayes. Lykwayes declaires, yr wer two holes besyd ye hearth stone, in Elspet thomsones house, qch she desired Ja mcKghie to put his finger in ym, but he did refuse, and yt wm. mcKghie her husband sd to him yt out of these holes ye ashes wold be often blowen up to ye crook and yt under the hearth, was a great din he heared lyke ye

rusking of a dog and that his wife Elspet confest to him these holes had bein thair since Janet callan dwelt wt her, who was brunt.

John Corsbie, and Richard corkny in Glenshinoch declaires, yt Wm mcKghie her husband, spoke the same of the holes to them, out of his own mouth one day at ye plough and frequently at sundry other times.

John shenon In potterland declaires he had nothing to say of Elspet thomson only, yt he knew all his neighboures wer feared for her.

John Corsbie in Glenshinoch declaires yt yr was a great contest betwixt his wife and Elspit thomson, because she was not bidden come to the birth and baptisme of his chyld and after yt she took sicknes qch was occasioned by a fear she got thinking yt Elspet thomson came to her and was like to murther her and her chyld, and her sickness increasing eight dayes after, John corsbie her husband went to Elspet thomsons house, and brought thrie rugs of thack above her dore head, and brought it home And brunt it befor his wife, qrupon she pntly recovered, but wtin a litle after, his child died no body seeing him. Lykwayes declaires yt he took sickness himselfe, and yt his clok and bed clothes wer cutted about him, and his owne wife and himselfe suspecting Elspit thomson for it, she went to her house and brought her to her husband, and desired her pray God send him his health, qch she did, and yr after he recovered sensibly.

Rosina mcKghie spouse to ye sd John corsbie, declaires yt Elspit thomson came to borrow a piece of a read for yearning milk, qch she gave her, but the rest of it or any other she borrowed, was useless to her qrupon she went to Elspet thomsone house, and desired her pray God send her good of her milk, but she replyed the devil take both ye good and the ill of it, and all ye have from yow, — wherupon rosina threatened to pursue her to the utmost, if she should beg for Justice, qn she desired her boyle a pairt of her milk, and pour in about a stone fast in the earth, qch she refuised to doe, and yrfor at Last against her will she sd God send all folkes good of yr milk, and after yt her milk renewed and send she still got good of it, Lykwayes declaires yt Elspit thomson came to her house to borrow a heckill and qn it was lying at ye beds side, she observed her to fathome and grope the bed wt her hands, and qn she was going forth, pntly a terror did strik her mind, least her servant should have put in the chyld in ye bed, fearing some hurt from her, Qrupon she instantly returned and did cast in a whelp in ye bed thrie tymes and imediately ye dog lost the power of his hinder quartirs, and became so odious and loathsome to look on yt her husband was forced to hang him, and put him out of paine, but after yt she tooke ane extraordinary sickness and swelling herselfe, Qch she thought was occasioned by ane other fear, That she visibly saw Elspit thomson come to her bed, endeavouring to destroy her and her chyld, but she using all meanes and loudly calling to her husband, it was not possible for her to waken him, and after yt, growing still worse, she sent for her to come and sie her, and desired hir pray God send her health, qch she refuised, nevertheless sundry others pressed her to it, as James thomson in Glenshinoch (who is suspect to know more of her) has confest, and declaired the same, Janet McKghie spouse to Archbaid Cairn in Glenshinoch and Janet Corkny In drongans, beside ye Long wood fot near dumfreis, being also present Qrupon because she refuised her husband went to one James Robsone in Lochrutone (yt is suspect to deal wt such persones) and got some kind of salve to his wife qrupon she recovered after he applied it declaires since yt ye deceast donald McKghie told her befor his death, yt Elspit thomson promised to do her mischief.

Janet thomson spouse to John Corkny in Bankend, declaires yt Elspit thomson offered her some aples, and because she refuised them, it fell out she took sickness, and blamed her for it qrupon she sent her two sones James Corkny and William Corkny to Elspit thomsones house, to bring from above her dore head thrie rugs of thack, qch they did, and she recovered.

James Corkny her sone declaired the same and yt his broyr went in his company.

Richard Corkny in Glenshinoch declaires yt Marion Coupland spouse to James thomson

In Glenshinoch, spoke it in his house, yt she blamed non for the death of her chyld but Elspit thomson.

Janet Christin spouse to John McKghie in Ridge declaires yt a short tyme befor Elspit thomson was apprehendit, she offered her daughter to Thomas McKghie in Ridg to be a herd to him, and because he refused to take her, she sd he might doe worse, and yrafter took sickness, and fearing he had received hurt from her, desired his brother John McKghie and his mother Marion tait in Ridg to fetch him thrie rugs of thack above her dore head qch they did and brunt befor him and he thought he presently grew better. John McKghie her husband, in ridg and thomas McKghie his brother, declaires the very same.

oyr witnesses to be called, beside what ar mentioned in the praemisses ar referred To The executiones givn in by the Officer to ye clerk of ye stewartrie qch ar to be presented to ye clerk of ye circuite.

Elspeth Thomsone in Glenshinoch in the parochen of Redick now prisoner within the tolbuithe of drumfreis

You ar Indyted and accused that wheir notwithstanding of the divyne law of the almightie god set doune in his sacred word especiallie in the 20 chapter of Leviticus and 18 chapter of Deutronomie All witches sorcerers and vsers and practisers of sorcerie and witchcraft are to be punished by death As also by the acts of Parliat and Municipall lawes of this na.oune and namelie be the 73 act of parl: of Queen Marie of Worthie memorie It is expreslie provydit statute and ordained that no maner of persone nor persones of whatsomevir estate degrie or condi.oune they be off take vpon hand in any tyme heirafter to vse any maner of witchcraft sorcerie or necromancie nor give themselves forthe to any such craft or knowledge theirof their through abuseing the people vnder the paine of death As in the saids lawes and acts of parliat at mair lenth is contenit Nevertheless It is of veritie that you the sd Elspeth haveing shaken of all feare of god and reverence and regaird of the divyne ordinance Lawes and acts of parliat of this kingdome hes these fyften or sextein yeires bygane betaken yorself to the service of sathan the enemie of your salva.oune Ingaged to be his servant And taken his marks vpon yor bodie practised vsed and exercised divers and sundrie devilishe charmes witchcraft and sorcerie And hes yrby hurt and damnified his maj/subjects in their goods and persones And hes bein the cause of sundrie other deathes by your sorcerie and witchcraft And also ye have had seall tymes carnall dealling or copula.oune with the devill And so defylled that bodie of yrs which should have bein a temple of the holie ghost by giveing the vse theirof to the devill as said is And to testifie and manifest your guiltienes of the saids Crymes.

1st Article proven

You about seven zeirs since or yrby haveing conceived ane anger malice or prejudice Agt John corsbie in Glenshinoch his wyfe and familie In respect ye was not desyred to the bearing and baptiseing of his chyld and haveing avowed to doe them ane ill turne and to cause them rue it Rosina Mcghie spouse to the sd John haveing Imediatlie taken ane sad and havie seikness in which she dreamed that she saw you the sd Elspeth standing by her and that ye wes readie to murder her and her chyld qrvpon the sd John went and brought thrie rungs of thack from above yor dore heid And brunt it before his wyfe (This being the ordinar course qrby yor neighbours vsed to remove any seiknes which they apprehendit to be laid on on themselves or yr beasts by yor witchcraft) wherby she recovered But within a short whyle theirefter the sd Jon his chyld died And he tooke seiknes himself and his cloak qn he was able to carie it about him wes cutt and the blankquets on his bed, And he and his wyf suspecting you to be the cause yrof she went to your house And brought you to her husband And desyred you to pray God send him health And that at the repeating of the words ye gripped his bodie which is your ordinar custome sua to do in the lyke cases And shortlie yrefter he recovered And yrefter ye haveing threatened the said Jon his wyfe she tooke another seiknss qrof she langwished for ane considerable space.

2nd Article

About seven yeires since or yrby you the sd Elspeth haveing come to the sd Rosina mcGhie spouse to the sd John Corsbie to borrow a peice Red for yerneing milk which she gave you And the rest yrof And all vthers reds proved vseles to her whervpon she desyred that ye wold pray god send her good of her milk Bot ye replyed devill take both the good and ill of it and all that she had whervpon She haveing Intendit to persew you ye desyred her to boyll a pairt of her milk and power it about a stone fastened in the ground which she refused to do supposeing the same to be witchcraft And ye feareing to be persewed bad God send her good milk which accordinglie wes done And lyke wayes ye haveing borrowed a ketle from her which was lying at the bed syde She observed you to faddome and grip the bed with your hands And when ye wes goeing forthe ane terror or fear did stryke on her mynd fearing hurt from you least her servant should have put in the chyld in the bed whervpon she Instantlie returned and cast in a whelp in the bed thrie tymes chuseing rather the whelp should be wronged by your inchantment and sorcerie then the chyld And Imediatlie the dog lost the power of his hinder quarters And he became so loathsome and odious that their wes a necessitie to cause hang him to put him out of paine.

3rd Article Proven

Item Donald Mcghie in haveing called you ane witch to William Mcghie yor husband the said William did promise him at that tyme ane ill turne qrvpon within a very short tyme yrefter by your sorcerie and witchcraft the sd donald died And qn his Corpes were a winding And ye being present And desyred by the by standers to touch the Corpes Imediatlie vpon the touching yrof the blood rushed forthe at his nose navell and yeard and his corpes bled all the way to the buriall place And Because the sd donald mcghie refuised to cast peits to you ye discorded with him whervpon he suddenlie contracted ane seikness and lost the power of his bodie which wes occasioned by your sorcerie and witchcraft.

4th Article

Item you haveing required James mcghie in Skrie to give you a dayes work and he haveing refuised the same ye threatened him and said that he should not work so much work for a zeires tyme And by your sorcerie and witchcraft within fyve dayes yrefter he contracted a cruell seikness and disease And hes nevir bein in perfect health since syne.

5th Article

Item about thrie yeires since or yrby ye haveing offered Aples very earnestlie to Janet thomsone spouse to Jon Corknay her sone which being refuised ye Imediatlie yrefter threatened to doe her ane ill turne and cause her rue it And Imediatlie yrefter she tooke a havie disease And seiknes which almost did cost her her lyfe And she haveing caused bring thrie rungs of thack from above your dore heid she recovered of the same which wes occasioned by your sorcerie and witchcraft.

6th Article

Item a litle before ye wes aprehendit in the moneth of Marche or Aprile last by past ye haveing offered your doughter to Thomas Mcghie to be apprehendit (sic) which being refuised ye threatened and said he might doe worse and promised him ane ill turne whervpon wt in eight dayes yreft. by your sorcerie and witchcraft he contracted a heavie disease and seiknes and groaned long vnder the same.

7th Article

Ye the said Elspeth hes bein repute and holden these seall yeires bygane ane Comone sorcrer Nicromancer and witche And hes yrby damnified and prejudged the whole countrie qrin ye dwell and leidges within the same And ye have done and Committed the malefices Nicromancies wrongs Injuries and other deids above speit, And wes actor at least airt and pairt yrof Which being found be ane assyse ye ought to be punished in yor persone and goods to the terror and example of vthers to Committ the lyk yreft.

8th Article

Item about thrie yeires since or yrby you haveing discorded or disagried with James Thomsone anent ane turfe of hether And yrvpon threatened to do him ane ill turne He Imediatlie yrefter by your sorcerie and witchcraft Contractit ane strange and langwishing disease vnder which he hes laboured these thrie yeires sometymes sweiting and sometymes cold And all the neighboures about him haveing come to sie him under the sd desease And the sd Bessie being desyred sua to doe she refuised And at last haveing come And being desyred by the sd James to say God send him good health she not only refuised sua to doe but wold not speak of god bot of her lord.

Justiciary South Circuit 1671

[f 18].

Rot. Maxwell Carselloch Chariff Jon Maxwell Killbane

Jon. Maxwell gribton ff
Jon Greirson barjarg c
Wm. douglas of Mouswall ff
Wm. douglas of dornock c
Tho. Irving c
Jon. Heslop ff
Rot Glessell ff
Tho: Richardsone ff

Jon. Milligane ff
George ffaries ff
Roderick Williams ff
Jon Ewart ff
John Irving c

The Assyse be pluralitie of voyces be the mouth of Rot Maxwell of Carnselloch yr chansler fyndes the first artickle of Elizabeth Thomson her Indyttment proven the third vna voce proven and fyndes all the rest of the artickles only presumptions Ro: Maxwell.

[f 19] Carnselloch chansler ff
Jon Maxwell of gribton c
Jon Greirson of barjarg C
Jon douglas of Mouswall c
Wm. douglas of dornock c
Jon Maxwell Killbane c
Tho: Irving c
Rot Glessell ff
Thomas Richardsone ff
Jon Milligane c

Jon Heslop ff
George ffaries ff
Jon Ewart ff
Roderik Williams ff
John Irving c

The assyse be pluralitie of voyces be the mouth of Rott Maxwell of Carnselloch yr chansler fyndes the first artickle of Janet McMurdoch her Indytment nott proven but vna voce fyndes the fyft artickle of her Indytment proven the thrid seperatum proven be one witness vna voce, the second and seiventh not proven.

Ro: Maxwell.

[f 24] Curia Justitiariae
S.D.N. regis tenta in
pretorio burgi de drumfreis sede
cimo die mensis May Anno 1671

Per honorabiles vires domini Robertum Nairne de Strathurd et dominum Joannem Barie de Newbyth Commissionaris Justiciare sub S.D.N. regis

Curia legittime affirmata

The whilk day Elspeth thomsone and Jonet McMuldroche prisoners being brought out of prisone to have heard doome and sentence pronounced agst them as they who vpon the fyften day of May instant were found guiltie be ane assyse of the articles of witchcraft mentionat in the verdict. The Lords Comisioners of Justitiarie thairfoir be the mouth of William Grahame dempster of court, Decerned and adjudged the said Elspeth Thomsone and Janet McMuldroche to be tane on thursday nixt the eightein day of May instant betwixt tuo and foure houres in the afternoone to the ordinar place of execut.oune for the toune of dumfreis And their to be wirried att ane Stake Gibbett till they be dead And theirafter their bodies to be brunt to ashes And all their moveable goods and geir to be escheat and Inbrought to his ma/vse.

From the Burgh Records of Dumfries

Magistrats of Drumfreis

Fforsamuch as in ane court of Justiciarie holden be us within the Tolbuithe of drumfreis vpon the fyftein day of May instant Jonet McMuldroche and Elspeth Thomsone were found guiltie be ane asyse of the se.all articles of witchcraft spe.it in the verdict given against them theiranent Were decerned and adjudged be us the Lords Commi.rs of Justiciarie to be tane vpon thursday next the eighteen day of May instant. Betwixt tuo and foure houres in the afternoone to the ordinare place of execu.une for the toune of drumfreis And their to be wirred at ane stake till they be dead And theirafter their bodies to be brunt to ashes And all their moveable goods and geir to be escheat, You shall thairfoir cause put the said sentence to due execu.une Wheiranent thir presents shall be your warrand Given at drumfreis the sextein day of May 1671.

Ro. Nairne.
Jhone Barry.

Dumfries Town Council Records

LETTER June 6th, 1671, from Glendonyng

Glendonyng, Stewart Depute of Kirkcudbright, ordering Magistrates of Dumfries to deliver Janet Hewat, Bessie Pain, Margaret Flemyng, Grissall McNae and Margaret McGuffog, suspect witches, at the Western end of the Bridge of Dumfries for transport to Kirkcudbright "att sun risying": a footnote adds "cause yor offrs, ty them with small cords". [Kirkcudbright, July 15th 1672]

Grissell Rae, Margaret McGuffok and Jonet Howat prisoners in Kdbt. for witchcraft, give in a petition to the Justices, whereupon they are ordained to be set at liberty upon caution for their appearance before them the third day of the next Justice Air, to be holden at Dumfries, or sooner upon 15 days warning—Records of Proceedings of Justiciary Court, Edinburgh, 1661-78, v 2, p. 104.

[Dumfriesshire, 1692]

Marion Dickson in Blackshaw, Isobel Dickson in Locharwoods, her daughter, and Marion Herbertson in Mousewaldbank for "many grievous malefices committed upon their neighbours and others" were ordered to be sent to Edinburgh for trial. How they fared afterwards is not known. Chambers, "Domestic Annals", v.3 p.66: McDowall, History of Dumfries, p. 378.

Dumfries Kirk Session Minutes

[Dumfries, 10th June 1697]

A petition being presented by Janet Horner spouse to John Russal Tayllior Bearing That Jantt McClellan servitrix to Mistris Edgar, brought a Cripple Child and laid it down on the street, and yt. she being troubled at it, hapened to say to the sd McClellan, What do you kno how soon the Lord may lay his hand on you or me? We may be dumb and deaf or night or in eternity, we are not sure of our life one minute; and so she left her And thereafter the said Janet McClellan having gone into the Garden and yr. fallen very sick, Agnes

ffleeming spouse to John Johnston of Hizliebrae, and oyr folks about sent for the petitioner and bid her grope Janet McClellans poulse qch she did; And then she had them get a little salt and water, with qch when she had washed Janet McClellans Stomack and temples, She said to some of the Company, Ye may cast a little of it into the fire, and yt she had seen ym turn down the mouth of the Cup, or spoon upon the hearth, in qch the salt and water was, qch the Company accordingly did: upon qch she left ym. And Complaining that people had taken occasion therefrom to call her a Witch, And therefore craveing that the session would examine the affair, and Vindicate her. The session having Considered her petition and acknowledgment of some things, qch they Judged scandalous, They thought fitt to Call the Witnesses, Viz. Mrs. Edgar, Hizliebrae's wife and John Nicolson, shoemaker, as persons of Competent age, who had been laully cited to this day and place, by the Minrs. order, upon a previous Information: And in the first place, Mistris Edgar, being called, Compeired and being Interrogat (but not on oath, albeit Janet Horner had no objection) She decleired That the sd Janet Horner prayed (or wished) that Janet McClellan might be either dumb or deaf before Night, which having come to pass accordingly, Hizliebrae's wife sent for Janet Horner, who did as she acknowledges, in her own petition, above insert. The Said Agnes ffleeming being Called, Compeared, and being Interrogate, Declared, that Janet McClellan being in the Garden both dumb and deaf, and as cold as if she had been dead, Mrs. Edgar caused give her salt and water, and then brought her in and sent for Janet Horner, who got salt and water and anointed her stomach and temples, and yn she either caused or did turn doun the dish upon the hearth, she could not tell whither of ym. John Nicolson being called and Interrogat qt he had heard Janet Horner say to Janet McClellan, He said he heard her say, What if ye shall be either dumb or deaf, or night, Or: want the power of limb or lith? To qch the sd Janet McClellan Replyed, I hope nothing will ail me if ye take it not from me.

Janet Horner being called and spoken to anent the turning of the dish, sd she had often seen it done, but she could not (or at least) would not tell who she had seen do it. Upon which, The session after due Consideration of the whole affair, Did hereby Referr it to the presbytrie for yr Advice, and cited Janet Horner apud acta to appear before them upon Tuesday come eight days.

[17th June 1697]

Continues the Reference of Horners affair, to the Presbytrie.

[1st July 1697]

Report being made, that the presbytrie having examined Janet Horners affair, found it not fully ripe, And therefore have advised the session to try it further, and determine in it as they shall sie cause; And cited her apud Acta to appear here this day: And the sd Janet Horner being Called, Compeared and being interrogate, she acknowledged as formerly in her petition, And the Moderator haveing spoke to her anent Janet McClellan's distemper, and c. She affirmed that she had the falling sickness. Whereupon Mistris Edgar and her Daughter Margaret being successively called and interrogate, Whither or no (qn Janet McClellan fell dead in the Garden) she did turn up the white of her eye, throw her Neck or foam at the Mouth, as these use to do who have the ffalling sickness? They both declared yt. she did none of these. And the sd Margaret being interrogat anent Turning the dish, She declared, That Janet Horner said not, she had seen it done (as her petition bears) but, that she expressly bad some of the Company turn down the Mouth of the dish, in qch the salt and water had been, and qn it was turned doun on the stone, she caused lay it on the earth. Mistris Edgar being interrogat anent that particular, declared the same. The Session having heard these things, Delayed the whole affair till the next Session day, and Appointed the Elders to make further inquiry anent it.

[8th July 1697]

Anent Janet Horners affair: Robert Johnston makes report yt he spoke to Mistris ffingas, who affirms yt she never knew Janet McClellan have the falling sickness, tho she was her servant a Considerable time. Others of the Elders report that they can hear no more of it

then hath been already said before the Session. The Session delays the further consideration of it till their next meeting, and all persons concerned therin are to be cited agt. yt. time. [15th July 1697]

Janet Horners affair continued till the next session the witnesses being absent this day. [29th July 1697]

The Witnesses formerly examined in Janet Horners affair, being again called and Interrogate, They declared as before; Margaret Richardson, spouse to John Wright Baxter, being cited and called, Compeared, and being interrogat, Declared that she heard Janet McClellan say, after she was recovering of her distemper, that Janet Horner had pulled away her heart. The session having maturely considered the whole affair, They appointed the Moderator to Rebuke the sd. Janet Horner Judicially, for her Charming etc. And accordingly she being called in; and having acknowledged her fault (tho with reluctance) and promised never to do the like again, She was dismist with a rebuke.

OLD HARBOURS IN THE SOLWAY FIRTH

By A. Graham and A. E. Truckell

Introduction.

Many years ago, a distinguished prehistorian from Central Europe remarked to one of the present authors on the 'Mediterranean' view obtained from the Mull of Kintyre. Arran, he pointed out, with Carrick, Galloway and Antrim, were disposed in a nearer ring, while the Isle of Man loomed up in the further distance; and he dilated on the openings for migration thus offered to primitive navigators. The Solway Firth is closely connected with this tract of enclosed water, and provides much evidence of comings and goings by sea since early prehistoric times.[1] The coasts of Annandale, Nithsdale, Stewartry and Merrick[2] have consequently seen the development of numerous ports and havens, and this paper has been prepared as a archaeological approach to their study. It covers the whole N. shore of the Solway Firth, with its tributary streams and creeks, from the mouth of the River Sark to the head of the Cree estuary, describing physical features and adding some historical notes.

Before embarking, however, on the actual description of the harbours something must be said about the circumstances attending their use. For example, against the ease of movement by water must be set the countervailing difficulty of transport and communication by land in the days before the roads were improved. The general badness of roads before the later 18th century need not be laboured here, and the dependence of the rural communities on water transport is brought out again and again in the Statistical Accounts. A telling example is given by the minister of Kirkbean parish, who records with satisfaction, in 1795[3], that 'No farmer in the parish is more than two miles distant from the harbour, where he can ship the produce of his farm'; and much the same point was made, in 1837[4], about the 'pows' in the Carse of Gowrie, whose mouths were said to form the 'small harbours by which the commerce of the district is carried on'.

Social and commercial conditions, again, had their effects on maritime activity. Dumfries, for example, the most important of the ports in the district, has records of its merchants trading, as early as the 16th century, with 'Burdiehouss in Brattonye' (Bordeaux), and this confusion of Bordeaux with Brittany suggests some earlier connection with the latter region. A. Symson, again, in an account dating from 1684[5], alludes to 'fish and tallow from Burdeaux exchanged there with Pruns Wine and Brandy; Skins and Hides for Holland. Our trading is with France, Holland and Dantzick'[5]. In the 18th century family firms in the town were doing business not only in the Clyde, Whitehaven, Liverpool and the Isle of Man but also in Virginia, the West Indies, and Continental ports as distant, for example, as Malaga, where one of their members settled, and ultimately became the grandfather of the

1. In particular, for evidence recovered from the Luce Bay sands see *PSAS.*, lxxxvi (1951-2), 43; xcvii (1963-4), 40.
2. Before 1975, respectively Dumfriesshire, the Stewartry of Kirkcudbright, and Wigtownshire.
3. *Stat. Acct.*, xv, 128.
4. *NSA.*, x, 371.
5. *Geogr. Coll.*, iii, 185.

Empress Eugénie. The hundred years from 1750 onwards seems to have been the period of greatest activity, with its peak about the 1840s. I. F. Macleod, reviewing the conditions that existed in 1820[6], points to growth in overseas trade as continuing through the first quarter of the 19th century, with harbours and navigational facilities undergoing progressive improvement to accommodate larger vessels. Besides the principal ports of Dumfries and Kirkcudbright, for which he quotes the numbers and tonnages of the ships entered on their registers, with details of where they were built, he also lists Creetown, Tongland, Carsethorn and Annan as 'active centres'. Further figures indicate that while the coasters, plying to western Scottish and English ports, Ireland and the Isle of Man, considerably outnumbered the foreign-going ships, important and interesting timber and shipbuilding trades were being established in Canada, where emigrant ship-carpenters would settle and build ships with the local timber, which in turn brought supplies back to the yards at home. Miramichi and sites on the Baie des Chaleurs were largely concerned in this trade, and an example may be quoted of a ship of over 300 tons, considerably larger than the Solway yards would have undertaken at the time, being built in New Brunswick about 1818 for the Thomson firm in Dumfries and brought back to Annan to be finished. Meanwhile the labour force available in the Solway towns was no doubt large and vigorous; traditional skills had not been undermined by factory production, and as good a ship could be built on the Nith as anywhere else in the kingdom.

The chief centres of the Solway shipbuilding industry were Glencaple, Kelton and Kirkcudbright, with Annan and Creetown filling a secondary place and Kippford and Dalbeattie not active until after about 1820[7]. Macleod further states that the local builders were largely concerned with supplying coastal craft to firms based in Dumfries, selling comparatively few ships outside the northern Solway area; but it is true that later, when the demand for clippers arose, some were built in the Annan yards. Shipbuilders' requirements must thus have affected harbour installations in a number of ways, but further discussion of the industry has been purposely avoided here for the reason that, if properly pursued, it would have tended to outrun the primary purpose of the study.

Of the coastal craft that made use of the Solway harbours, Mr W. A. King-Webster has written[8] that "various rigs were used, but the pressure of competition eliminated the less efficient [leaving] only 2- and 3-masted top-sail schooners, and ketches, with hulls from about 60 to rather more than about 100 ft. long. Hulls were . . . flat enough in the bottom to take the ground upright". One of these vessels about 100 ft. long might have carried some 50 to 60 tons of cargo, according to its build; it could have been worked, and normally was worked, by a crew of two, or quite often by a single man.

The design of the harbours was much influenced by the natural features of the locality. In the first place, however violent may have been the worst of the weather in the Firth, these ports were not called upon to face anything compar-

6. *Shipping* 1820.
7. *Ibid.*, 7 f.
8. Personal communication.

able with the North Sea storms — particularly as most of them were sited on comparatively quiet estuaries or on tidal creeks well back from the main seaboard. As a result, the typical stout breakwater-pier, in older diction the "bulwark", on which so many ports in Fife and the Lothians depended for bare existence, was nowhere needed in the Solway. In the second place must be remembered the great tidal flats of sand and mud that border long stretches of the shore — and this not only in the estuaries and creeks but also in much of the inner part, at least, of the Firth itself. Of these flats the minister of Gretna parish remarked, in 1793[9], that they made it safe for small craft to beach themselves more or less at will, while he added that the more rugged western shores of the Firth were well provided with sheltered coves and bays[10]. Expressing the point of view of the practical navigator, W. A. King-Webster remarks[11] that 'every available inlet had its quay, and elsewhere vessels used to dry out on any patch of sand firm enough for carts to come alongside when the tide was down'. The harbours now under review may thus be thought of as having originated either from a tidal beach where ships could take the ground or, where the water was deep enough, from a linear strip of wharfage built along the bank of some river. Nor should one overlook the influence exerted, in the earlier stages of this process, by local potentates who needed harbours or landings conveniently close to their strongholds, and who accordingly established themselves at the head of navigation on some suitable creek or estuary.[12] The evolution of a much-used landing-beach into wharfage, and so into a regular port, is well seen at Dumfries or Annan.

In addition to these points of difference between the south-western and south-eastern harbours, others exist which do not seem to be determined by natural conditions. Thus certain of the Fife ports which were cut off from open water by tidal flats (Torry, Torryburn, Crombie) built long stone piers out of the edge of the mud, with quays at their ends where deep enough water was found for the working of ships. It is possible that the mud at these sites may have been too soft and unstable for the Solway method to be used. Again, in the Solway area good squared masonry seems to have come into use for quays and docks at only a few of the more important harbours (Dumfries, Annan, Kirkcudbright), and that not before the beginning of the 19th century; and in fact it is impossible to point any structural remains for which a date earlier than, say, about 1800 can be proposed with any confidence. By contrast to this we find Stirling, at the head of navigation on the Forth, repairing its 'hewin and herberis, in bigging of schoiris and bulwarkis' as early as 1604[13], the language of this record suggesting masonry construction. Alloa, likewise, probably possessed a built quay in 1655, and was credited with a 'commodious harbour' in 1722[14]; while the small harbours on the Gowrie coast, which are quite unlikely to have done any volume of business comparable with that of, say, Dalbeattie, possessed quays of squared masonry while Dalbeattie

9. *Stat. Acct.*, xi, 519.
10. This word cannot always be taken at its face value in Scottish place-names, as it can mean 'cave' as well as 'coastal inlet.'
11. Personal communication.
12. E.g. galleried dun at Castle Haven (Kirkandrews Bay); mottes at Annan, Anwoth (R. Fleet), Buittle (R. Urr), Dumfries (R. Nith), Ingleston (New Abbey Pow), Kirkcudbright (R. Dee).
13. *PSAS.*, ci (1968-9), 278.
14. *Ibid.*, 220, 245, 265.

Port was content with rough stonework reinforced with timbers. This technique, in fact, of poorly-coursed drystone masonry strengthened by upright timbers (Palnackie, New Abbey Pow, Carty Port) seems to have been something of a specialty of the Solway builders, though it is true that at least one eastern harbour, Fisherrow, was using stone-filled cribwork in 1682_{15}. Dock basins may best be regarded as refinements of the riverside wharf, and are in no way comparable with the large open pools defended by breakwaters that are seen, for example, at Dunbar, Pittenweem or Crail; dock-basins of the Solway type, as at Kingholm, Palnackie or, formerly, Kirkcudbright, can be matched on the Firth of Forth at Leith and Alloa.

At a few sites in Fife, post-holes have been cut in the tidal rocks, apparently for wooden platforms, and rocks themselves have been smoothed off to facilitate access by boats [16]; but the only site on the Solway at which such work is at present known is Castle Haven, in Kirkandrews Bay. Further evidence, however, might well be obtained elsewhere, by local investigators working as the tide permitted.

Another subject which calls for comment here is the notorious contraband trade, as reference to this will be made pretty frequently below.[17] Its impact on the local community is illustrated forcibly by some passages in the **Statistical Account of Scotland.** Thus the parish minister of Ruthwell could state roundly, in 1794, that 'all the people living upon the Solway Firth were more or less concerned in smuggling from the Isle of Man'.[18] His colleague in Kirkcudbright town parish wrote, at the same date, 'The town . . . had long ago a considerable inland trade. . . . How it came to lose it in a later period can be accounted for only from the contraband trade, which it afterwards carried on with the Isle of Man. . . . After this trade was set aside, large smuggling companies established themselves along the coast of Galloway, and with a high hand braved, for some time, all the efforts of the Government to suppress them'.[19] From Urr came much the same story — 'It is inconceivable how much the agriculture of every parish in the maritime parts of Galloway has benefited by the island's subjection to the British Customs regulations'.[20] McDowall, too, quotes Custom House records for the continuous and vicious strife between the preventive forces and the smugglers, the latter strongly supported by militant associates ashore.[21] The allusions to betterment resulting from the application to Man of the British Customs regulations is somewhat puzzling, as, in Mackenzie's words, 'Subsequent to the revestment of the Government of the Isle of Man in the Crown of Great Britain, in the year 1765', contraband trade with the island came so to occupy 'the most intelligent and enterprising of the inhabitants of Galloway that the idea of acquiring wealth in a commercial line by fair and upright dealing seemed to be wholly laid aside'.[22] Contributors to both the Statistical Accounts often appear to assume that reform was effected in the 1760s; but the Isle of Man Purchase Act of 1765_{23} contained no

15. *Ibid.*, 242.
16. *Ibid.*, 222, 238.
17. On this subject in general, see *Smuggling, passim,* and List A below.
18. *Stat. Acct.*, x, 228.
19. *Ibid.*, xi, 19 f.
20. *Ibid.*, xi, 65.
21. *Dumfries,* 557 ff. See also Mackenzie, Rev. W. (ed. Nicholson, J.), *The History of Galloway,* ii, App., 56
22. Mackenzie, Rev. W., *op. cit.*, 55.
23. 5 Geo. III, c. 26. For information on this point the authors are indebted to Mr J. Mackenzie.

provision for the Customs, and it was not in fact until 1876 that the island was incorporated in the United Kingdom for Customs purposes.

Finally a word must be said about the arrangement of the descriptive articles. In the case of sites other than regular ports a question frequently arises as to which of them can properly be treated as a harbour or habitual landing-place. It may be hard to draw a line between those where merely casual landings could be made, as occasion happened to demand, and those which saw enough such use to rank as ports of a kind though lacking artificial improvement or official status. Some landing-places regularly used by smugglers, such as Balcary Bay, seem to fall into the latter category. While an archaeological survey of all such sites, known or suspected, might well have had interesting results, as did the excavation of Torrs Cave (q.v.), the present authors were not in a position to tackle it, and must consequently present results which are less than fully comprehensive.

A rather similar problem was presented by sites to which the O.S. maps give suggestive names, such as White Port or Red Haven, but for which no specific record or material evidence is available. This difficulty has been met by simply consigning the sites in question to a list (List A below), as a record and an invitation to further enquiry. In the same list have been placed sites about which nothing is known beyond their mention in J. M. Wood's **Smuggling in the Solway,** these being marked S in the list, or SC where a cave is noted. The List A sites are arranged in alphabetical order; a second list, List B, shows all the sites arranged in topographical order, from east to west, in correspondence with the general map of the area (Fig. 1).

In conclusion, the authors wish to record their indebtedness to the numerous friends who have helped them at various stages of their enquiry, and in particular to Miss J. Gordon, Miss C. Rae, Miss J. M. Wilkes and the staff of the National Library Map Room, Mr A. Anderson, Mr T. R. Collin, Curator of the Kirkcudbright Museum, Mr I. Fisher, Mr J. Kingan, Mr A. Knox, Secretary of the Annan Harbour Trust, Mr I. F. Macleod and Mr G. Stell.

Descriptive Articles.

ABBEY BURNFOOT, NX 742243.

The Abbey Burn debouches into a wide bay, well suited for use by small craft capable of taking the ground. The parish minister of 1794 recommended improvements[24], and his successor of 1844 believed that the place could be made 'safe and commodious' at small expense[25], but there is little or nothing to show that their advice was ever followed. It is true that the 25-in. O.S. map of 1907, the most recent edition at this scale available in 1975, marks a 'breakwater', about 100 ft. long, on the left bank of the Abbey Burn some 120 yds. south of Burnfoot Bridge; but no remains of this work have been identified, and it is probable that any local traffic, such as might, for example, have been associated with Dundrennan Abbey, passed over the open beach.

24. *Stat. Acct.*, xi, 48.
25. *NSA.*, iv (K), 361.

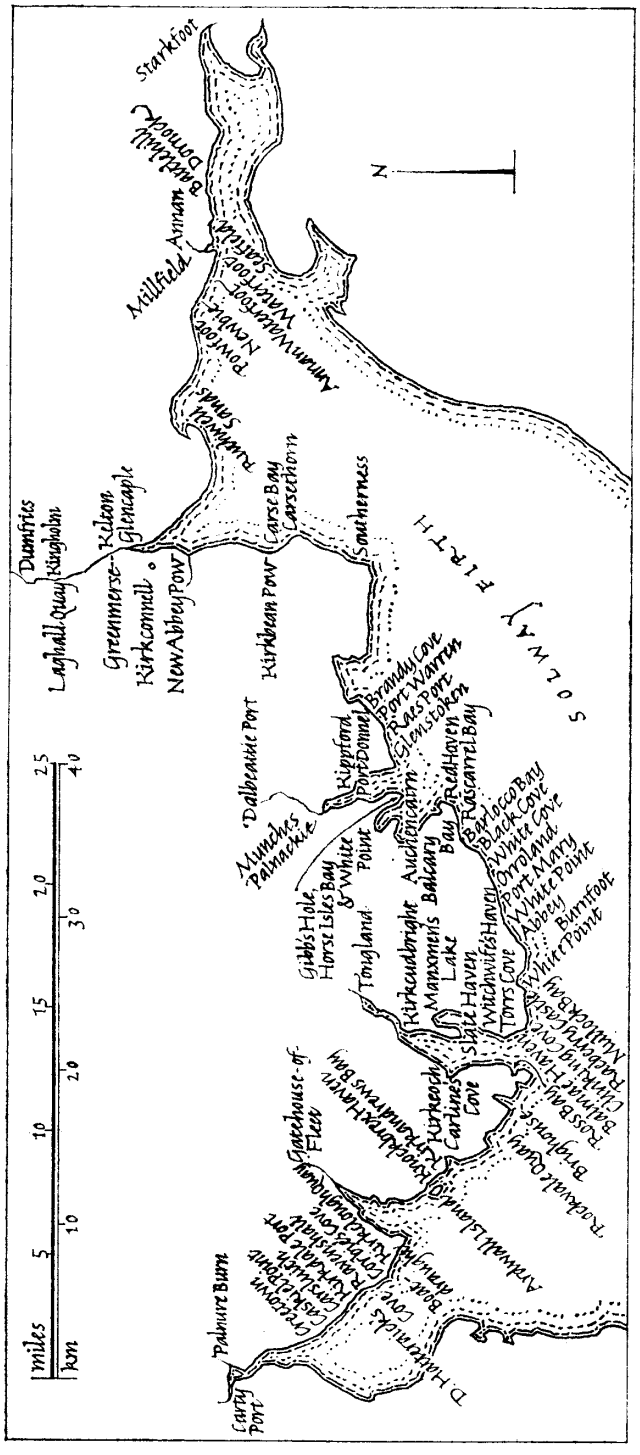


Fig. 1 Harbours, landing-places and other sites given in List B.

In 1565, in a dispute with Kirkcudbright concerning customs rights over the cargo of the 'Grace of God', from Bordeaux, Dumfries successfully claimed that its Customs rights extended as far as 'the burn fute of oure abbay of Dundranane'.

ANNAN, NY 188662; WATERFOOT, NY 190646.[26]

The town of Annan stands on the left bank of the Annan Water, about two miles from its mouth, while Waterfoot is at the mouth, still on the left bank but fronting on both the river and the Firth. Records of the port's history are regrettably meagre, but as spring tides still penetrate fully a mile above the town there is no reason to doubt that, before the river was bridged in the years 1699-1704[27], ships could have unloaded at suitable points on the bank at least as high up as, say, the site of the motte, which closely overlooks the water just upstream from the bridge. A word has been said above about the association of landing-places with mottes, and in the present case allusions to the porterage of victuals and wine from ships to land in 1299, and to arrangements for having them watched while 'on the bank',[28] agree very well with the idea of landings being made hereabouts on an unimproved tidal shore. Downstream, it was noted in an English military intelligence-report dateable to the period 1563-6[29] that 'after a houre flode be past, boates may come to the towne of Annande . . . and within a quarter of a myle of the moutht of Annand watter, small shipps may ryde as in an open road ware sene'. The lowermost stretch of the river received favourable mention from Defoe in 1727[30] and from the parish minister in 1797[31], but the town possessed no built harbour-works until shortly after 1810[32], when the existing quay was constructed. The beginning of this work is dated to 1811 in a letter quoted by the Rev. W. Singer[33], which states that the people of Annan, 'having long laboured under the disadvantage of having no proper place at which they could load or discharge their vessels at all times of the tide, have lately begun to erect a wharf'. This work, at the S. end of Port Street, was originally some 250 ft. long, but was lengthened to 400 ft. in 1904. It is built of large, well-squared, red-sandstone blocks, reinforced at intervals with frontal uprights of timber and having a wooden runner along its lip. At its S. end it returns 60 ft. at right angles, to the side of the road that prolongs Port Street southwards. Much of the surface is grassed over, owing to lack of traffic, the quay being no longer in commercial use, but some traces of cobbling can be seen. There are six bollards, one of them a large tree-butt, and a massive iron mooring-ring.

The quay is situated at the mouth of a narrow tidal creek separated from the main river by a tongue of low-lying land marked 'Minister's Merse' on the O.S. maps. The creek's upper end has been artificially extended and improved to

26. These two harbours, and the reach of the river that links them, are too intimately connected for treatment otherwise than as a single unit.
27. *Records of the Convention of Royal Burghs*, iv, 288, 319, 349, 355. The language of the final entry makes it uncertain whether or no the work was actually completed by 1704.
28. *Cal. of Docts.*, ii, 284.
29. Armstrong, R. B., *History of Liddesdale, etc.*, i (1883), App. lxx, p. cxii.
30. A Gentleman, *Tour through the whole Island of Great Britain*, iii, 54.
31. *Stat. Acct.*, xix, 447 f.
32. The authors are indebted for this date and much other information to Mr A. Knox, SSC., Clerk and Treasurer to the Annan Harbour Trust.
33. *General View of the State of Agriculture in the County of Dumfries* (1812), 632.

form a mill-lade to bring water from the river to serve a brewery and a cotton-factory, both built about 1786 and both now vanished. The length of the artificial portion cannot now be determined, but it may well have amounted to some 300 yds. or more. For some distance above the quay, creek and lade could be used by small coastal boats for the discharging of cargoes direct into the Port Street warehouses, which stood on the E. bank. The tidal stretch is now much silted up, and the more northern portion of the lade has been filled in and built over; its intake, on the river-bank some 200 yds. below the SE. end of the highway bridge on A 75, is marked 'sluice' on the O.S. map, but any structural remains have been obliterated by improvements to the bank. Water was directed from the river towards the intake by a masonry weir, now partially washed away; the stone used in its construction was probably quarried at Corsehill.

The pier that stands about a quarter of a mile downstream from the Port Street quay forms no real part of Annan's harbour-complex. It was built about the middle of the 19th century by the Newby estate, has changed hands several times, and is now owned by Messrs T. Niven, Ltd., Carlisle. It has not been used for many years.

The improvements effected in the 1820s and later[34] were mainly at Waterfoot, and elsewhere downstream from the town. In their course, the lowermost reaches of the river were deepened and the saltings to the east were embanked, with the result that shipping was enabled to obtain the shelter of Barnkirk Point and also found safe anchorage further upstream, perhaps where the river changes its direction in square 1865. The embankment runs close beside the water, and at Waterfoot returns northwards at an acute angle to extend protection to the saltings from threats from the north-east. Of the works at Waterfoot, the **New Statistical Account** records the construction, before 1839, of two jetties, 'for steamers plying between Liverpool, Annan, Waterfoot and New Carlisle', and also, about 1833, of the road from Annan to Waterfoot. On the 6-inch O.S. map of 1857 these jetties are shown as an odd-looking Y-shaped structure, either arm of which is itself Y-shaped, and the whole may be interpreted as the substructure of a partially ruinous, double-headed pier which, at the time of the survey, had lost the decking of its spreading, triangular pier-heads. A comparable example, but with a single head, has been noted at Carsethorn (q.v.) The same map shows the road from Annan, the seaward end of which has run for a short distance on top of the protective river-embankment, as continuing to the piers on a length of earthwork of its own, which leaves the embankment at the angle mentioned above; but this branch has been cut off short, apparently washed away[35], and its broken end has been faced up with masonry. From beside the end of this short work, a roughly metalled track, with some remains of kerbing, leads down to the water's edge through the tidal mud; at high-water mark it measures about 10 ft. in width, but as it descends the gently sloping foreshore it expands to about 25 ft. There is nothing to show its relationship, if any, with vanished piers, of which nothing now survives but the stumps

34. Municipal Corporations in Scotland, *Report on the Burgh of Annan* (1835), 63; *NSA.* (D), 529.
35. At this point HWMOST appears to have advanced some 30 ft. inland between 1899 and 1931.

of one or two posts; but it may well be considerably older, and have been constructed as a 'hard' to facilitate the working of ships.

The application of the place-name Waterfoot seems to be somewhat ambiguous. The O.S. map of 1857 marks it on both sides of the mouth of the river, but the site on the right bank, just inside Barnkirk Point, appears as Port Annan on Crawford's map of Dumfriesshire (1804) and as Annan Waterfoot on the current 1-inch edition (7th series). A place bearing the last name is mentioned by McDowall as a landing-place for smuggled goods, and also as the point recommended in 1724 for the establishment of a preventive station[36].

BALCARY BAY. NX823495.

Balcary Bay seems always to have been regarded as a safe anchorage, though no artificial improvements are noted and no harbour-works can be seen. T. Tucker mentioned the bay in 1655 as a small creek[37]; A. Symson in 1684 called it 'a very safe harbour'[38]; Murdoch Mackenzie marked an anchorage in 1776[39]; in 1844 it was described as 'safe and commodious by nature'[40]; and in 1847 as a harbour of refuge and as 'a shelter for small coasters able to take ground'[41]. In addition, the record (1794) of an unnamed port in Rerrick parish, possessing uninterrupted smooth sands and 'a natural basin where many large ships may lie in perfect safety'[42], pretty certainly refers to Balcary. Other risks, however, might sometimes have to be run, as by the Dumfries merchants' ship 'Adventure', moored in the Bay in 1682, when the people of Kirkcudbright, summoned by tuck of drum and led by a baillie, came out over the sands and attacked the crew, causing such damage to the ship that the cargo of Bordeaux wine missed the Dumfries market.

The most interesting point, however, in the history of this site is its connexion with the contraband trade[43]. The original nucleus of the existing Balcary House was built in the 18th century as a kind of overseas base by the Manx smuggling company of Clark, Grain and Quirk, much as a trading-company of the day might have built a 'factory' at, say, the mouth of a West African river. This original building contains a barrel-vaulted basement storey, partly set back into a hillside but entered in front at ground level, like any small Georgian mansion, and showing on its face a projection, semicircular on plan, which incorporates an 18th-century fireplace. This capacious storage-vault suggests comparison with Gunsgreen House, Eyemouth, where a basement of cellarage is connected in local tradition with the smuggling trade that once flourished in the town[44], a significant point of similarity being the apparent absence, at either site, of any serious desire for concealment.

BLACK COVE. NX788467.

The O.S. map of 1850 marks a littoral cave here with a channel, presumably formed by a small stream, running out from it across the tidal foreshore. This

36. *Dumfries*, 603, 604 n. See also *Smuggling*, 121.
37. *Early Travellers*, 180.
38. Mackenzie, W., *History of Galloway from the Earliest Times* (1841), ii, App. 34.
39. *Maritime Survey of Ireland and West of Great Britain.*
40. *NSA.*, iv (K), 361.
41. *Tidal Harbours*, 612, lix.
42. *Stat. Acct.*, xi, 46.
43. *Smuggling*, 9.
44. M'Iver, Rev. D., *Eyemouth*, 137.

is probably the cave used by smugglers that is placed by J. M. West in Barlocco Bay[45], as Black Cove lies just west of the latter's western end.

BRIGHOUSE BAY. NX 6344, 6345.

Apart from Rockvale Quay (q.v.), this bay, though narrow and penetrating deeply into the land, shows little evidence of use as a landing-place, perhaps on account of the south-westerly exposure of its entrance. The minister of Borgue parish, writing in 1794[46], merely noted that vessels of light burden anchored there occasionally in fair weather. Its use by smugglers is recorded[47].

CARSETHORN; CARSE BAY. NX 9959, 9860.

The village of Carsethorn stands on a gently rounded projection of the coast, immediately south of the shallow crescentic indentation of Carse Bay, the bay and the beach at the village forming a continuous stretch of safe mooring-ground for ships[48]. They are thus best considered together. The place has a long history, being first mentioned specifically as a port in 1562, when a ship was loading there for La Rochelle and Bordeaux; other record entries, of the 1520s and 1530s, evidently refer to Carsethorn though without mentioning its name, and it is clear that this 16th-century use continued a still earlier practice. A somewhat unfavourable view, however, was taken by an English military intelligence-report of the period 1563-6[49], which stated that 'there may come shyppes to Kerss thorne . . . and noo farder, being open ryding withoute any haven, and dangerous for syndry wyndes'. The early records all speak of ships mooring at the Carse thorn, no doubt a conspicuous thorn-tree, and in later times such a tree actually stood where the beach borders on the bay. In the 16th century no village seems to have existed at Carsethorn, as it is only in the 1680s that anyone is mentioned as a resident, with the appellation 'at Carsethorn'; and the first warehouses were probably built at this time in the course of Dumfries burgh's initiative in the expansion of trade. Further evidence of this initiative is to be seen in the road built by the burgh to Carsethorn in the 1660s, the cobbled surface of which can still be felt, by probing, in places along a line between points NX 979603 and NX 984596. The 'Company of Merchants adventuring from Dumfries', a fragment of whose minute-book is preserved in the Scottish Record Office, may well have been largely responsible for these 17th-century developments.

In 1795 this area was noted as a safe anchorage, the parish minister of the day then stating[50] that timber ships from the Baltic often discharged there, as the higher reaches of the Nith were difficult of navigation for ships drawing as much as 11 or 12 feet; and he observed in the same passage that a draught of three fathoms was obtainable 'in the bay'. He also mentioned that the burgh of Dumfries had put up mooring-posts at Carsethorn — and mooring-posts still stand along both beach and bay. His successor of 1844 recorded that a wooden pier had 'lately' been built to serve the Liverpool steam-packet[51], an arrangement analogous with the

45. *Smuggling*, 48.
46. *Stat. Acct.*, xi, 32.
47. *Smuggling*, 92.
48. The breakwaters south of the village are of 19th-century date.
49. Armstrong, R. B., *History of Liddesdale, etc.*, i (1883). App. lxx, cxii.
50. *Stat. Acct.*, xv, 128.
51. *NSA.*, iv (K), 241.

one made at Waterfoot (see Annan, **supra,** at a site rather similarly placed at the mouth of another estuary. The analogy is strengthened by the structural similarity of the two piers, as both had spreading triangular heads; the shape of the one at Carsethorn is clearly shown on the 25-inch O.S. map of 1893, though it was by that time ruinous, and the uprights of the expansion still stand today some six to eight feet clear of the mud. In 1847 Carsethorn was noted as one of the nine landing-places in the Nith estuary[52], and in the same report 'Carse' was named as a harbour of refuge, though described as an open sea-beach or 'natural scar harbour'.

In the early 19th century Carsethorn was an 'active centre' among the smaller shipbuilding ports[53].

CARSLUITH. NX 486546.

The quay marked on the 25-inch O.S. map is a recent industrial development, wholly similar to those noted at Caskiel Point (p. 120); but when the site was visited in 1975 the herbage and undergrowth were heavy enough to have obscured traces of any earlier construction. Carsluith has been mentioned as a smugglers' landing-place[54], but for that purpose the mouth of the burn, without artificial improvements, would no doubt have been fully adequate.

CARTY PORT. NX 431625.

Carty point may be regarded, for practical purposes, as the head of navigation on the Cree estuary, irrespective, that is to say, of Symson's statement (1684)[55] that 'little barks' could reach the upper limit of the tide at the ford of Machirmore, about a mile below Minnigaff. The history of the port is obscured by the existence of two separate quays. The 6-inch O.S. map surveyed in 1848 marks the existing one as 'New Quay', and in addition an 'Old Quay' some 550 yds. upstream; and here comparison may be made with a record of 1844[56], that 'an old landing-place or port', then disused, had once existed a short distance upstream. To which of these ports other records should be thought to refer is not always clear. Ainslie's map of the Stewartry of Kirkcudbright (1797), which marks Carty Port with buildings and an access road, seems to refer to the older site but the scale is too small for certainty. The parish minister of Penninghame, who noted in 1792 that small vessels could safely be brought to Carty[57], does not provide any evidence one way or the other; but by 1838, the date of his successor's account,[58] the 'New Quay' must almost certainly have been built. In 1838 the usual size of vessels trading to the port was 35 to 40 tons, or up to 80 tons at springs, when a depth of 12 feet was obtainable; the Liverpool steamer of the time, however, was said to have been 'delayed' by the windings of the river.

At the site of the Old Quay, the map of 1848 marks an indentation in the coastline which, though very small, is of a significantly artificial shape. Some buildings are also shown, and the place-name Shell Acre. The New Quay is shown as

52. *Tidal Harbours*, lix, 609.
53. *Shipping* 1820, 4
54. *Smuggling*, 89.
55. *Geogr. Coll.*, ii, 110
56. *Tidal Harbours*, 596.
57. *Stat. Acct.*, iii, 342.
58. *NSA.*, iv (W), 187.

possessing a frontage of about 100 feet, and as projecting about 70 feet; today its projection is slight, as the ground on either side of it seems to have built up, with the result that it now appears as little more than a stretch of rough masonry, with frontal uprights of timber, facing the steep river-bank. Mr King-Webster notes[59] that the quay might have taken schooners up to 80 ft. in length, and that a two-knot current keeps its face clear of silt.

CASKIEL POINT: NX 4756.

The granite formations of this district were certainly under exploitation by the later 18th century, as shipments had already been made before 1795 to many important buildings — among them two of the notorious Bishop of Derry's churches in Ireland.[60] Kirkmabreck Quarry was opened in 1831-2 by the Liverpool Dock Company[61] for material for the Liverpool docks, and by 1844 a harbour had been built at Caskiel Point[62], which is shown on the 6-inch O.S. map of 1850 as serving, in addition, the Abbey Wood and Glebe Quarries. The same map shows that the works comprised a stretch of artificial river-frontage some 500 yds. long, with a dock at its N. end and a 'tram road' from the quarries passing its S. end and running out to the tidal flats. Between the riverside construction and the dry land behind it there is a large marshy pool. The 1957 edition of the map shows the port as fully developed for industry, and there can be no doubt that even the older features are industrial in origin. Such features are a quay about 200 ft. long, incorporated in the frontage and named on the map 'Creetown Old Quay', and also the base of an old lighthouse. The distinction between this quay and the old harbour in Creetown village is not always clear in the records, but the mention of Creetown-bound vessels mooring at the river-bank (1844)[63] probably refers to the Caskiel site while that of Creetown's small harbour and roadstead (1847)[64] more probably points to the village.

There are plentiful remains of harbour-works at and near the position of Creetown Old Quay, but, as has been said, they are all clearly connected with the operation of the quarries. There are no traces of a dock. Construction is in very massive granite blocks, piled rather than fitted together, and faced with timber uprights; at least two periods are represented, newer work having been added on top or in front of older. At one point there are some remains of a wooden platform, supported by heavy posts, in front of the quay-face. The wreck of a wooden crane, counterweighted with large blocks of granite, stands near the N. end of the quay. Many of the blocks used in the construction of the quay show drill-holes, and some have carried chairs for the rails of a railway.

The lighthouse stood about 155 yds. south of the quay, but it is now totally ruined. Insofar as any features can be seen in the pile of debris, is seems to have been rectangular on plan, measuring 10 ft. 6 ins. by 8 ft. 6 ins. and built of smallish rubble with mortar. The only considerable fragment now stands 3 ft. 6 ins. above what seems to have been rather larger base, perhaps about 2 ft. high.

59. Personal communication.
60. *Stat. Acct.*, xv, 554.
61. *Gatehouse*, 13.
62. *NSA.*, iv (K), 343.
63. *NSA.*, iv (K), 341.
64. *Tidal Harbours*, lviii.

CREETOWN. NX473586.

Creetown's historical function was to serve as the eastern terminal of a ferry across the Cree, and provision for pilgrims visiting St. Ninian's shrine at Whithorn is suggested by the grant, made in 1305, to the monks of Dundrennan of a hospital at Crithe[65]. A memory of this arrangement seems to be perpetuated in the place-name Spittal, which occurs just north of Creetown; while the former existence near the village of a chapel[66] suggests a comparison with chapels and churches at other ferry-terminals, such as Earlsferry, North Berwick or Queensferry[67]. Symson, writing in 1684 and naming the village Ferriton, states[68] that there 'us'd to be a boat', as if implying that the service had been discontinued in his day; but perhaps more than a single crossing-place may have been in use at different times, seeing that Macleod places the ferry above, not at, Creetown[69], and that the O.S. maps mark Knockdoon Ferry near Spittal farm, about a mile and a half upstream. The ferry evidently did not go out of use when the bridge was built at Newton Stewart in 1745, as in 1795 a 'passage boat' was constantly available[70].

Creetown can be approached from the river, through the tidal flats, by way of the Moneypool Burn, the lowermost reach of which is named Ferry Burn on the O.S. maps; this is said still to be navigable by small boats[71], and may well have been used by the smugglers of whom a tradition is recorded [72]. In 1844 vessels trading to Creetown were said to have moored at the river-bank[73], and in 1847 the place possessed a small harbour and a roadstead and could be approached by craft up to 50 tons[74]. These last two records must, however, be regarded as somewhat ambiguous, as by the 1840s 'Creetown Old Quay' at Caskiel Point (q.v.) must presumably have been in existence. Macleod classes Creetown as one of the smaller active centres of shipbuilding in the early 19th century[75].

The old harbour lies at the S. end of Harbour Street, where the Balloch Burn joins the Moneypool Burn on the latter's left bank. It now takes the form of a shallow, grassy depression, showing no artificial features beyond its straight N. side, evidently once a quay.

DALBEATTIE PORT; DUB O' HASS. NX 829603-4.

The Dalbeattie Burn enters the Urr Water about a mile below the town of Dalbeattie, their junction bearing the name Dub o' Hass[76]. The ground adjoining the confluence is shown on the older O.S. maps as consisting of wide tidal flats, but these have now been embanked against high tides and flood-water, and have become grassy meadows. This naturally favourable site must no doubt have been used as a port for a very long time, even perhaps by the owner of the motte that stands on the right bank half a mile below the confluence. Ainslie's map of the

65. *Cal. of Docts.*, ii, No. 1702.
66. *NSA.*, iv (K), 312.
67. *PSAS.*, ci, 238, 257, 276.
68. *Geogr. Coll.*, ii, 67.
69. *Gatehouse*, 14.
70. *Stat. Acct.*, xv, 554.
71. Information from Mr W. A. King-Webster.
72. *Smuggling*, 88
73. *NSA.*, iv (K), 341.
74. *Tidal Harbours*, lviii
75. *Shipping* 1820, 4
76. Dub, *pool;* Hass, *throat* or *passageway*.

Stewartry (1797) marks a port at Dalbeattie, and the remarks on the contraband trade by the minister of Urr parish, as quoted above in the introduction, point to the existence of one or more local landing-places well back in the 18th century.

The 19th-century port was situated on the right bank of the Dalbeattie Burn a short distance above the confluence, the 6-inch O.S. map of 1849-51 marking a Port House and the name Dalbeattie Quay. The 25-inch edition of 1908 shows mooring-posts on both banks of the combined stream below Dub o' Hass, as well as of the Dalbeattie Burn up to the Port, and others on the right bank of the Urr above the confluence; but otherwise no harbour-works apart from a straight stretch of bank, about 140 ft. long, at the site of the Port, which presumably represents a quay. The edition of 1973 marks 'The Port' in the position of the earlier Dalbeattie Quay, and adds some subsidiary names such as Port Street, Port Road and Port Bridge. This last spans the burn just above the port site and was built in 1860. A local author of 1909 mentions quays dating from the late 18th or early 19th century[77], but gives no details regarding them. In his time vessels of up to 150 tons, a quarter of them steamers, were engaged in the export of granite and wood to Liverpool and the import of manure and feeding-stuffs, and the contrast between his figure and the modest 60 tons recorded in 1794[78] suggests that at the earlier date the harbour was still unimproved.

Very few remains of harbour-works survive. The port's site is now occupied by a large flour-mill, and all that can be seen is a stretch of revetment along the bank of the river under the buildings. This revetment extends from just below the bridge for about 100 yds., a figure which compares better with the 116 yds. of 'stone quay' reported in 1847[79] than the 140 ft. indicated on the O.S. map. The revetment is of good drystone masonry faced for most of its length with timber uprights; but at the downstream end the timbers have been omitted and part of the work has collapsed.

Hardly to be separated from Dalbeattie Port is the landing-place at Dub o' Hass, situated at the confluence of river and burn. A minute of the Dalbeattie Harbour Trustees[80] of 1812 noted that the navigation of this reach was extremely difficult, requiring local knowledge and favourable conditions of tide, and considered the possibility of cutting an easier passage between the two streams. It was also proposed that the road should be widened so as to allow horses to be used for the towage of vessels, in replacement of the then-existing system of traction by men, and the arrangements now seen may or may not be the result of the suggested improvements; they include a number of stone bollards on the left bank at the confluence. The point of land between the streams is revetted with masonry and timbers in the same way as the river-bank at the Port; a single stone bollard can be seen close to the point, among the dense herbage.

The value of Dalbeattie as a port must have been greatly reduced by the shallowness of the water and the other navigational hazards, though there was

77. Frew, Rev. D., *The Parish of Urr*, 141 f.
78. *Stat. Acct.*, xi, 63.
79. *Tidal Harbours*, lix.
80. Vol. ii, pp. 71 ff.

ample room for several schooners to berth at Dub o' Hass. A photograph taken in July 1897 shows fourteen sailing-ships in the anchorage. Such drawbacks would no doubt have worked to the advantage of the downstream port of Palnackie (q.v.), where improvements were made and larger vessels accommodated.

DIRK HATTERAICK'S CAVE. NX 518526.

This cave, situated 200 yds. east of the mouth of Kirkdale Burn, derives its name and its popular association with smuggling from Sir Walter Scott's **Guy Mannering;** and while this may well be a true assessment of its history, it is to be noted that the small stone-built recesses inside the cave are nesting-boxes for pigeons, and not bins for bottles or receptacles for contraband goods. The adaptation of the place as a kind of natural dovecot could have been managed easily enough when the original entrance was accessible, and not, as at present, obstructed by a fall of earth[81]. I. F. Macleod, again, observes[82] that such caves may well have been used by refugee Covenanters.

DORNOCK. NY 2265 (approx).

No actual port or landing-place is recorded in Dornock parish, but the minister, writing in 1792[83], mentions its 'ready access to the English and other markets by water carriage', implying, no doubt, that the craft concerned were simply beached at high tide. He also considers that the people were 'more civilised' than they had been thirty or forty years before, particularly on account of the cessation of contraband trade with the Isle of Man. His successor of 1833 alludes[84] to merchant-ships from Liverpool and timber-ships from Miramichi as lying on the opposite side of the Firth, apparently in the channel of the Esk, off Bowness.

DUMFRIES. NX 9775.

Dumfries harbour consists of the town's frontage on the River Nith, and extends downstream from the Caul, a weir just below the Old Bridge, to Dockfoot Park, a distance of about half a mile. Castledykes Quay, immediately downstream again, is its southward continuation for practical purposes but is often mentioned individually. In its present condition (1975), the frontage bears the general appearance of a riverside walk flanking a wide street; but in fact the facing-wall that rises from the water is that of the former quay, and bollards of stone or iron, of which only a few now survive, were in place throughout its length in quite recent years.

Little seems to be known about the harbour in its earliest phases, but the proximity of a motte to what must have been a good landing-beach close to the head of navigation suggests a long history. The area now occupied by Dockfoot Park figures in the Burgh records from 1506, but is first referred to as 'the Dock' at the beginning of the 18th century, when a tenant complained that the use of his land was being interfered with by, among other things, the unloading of ships. In the 1520s the records of the Burgh Court mention claims for cloth

81. RCAM, *Inventory of Kirkcudbright*, No. 298.
82. *Gatehouse*, 18.
83. *Stat. Acct.*, ii, 28 f.
84. *NSA*,. iv (D), 258.

and barrels of herring washed away by a flood from the White Sands, with the implication that cargo was then being landed on the Sands from grounded ships. In February 1539-40, Carruthers' Protocol Book records the building of a ship 'within the town', no doubt somewhere on the adjoining foreshore. In 1600 the town was permitted to levy an impost for a period of five years[85] but the proceeds were almost certainly intended to be spent on the bridge and not on the harbour. From 1710 onwards the Burgh Treasurer's accounts record blasting and stone-clearance in the riverbed, and in 1710-20 the preparation of a chart of the approaches and the provision of marker-posts and buoys in the channel. By 1727, at any rate, a quay of some sort was certainly in existance, as Defoe writes[86] that 'ships of burthen come close up to the key'; but no other evidence of structural improvement is forthcoming even as late as about 1810, when ships could still be figured as tied up to the riverbank in the White Sands area. It must be remembered, in any consideration of the harbour's history, that although Dumfries had been carrying on a coastwise and overseas trade since at least the 16th century, and by Defoe's time employed a 'considerable number[87] of ships, the navigational dangers of the Nith estuary were serious[88], especially for larger vessels; Tucker, for example, reports in 1655 that 'the badnesse of the comeing into the river' hindered the town's overseas commerce[89], while in 1793 the waterway was only suitable for craft of up to 30 or 40 tons, and that at springs[90]. Eight or ten coasting vessels were then owned in the town, two or three being engaged in the Baltic or wine trades, the latter expression no doubt referring to the Spanish and Biscay ports.

At this time and earlier the port was managed by the Town Council, whose minutes and accounts record the clearing and opening of the channel from about 1790 onwards[91]. In 1812 there was established the Nith Navigation Commission, which aimed at making the river navigable for large ships as far up as Dockfoot. The work included the straightening and deepening of the channel, the blasting of a transverse rock-ridge below Castledykes, and the building of embankments further downstream. By 1823 a spring-tide depth of 10 ft. had been secured at Dockfoot and one of 8 ft. at Dockhead. The harbour wall at Dockhead followed, and from about 1850 the ground behind it was raised and cobbled, so that the 'sandy' character of White Sands was ended and the space fronting on the river was gradually brought to something like its present condition. By 1833, after more than £18,500 had been spent on improvements and repairs to the channel as a whole, ships could discharge their cargoes conveniently close to the town, and quays had been built at Kingholm (q.v.) and Glencaple (q.v.)[92]. In 1847 Dumfries possessed 470 linear yards of wharfage, less 233 yards which had been improperly built and were to be reconstructed, while Castledykes had a further 115 yards[93]; the latter place having been treated in this report as distinct from Dumfries, and

85. *Records of the Convention of Scottish Burghs*, ii, 66.
86. A Gentleman, *A Tour through the Whole Island of Great Britain*, iii, 56.
87. Ibid.
88. For details of the hazards and suggested remedies, see *Tidal Harbours*, 605 ff.
89. Quoted in *Early Travellers*, 180.
90. *Stat. Acct.*, v, 131.
91. *Dumfries*, 750. Most of the historical matter quoted here is taken from this work.
92. *NSA.*, iv (D), 22.
93. *Tidal Harbours*, 609.

as one of nine individual harbours in the Nith estuary[94]. In 1823 eighty-four ships were owned in the port, which included Annan, administered as one of its 'creeks'; and in addition some twelve to eighteen foreign ships normally traded there. The last vessel to use the harbour docked at Dockfoot in 1916.

The walling of the harbour frontage is formed, in general, of red-sandstone blocks, varying in size and quality; in places, at the lowermost levels, they tend to be smaller and less well coursed than higher up. The report of 1847 gave their average size as 8 cubic feet, with a maximum of 16 cubic feet, and noted that no frontal fenders of timber were used[95]. In the muddy bottom of the river, in front of the quay-face, massive pitching can be seen from place to place. Other remains of harbour works exist at several points. Just below the Caul, a recess called the Sandy Entry, into which there descends a ramp on its N. side, breaks the line of the quay-face; its purpose was to allow rafts of timber to be hauled up from the water at a point convenient for their delivery to the timber yards, which occupied the site of the existing Auction Marts[96]. Another rather similar ramp exists about 100 yards upstream from the Suspension Bridge; this gave access to a ford on the line of a mediaeval route to the west, a continuation of which is to be seen in a lane mounting the opposite bank[97]. Until obliterated by recent building, the parched trace of this road used to show up regularly, in dry weather, in a field beside Rotchell Park Road. Two flights of steps lead down to the water's edge, one above and one below St. Michael's Bridge. Further downstream, the quay-face returns to form the right-angled nook known as The Stank, downstream from which the bank of Dockfoot Park is revetted and represents the former Dockfoot Quay. Further downstream again was Castledykes Quay. This has suffered rather heavily through the formation of a riverside path and a car-park, while much of the frontage is obscured by bushes and small trees; where visible, however, the work is of well-squared sandstone blocks, but shows signs of fairly recent repointing and improvement, concrete steps and a vertical ladder of blocks being obvious insertions. A range of bollards still remains in place — six of these, including a turfed-over stump, are of granite, while a seventh, partially broken and thus showing its hollow construction, is of cast iron. The footpath between the river and the Kingholm road was formerly a cart-track leading to the quay.

The Caul is not, strictly speaking, a part of the harbour installations, but it calls for notice on account of its effect on the river. About 1660 the Stakeford Caul, built in the 1520s, seems to have been falling out of use, and in 1661-2 large sums were spent on a caul which must have been in a different position from the old one. That is to say, in 1704, when a caul was required to serve a new mill and to divert part of the main current of the river, which was eroding the left-bank foreshore below the Old Bridge, a cut more than 100 yds. long was made on the right bank 'a stone's throw below the old caul'; but as the 16th-century work would have been nearly half a mile upstream it cannot be the work referred to, and the

94. Ibid, lix.
95. Ibid.
96. In the 1860s, timber could be landed at the new wet docks at Silloth, in Cumberland, and rafted thence to Dumfries, at a cost lower than that of direct delivery.
97. The name 'Pilgrim Way' given to this lane has no traditional background.

17th-century caul must therefore have been close to that of 1704. This latter was of timber, and when it was wrecked by ice in the winter of 1710-11 the Council decided not to rebuild it, but to heighten and strengthen the structure 'a stone's throw' above it. As the work so rebuilt has helped to preserve the adjoining left-bank foreshore, where vessels habitually tied up, it may properly be regarded as an early measure of improvement.

GATEHOUSE-OF-FLEET[98]. NX 5955, 5956

Before the middle of the 18th century, Gatehouse was essentially a staging-post on the road from Dumfries to Portpatrick, and in consequence its river approaches were probably of little importance. Tucker, writing in 1655, alludes[99] to 'one creek at the foot of the Water of Fleet, not worth the nameing', though the presence of the Green Tower motte and Cardoness Castle close to tidewater at the head of Fleet Bay points to a landing-place here with a long history. It is true, however, that Murdoch Mackenzie's **Maritime Survey of Ireland and West of Great Britain** (1776) marks neither an anchorage in the bay nor the village of Gatehouse itself; and it was only the industrial developments initiated or encouraged by James Murray of Broughton, between about 1760 and 1790, that called for improvements on the lowermost reaches of the river. The remains of some of these still survive.

The port was originally at Boat Green (NX 598560), above which navigation is stopped by a stretch of rapids. Here the river turns sharply from south-south-east to west, and a ditch which drained the ground west of the present Hannay Street may have helped to keep clear a larger pool than exists today among the reed-beds and saltings. Some 200 yds. to the west, at Alder Pool, the river curves again, towards the south, and then continues south-westwards for over a mile before debouching into the sands of Fleet Bay. In an unimproved state the waterway must have been difficult for any but the smallest craft. Access to Boat Green, for example, was obstructed by a rocky shallow; about 120 yds. below Alder Pool a tight meander turned off eastwards, re-entering some 170 yds. further downstream; and still lower downstream (squares 5955, 5854) another series of meanders existed which are marked 'Track of old river' on the O.S. map surveyed in 1853. To counter these drawbacks Murray effected some straightening and deepening of the channel, and it was no doubt at this time that the meander below Alder Pool was by-passed by the cut marked on the same map as 'Ancient Canal. Course of old C.'; while in 1825 'the Canal', which begins about 300 yds. below its 'ancient' counterpart, was opened to give free passage right down to Fleet Bay[100]. This latter work, 1400 yds. long and perfectly straight, was executed in the previous summer for Alexander Murray by his factor, Alexander Gray, using a force of some 200 men from the Murray estates in Donegal; the cost, originally estimated at £5,000, was reduced to £2,240 by turning the river into a small guide-channel, previously dug, and causing the rush of the water to complete the cut. The canal was crossed near Cardoness Castle (NX 592553) by a swing-bridge, of which the masonry abut-

98. Much of the material used in this article is taken from *Gatehouse* and *Shipping* 1820, to which reference should be made for further details.
99. *Early Travellers*, 180.
100. *NSA.*, iv (K), 292.

ments survive with the remains of an iron turntable. A final improvement came, in 1836-7, with the construction of a quay near the lower end of the 'ancient canal' by David McAdam, a shipbroker in Gatehouse who was also harbour-master in 1838; the channel was deepened by about three feet, and the quay accommodated craft too large to reach Boat Green. Port McAdam, as it was named, was last used commercially in the 1930s, and when it was visited in 1974 little could be seen beyond a stretch of dilapidated quay-face on the right bank, partly overgrown with bushes. It was of drystone construction, with tall frontal timbers attached to the stonework with iron clamps; a few timber bollards also survived. In 1975, however, the quay was repaired, and the site was redeveloped for use by pleasure craft, by a local group led by Mr W. A. King-Webster.

In 1794 several vessels of 80 tons and under were owned in Gatehouse,[101] trading chiefly with the west of Scotland and the north of England. At this date the port was accessible to craft of about 50 tons[102], but by 1844, thanks presumably to the construction of Port McAdam, the upper limit of tonnage had risen to 160 tons[103].

GIBB'S HOLE. NX 831530.

This place is twice mentioned in **Tidal Harbours**[104] as a well-sheltered harbour of refuge. At low water the depth was 9 ft., but the bar outside gave only 3 ft.

GREENMERSE. NX 9870.

The 6-inch O.S. map of 1850 marks a long line of mooring-posts by the bank of the Nith north-east of Greenmerse, and opposite Kelton (q.v.), but they seem to have disappeared before the survey was revised in 1966.

GLENCAPLE QUAY. NX 994687.

The earliest quay at Glencaple was built in 1746, on a virgin site gifted by the proprietor, William Maxwell of Nithsdale[105]. It is marked on Crawford's map of Dumfriesshire (1804). The existing works, however, date only from the early 19th century, when they were constructed as part of the general reorganisation of the port of Dumfries (q.v.) to accommodate ships too large to approach nearer to the town[106]; and in this phase the harbour was mentioned, in 1847, as one of the nine landing-places in the Nith estuary[107]. As it stands today, the quay has a western frontage on the river-bank, about 130 ft. in length and carrying bollards made of the butts of large trees. The N. side is flanked by a large tidal ditch, fed by a stream which keeps the quay-face free of silt. A flight of steps descends from the quay into this ditch. The S. face returns some 50 ft. at right angles to the W. face, diverges slightly southwards for 40 ft., and then resumes its original direction for a final 100 ft.; much of it, however has been encroached on by the river-bank, and there are now no traces of the shipbuilding yard that is marked here on the O.S. map of 1856. A few mooring-posts stand by the bank south of the quay, and

101 *Stat. Acct.*, xi, 312.
102. *Stat. Acct.*, xiii, 345.
103. *NSA.*, iv (K), 292.
104. Pp. lix, 612.
105. *Dumfries*, 654.
106. *NSA.*, iv (D), 22.
107. *Tidal Harbours*, lix

more are marked on the same map both to north and to south, together with a wooden pier about half a mile to the north, now vanished.

Glencaple was an important shipbuilding centre, the great majority of the ships registered at Dumfries in 1820 having been built either there or at Kelton (q.v.) In the years 1787-1818 eighteen coasters, mostly small sloops, came from Glencaple, and also four brigs for foreign trade, the largest of them 209 tons[108].

KELTON. NX 990704.

No remains of any harbour-works can be seen at Kelton, although records of ships unloading there can be traced as far back as the middle of the 17th century, and Kelton Scar was still noted in 1847 as one of the nine land-places in the Nith estuary[109]. The O.S. map of 1856, however, shows mooring-posts set out along the river-bank, and others extending for more than half a mile along the embanked shore of the Merse, a little further upstream, and these may or may not have had some connection with the shipbuilding industry that Kelton formerly possessed. A contract of 1738 survives for the building of a ship for an Annan consortium 'on the Merse of Netherwood', just above Kelton; and the importance of this industry is shown by the fact that the great majority of the ships registered at Dumfries in 1820 had been built at Kelton or Glencaple (q.v.), twenty-nine coasters, mostly small sloops of 40 to 65 tons having come from Kelton in the years 1804-20[110]. The Dumfries firm of Robert Thomson, to quote an example, had built at Kelton since about 1812. Some remains of workshops and a smithy, part of the shipbuilding installations, were still visible at Kelton a few years ago.

KINGHOLM QUAY. NX 974736.

The existing harbour-works at Kingholm date only from the first quarter of the 19th century, the place having been developed in the course of the re-organisation of the port of Dumfries (q.v.) In this phase it was mentioned as one of the nine landing-places in the Nith estuary[111]. An earlier quay, however, had been built in 1746[112], and a landing-place of some sort had evidently been in use at a still earlier date, as, in 1707, a road was made from Dumfries for carters having business with the quarries and shipping at Kingholm[113].

The 19th-century structures consist of a basin with a quay on either side of it. The basin is excavated obliquely into the river-bank, on a north-easterly axis, and measures 230 ft. and 340 ft. along its NW. and SE. sides respectively by 70 ft. in width. It is flanked on the north-west by an earthen embankment, which returns northwards along the shoreline and was evidently intended to prevent the flooding of the saltings that lie to the north. Drainage from these saltings on which the meanders of old grassed-over ditches can still be traced, is led through a sluice-gate to enter the basin at its inner end through two stone-built underground conduits; this water has kept the floor of the basin clear of silt immediately below the conduits, but a bank of muddy deposit has built up between them which now

108. *Shipping* 1820, ll ff.
109. *Tidal Harbours*, lix.
110. *Shipping* 1820, ll ff.
111. *Tidal Harbours*, lix.
112. *Dumfries*, 654.
113. Ibid., 542.

divides the basin lengthwise into two. The floor of the basin, where it has thus been kept clear, can be seen at low water to have been pitched, at least in its uppermost 30 ft., with large stone blocks set on edge. A flight of steps descend into the basin on its NE. side, and bollards of both stone and iron are present. The 25-inch O.S. map of 1900 shows a row of mooring-posts running southwards from the return of the quay, and this stretch of the river-bank is revetted with masonry. In 1847 the total length of wharfage was given as 831 ft.[114] The harbour remained in use until 1939.

KIPPFORD. NX 835553.

In the years after 1812, Kippford was actively engaged in the building and repairing of ships, and at the same time provided good mooring facilities. The last ship was built there in 1867, but repair-work was continued until 1911. Only the scantiest traces of this industry now survive, but a stone heavily scored by the keels of vessels was discovered recently when the concrete surface of a boat-slip was broken up and this relic of an earlier slip uncovered. The house known as Whin Cottage was formerly a shipbuilder's store.

The earlier pier was demolished some years ago, the existing one being modern and intended only for pleasure-craft.

KIRKANDREWS BAY. NX 598480.

That a landing-place was in existence at the W. end of Kirkandrews Bay at least as long ago as the Early Iron Age is proved by discoveries made in the galleried dun of Castle Haven.[115] While the dun's main entrance is to landward, another doorway opens towards the south, and gives access by a steep stone stair to the beach some 12 ft. below. From the foot of this stair, a partially rock-cut passage, 40 ft. long and expanding in width from 8 ft. at the landward to 20 ft. at the seaward end, descends to what the excavator called a 'gangway', 50 ft. long by 4 ft. wide and constructed of 'large stones fitted together', which continues to the shore of the bay. Traces of rock-cutting have also been observed on a sheer-sided reef just off shore, beside which a ship might have lain; this observation recalls some rock-cuttings noted in Fife, e.g. at Earlsferry or Pittenweem (Boat Harbour), or at South Queensferry.[116] On the other hand, the parish minister wrote of the bay in 1794 without enthusiasm, merely stating that vessels of light burden anchored there occasionally in fair weather[117]. Its use by smugglers is on record[118].

KIRKBEAN POW. NX 984603.

Kirkbean Pow discharges into Carse Bay (q.v.), its mouth being covered by a gravel spit within which lies a small, sheltered haven. In 1710-11 this was the quarantine station for the whole of the Solway area. No trace of any quay or jetty can be seen today, and in fact the haven is so well sheltered, and its sides would have been so close to an anchored ship, that by the standards of the time a pier

114. *Tidal Harbours*, 609.
115. *PSAS.*, xlvii (1906-7), 69 ff.
116. *PSAS.*, ci (1968-9), 238, 264, 276.
117. *Stat. Acct.*, xi, 32.
118. *Smuggling*, 92.

might well have been considered unnecessary. It is true that the O.S. map of 1850 marks a quay inside the mouth of the Pow, but the remains of this structure must have been washed away or sanded up, and it is not remembered locally. It may have been associated with a kiln for making tile-drains which was worked here in the middle of the 19th century, clay being obtained from the banks of the Pow and coal being brought in and the product exported by schooner.

The opinion expressed by the parish minister of 1795, on the value to the local farmers of a conveniently placed harbour[110], has been quoted above (p. 109) as an index of the place of these harbours in the general economy of the district. It was no doubt this harbour, or perhaps Carsethorn or Carse Bay, that the minister had in mind.

KIRKCONNEL QUAY. NX 986675.

The site of Kirkconnel Quay now lies well inland, being separated from the Nith by a belt of recently-formed 'merse' about a half a mile wide. Few remains of any structure survive, but the O.S. map of 1850 shows a straight pier about 400 ft. long, and some traces of a shorter one, formerly used for the supply of coal, etc., to Kirkconnel House beside it. Some overgrown mounds can also be seen at what was the landward end of the long pier, and these are believed locally to be formed of debris from brickworks which once existed here.[120] With this tradition may be compared P. H. McKerlie's record[121] that part of Kirkconnel House was built in 1750 of bricks made on the property.

KIRKCUDBRIGHT. NX 6851.

The former 'haven' of Kirkcudbright is today represented by a straight stretch of quay-wall, which forms the facing of the left bank of the Dee for a length of some 175 yds.; but this arrangement only marks the final stage in a longish process of evolution, for an understanding of which it is necessary to review the history of the site.[122]

The mediaeval town occupied a raised gravel ridge, bordered on the north by the river and partially encircled on the east and south-east by a tidal creek and its associated streamlets and marsh. The resulting semi-insular site bore, at some point probably near what is now the N. end of the High Street, a motte, of which no material remains survive in a recognizable form, though its memory is perpetuated in the place-name 'Mote Brae'. The site was suitable for a stronghold, as it combined good water-defences, some sort of sheltered landing-place at the mouth of the creek, and control of the only ford across the lower Dee[123]. Another feature of the Mote Brae site which concerns the harbour's history is the vanished Greyfriars Convent, founded there about 1455, the wall of whose graveyard evidently ran close beside the riverbank. In 1569 the Friary lands and church were granted by the King to Sir Thomas Maclellan of Bombie, who handed them over to the

119. *Stat. Acct.*, xv, 128.
120. Information from Mr J. Williams.
121. *History of the Lands and their Owners in Galloway* (1879),, v, 220.
122. The history of the town and its harbour has been discussed by J. Robison in *Kirkcudbright* (1926), and use of this work has been made from place to place in the present account.
123. In 1843 the ford was passable 'sometimes', the depth of water 'on some singular occasions being no more than 1¼ foot'. (*NSA.*, iv (K), 31.

Town, the church becoming the Town's parish church in the following year.[124]

It is desirable, before going further, to consider the position and extent of the tidal creek, as this has had a great deal of influence on the harbour's development. From plans preserved in the Stewartry Museum[125] it is clear that before about 1780, or even perhaps a few years later, the creek ran well inland past the E. sector of the Mote Brae, forming, with its associated swamp-land, a kind of finger bounded on the west by the slope below the Castle Street gardens, as these now exist, and on the east by the steeper rise to the modern parish-church of St. Cuthbert. Further north-eastwards, again, the marshes covered what is now the E. part of St. Cuthbert Street virtually as far as its junction with Millburn Street. A property known as Creikheid is recorded hereabouts at least as early as the middle of the 17th century. Information kindly supplied by Mr A. L. D. Bowick, formerly the Burgh Surveyor, is to the effect that the whole of these waterlogged areas was drained by a system of conduits, which converged on a brick-built gathering-pit at the foot of the finger-like hollow just mentioned, and was discharged thence into the harbour. Since the filling-up of the harbour basin, the sewer has been prolonged and now opens straight into the Dee. The result of the subsidence caused by this underground water and the gathering-pit can be seen in the sagging of the roof-line and the distortion of a fanlight and a string-course at Nos. 18-22 St. Cuthbert Street. The road leading from Millburn to the creek crossing, on the way to the church and castle, was known as the Creik Gait, and it conformed to the natural conditions by following a slightly sinuous course through the ground just north of St. Cuthbert Street; this latter, strictly aligned from end to end as we see it now, represents the older route in a rationalised form, and must be classed, like St. Mary Street and Castle Street, as an improvement dating from the end of the 18th century[126]. The Creik Gait is mentioned in the Town records at least as early as 1588[127].

Evidence for the creek having functioned as an enclosed harbour has been seen in an English military intelligence-report dated on internal evidence to the years 1563-5[128], which states that 'at full sea thei [ships] may pas up and lye at all times under the freres of the town'; but this pretty certainly implies no more than that ships habitually tied up, or grounded, below the NW. sector of the Friary's graveyard, and not that they entered the creek and moored by the graveyard's E. sector. This interpretation of the passage is supported by the Town Council records of the 17th century, which consistently refer to 'the shore', 'the Moit' (1611), or 'the Moit wall' (1640), the last word being sometimes spelt 'woll', an old Scots form of 'well', which has persisted in the modern name of Motewell House, but apparently never to the creek, as the place where ships were handled. Again, in 1656 and 1657

124. Some remains of this church can be seen incorporated in the rebuilt Episcopal church on this site (RCAM, *Inventory of Kirkcudbright*, p. 108).

125. (i) Tracing of 'Plan of the Town of Kirkcudbright', by John Gillone, junior, dated 1776. (ii) Original plan, serial no. 3, of the Earl of Selkirk's properties in the town, also by John Gillone, junior. Though undated, it can safely be associated with (i), as it shows the same details on a larger scale. (iii) Tracing of an unsigned 'Plan of Kirkcudbright Castle & Yards, etc', dateable to the later 18th century by its representation of St. Mary's Street as planned but not formed, and of Castle Street as formed only in its N. part but not given a name, and with no building stances laid out along it.

126. An heraldic panel on the Masonic Arms, Castle Street, bears the date 1790.

127. *Kirkcudbright Town Council Records*: 1576-1604, 229.

128. Armstrong, R. B., *History of Liddesdale, etc.*, i (1883), App. lxx, p. cvi.

it is 'shore-masters', not 'harbour-masters', whose appointments are recorded[129]. Nor need the language of the Town's application (1608) for help in the 'reparatioun of thair heavin and mott'[130], nor a reference (1641) to the 'harborie'[131], necessarily apply to the creek rather than to river-bank wharfage or to a foreshore kept in a suitable state for ships to take the ground. At rather later dates A. Symson (1684) mentions the 'Kirk wall'[132], while J. Macky (1723), though he alleges that a warship could 'throw her anchor into the Churchyard'[133], clearly shows that he envisages the haven as extending to the whole of the estuary, as he states that its mouth is closed by an island, i.e. Ross Island, and that it is big enough to hold 'all the Fleet of England'. Tucker no doubt took a similar view, when he ranked Kirkcudbright (1655) as one of the best ports on that side of Scotland[134]. In fact, the first evidence for harbour-works elsewhere than along the frontage dates only from 1684, in a plan prepared for the Board of Ordnance[135]; this marks a small enclosed basin, titled 'Ye Dock', at a point apparently corresponding with the mouth of the creek, and also three ships lying at the riverbank a short distance downstream. Between the W. end of the existing quay-wall and the buildings of Castle Bank, the former ferry-terminal is today represented by a stretch of foreshore 90ft. long with a masonry ramp in its centre; Gillone's plan of 1776 marks this point as 'Landing place where ships unload'.

Notwithstanding the natural advantages that Kirkcudbright enjoyed, seafaring seems to have played a comparatively unimportant part in the town's life, at any rate before the later years of the 18th century. Macky remarks[136] on the small amount of shipping owned in the town in his day, and on the lack of interest in fishing shown by the people; while Defoe[137], in 1727, uses strong words about their poverty and lack of initiative in business. Later in the century, according to W. Gilpin[138], the town had no extensive trade, though it employed enough coasting vessels to 'people the bay with shipping'. Whether or how far these depressed conditions are to be attributed to damage from smuggling, as mentioned above in the introduction, is a question which goes beyond the scope of the present study; here it will suffice to notice that the port became more active from the later 18th century, and in the 19th possessed an important shipbuilding industry comparable with those of Kelton and Glencaple[139].

So much for the historical background, but in considering the existing structures it is unnecessary to go back further than about 1817, to which year J. Robison dates the reconstruction of the harbour[140]. Another record (1836) of what was presumably the same operation states that 'between 1822 and 1825 upwards of £1,620 had been expended on the excavation of the harbour, and erection of new piers'[141].

129. *Kirkcudbright Town Council Records*: 1606-58, 1027, 1061.
130. *Records of the Convention of Royal Burghs*, ii, 266.
131. *Kirkcudbright Town Council Records*: 1606-58, 637.
132. *A Large Description of Galloway* (1823), 14, as in *Geogr. Coll.*, ii, 109.
133. *A Journey through Scotland* (1723), 1 f.
134. *Early Travellers*, 180.
135. Reproduced by Macleod, I. F., *Old Kirkcudbright*, Pl. 5.
136. Loc. cit.
137. A Gentleman, *Tour thro' the whole Island of Great Britain*, iii, 67.
138. *Observations made in the year* 1176 *on several parts of Great Britain, etc.* (ed. 1792), ii, 104.
139. Q.v. For details of shipping and shipbuilding, see *Shipping*: 1820, 7 ff.
140. Op. cit., 146.
141. *Municipal Corporations*, xxiii, 168.

By 1843 there existed a dock having one side of wood and the other of stone, the parish minister remarking that vessels would often unload at the beach and take on their cargo in the dock[142]. He gives the depth of the water as varying between 30 ft. at springs and 25 ft. at neaps; a later estimate, of 1847, gives 7 ft. to 30 ft. according to the state of the tide, with 17 ft. at the quays at springs[143]. The O.S. maps, beginning with a 6-inch edition of 1850, show the creek organized as a parallel-sided basin 145 ft. long on its W. side, including a quay which projected 65 ft. forward of the shore-line, 290 ft. long on the east over a projecting L-shaped 'landingstage', and 80 ft. wide. Its inner end was 170 ft. from the southern house-fronts of St. Cuthbert Street, and its SE. corner, which formed an acute angle, was 105 ft. from the opening of St Cuthbert's Place. Old photographs, perhaps of the 1890s or earlier, preserved in the Stewartry Museum, show the landing stage as a timber structure at the end of a stone quay, and numerous bollards. One photograph shows, close to the basin on the west, what appears to be the entrance to a shipbuilding yard just east of the Mote Brae; a yard is marked here on the large-scale O.S. town-plan of 1862, and Robison states that the easternmost part of the Brae was turned over, after extensive levelling, to industrial uses which included a ship-yard. He implies a date in the earlier 19th century. The whole area was made into a pleasure-ground in 1895.

The 19th-century harbour was re-organized in 1912, when the dock was filled in and the quay-wall was given its present form. Among the cast-iron bollards there are five of a peculiar form, being bean-shaped in horizontal section. The specimen examined measured 25 ins. in width at ground level by 10 ins. in thickness at the centre, while the top thickened and overhung the concavity. The convex side was turned away from the waterfront, and in some cases an iron bar, 1 in. thick and curved to shape, had been bolted horizontally 9½ ins. below the shoulder, to prevent ropes slipping off. As one of them appears in a 19th-century photograph, they must have been old quay-fittings re-used after 1912.

KNOCKBREX HAVEN. NX 582495.

This seems to have been a place of little importance, the parish minister of 1794 recording merely that Knockbrix Bay was better than Bridgehouse or Kirkandrews Bays but exposed to southerly and westerly winds [144]. The 'safe and commodious harbour', whose close proximity later encouraged a local farmer to build two trading-vessels of his own[145], was presumably the Dee estuary as a whole; but the further note, that 'our ports are visited by other coasting vessels as occasion requires', no doubt covers Knockbrex.

The existing quay is of very recent construction, and appears to have been intended for use by private yachts. Nothing is marked on the 6-inch O.S. map of 1850.

LAGHALL QUAY. NX 973732.

The construction of this quay was reported to the Nith Harbour Commissioners in 1823, as part of the scheme for the improvement of Dumfries Harbour, but

142. *NSA.*, iv (K), 31.
143. *Tidal Harbours*, lviii.
144. *Stat. Acct.*, xi 32.
145. *NSA.*, iv (K), 60.

records of the use of the place go back to at least as early as 1694. In 1849 Laghall was mentioned as one of the nine landing-places on the Nith estuary[146]. The work is situated on the right bank of the river, about a quarter of a mile downstream from a point opposite Kingholm, and was evidently approached from Mavisgrove. The road from this abandoned steading, now much overgrown, is raised above the level of the fields on either side — themselves no doubt stabilised from 'merse', as traces of a grassed-over drainage-ditch can be seen on the north, and on the south the roadway impinges on what seems to have been the mouth of a small 'pow'.

The quay is well built of dressed red-sandstone slabs and blocks, measuring about 70 ft. along its face and returning inland for about the same distance at its N. end. At the angle of the return, which is rounded, the work projects some 14 ft. from the present line of the riverbank, but the former N. face is now largely earthed up, only the uppermost courses of the stonework appearing in a flanking ditch. The surface of the quay is obscured by herbage; but two stone bollards remain, and an iron bollard, similar in pattern to those at Kingholm, stands in the field to the north. This last may be associated with the long series of mooring-posts marked on the O.S. map of 1856.

Immediately downstream from the quay, the riverbank has evidently been improved to a certain extent, perhaps to prevent erosion of the quay by a current, as sandstone facing can be found at the lip of the riverbank for some 40 ft. At its junction with the quay this construction is at least four courses deep. A single massive mooring-post stands just south of this improved stretch; erosion has laid bare its underground portion, and has provided a remarkable object-lesson in the depth to which posts and bollards had to be sunk.[147]

The remains of another old quay, a short distance downstream from the works just described, were observed from across the river. This appeared to be of earthen construction, and the considerable quantity of stone and debris visible on the mud at its base is probably derived from eroded boulder foundations or rough masonry facing.

MANXMEN'S LAKE. NX 6748, 6848.

Manxmen's Lake is a large inlet in the E. part of the Dee estuary, separated from the main waterway by St. Mary's Isle. Most of it dries out at low water. Murdoch Mackenzie marked anchorages there in 1776[149], and in 1794 the minister of Kirkcudbright, who evidently regarded the inlet as part of the town's harbour, noted it as a safe anchorage and gave some navigational instructions[150]. His successor of 1843 considered that Kirkcudbright possessed two harbours, the one at the town and also Manxmen's Lake; he mentioned the bar that made entry to the inlet difficult, and stated that a depth of from 14 ft. to 16 ft. could be obtained after four hours' flood[151]. No record has been found of any harbour-works, and smugglers[152] and others who landed there no doubt simply took the ground.

146. *Tidal Harbours*, lix.
147. For some parallel cases, see *PSAS*, ci (1968-9), 213.
(148. Omitted.)
149. *Maritime Survey of Ireland and West of Great Britain.*
150. *Stat. Acct.*, xi, 12.
151. *NSA.*, iv (K), 31.
152. *Smuggling*, 9.

MILLFIELD. NY 186662.

There are three small stone jetties on the right bank of Annan Water, between the railway bridge and the inflow of the Old Mill Burn. They form no part of the town harbour of Annan (q.v.), as this reach of the river is separated from the back-water and mill-lade that serve the latter by the low-lying Minister's Merse. The central jetty was visited, and was found, though largely turfed over, to be well built of cut red-sandstone blocks, held together with iron clamps; it is about 55 ft. long by 15 ft. wide, and is set obliquely to the bank with its end pointing downstream. On its downstream side there is a recess in the bank large enough to hold a boat. Of the other two jetties, one lies about 300 yds. downstream and is shown on the O.S. map as being about 40 ft. long and L-ended; the other is small and lies mid-way between the central one and the railway-bridge.

MULLOCK BAY. NX 7043, 7143.

This bay accounts for nearly a mile of coastline, but the only point of interest suggested by the O.S. maps is the place-name Brandy Burn (712439). This name compares significantly with Wood's record[153] of the bay having been used by smugglers. In 1844 the minister of Rerrick parish considered that the bay could be made 'safe and convenient' at small expense[154], and his predecessor of 1794 had likewise suggested improvement[154], but nothing seems to have been done.

NEW ABBEY POW, or BOG QUAY. NX 977655.

That a landing-place on the New Abbey Pow, at or near Bog Quay, was in use as long ago as the early Middle Ages is suggested by the existence, less than a quarter of a mile away, of Ingliston Motte. A further hint of the early use of the site is provided by the remains of a hollowed track on the line of the farm-road that leads north-eastwards from point 975652 on Highway A710, and by slight traces of a roadway continuing the same line north-westwards, perhaps towards one of the Abbey's granges. As far, however, as written sources go, the earliest record, apart from a note of the place having been used by smugglers at some unspecified time[156], seems to be a petition of 1788 to the Town Council of Dumfries asking for the bed of the Pow to be cleared, in view of the existing hazard to the considerable number of ships making use of it. Again in the 18th century, Ainslie's map of the Stewartry (1797) marks the place as 'Loch-hill Quay'. In 1844 the Pow was said to be navigable, at springs, to within a mile of New Abbey village by vessels of 60 to 70 tons, but the harbour, described in 1847 as 'a small tidal Wharf wall[157], was in a very bad state[158]. Also in 1847 it was listed as one of the nine landing-places in the Nith estuary[159]. The 6-inch O.S. map of 1853 marks 'Bogue Quay', the form 'Bogue' evidently representing the local pronunciation of Bog, but the 25-inch editions of 1895 and 1966 show nothing beyond the straight edge of the quay-face, about 120 ft. long. The structure as it now survives consists

153. *Smuggling*, 92.
154. *NSA.*, iv (K), 361.
155. *Stat. Acct.*, xi, 48.
156. *Smuggling*, 111.
157. *Tidal Harbours*, lix.
158. *NSA.*, iv (K), 253.

only of the facing of this quay, constructed of rough drystone masonry reinforced in places by upright frontal timbers, but somewhat dilapidated. A few timber bollards remain, and a heavy chain, 23 ft. long, is pegged to the ground on the landward side of the quay.

Some interesting information about shipping at the quay in the final years of its life have been supplied by Mr James Kingan, whose family firm, James Kingan and Sons, Ltd., of New Abbey, made use of the place as recently as the 1920s. Mr Kingan recalls five schooners[160] which carried typical cargoes of the coastal trade of those days — timber, potatoes and oats to Liverpool, Rhyl, Whitehaven, Maryport and Silloth, and on their return maize, cake, bran, wheat and coal, the last from Whitehaven or Maryport. He describes the difficulty of manoeuvring schooners up the narrow and twisty waterway, an operation only possible at all when the tide was nearly full. About 1925 Messrs Kingan fitted a 25-hp. engine to the 'General Havelock', but before this was done, Mr Kingan writes, 'We had a horse on each side with a tow-rope hauling up where we could manage access, and men helped where horses could not manage'. The quay could, on occasion accommodate two schooners at the same time, and the chain just mentioned was used for tying up moored craft. Mr Kingan further confirmed that a depression, which lies immediately downstream from the quay, contained a shipbuilding dock, and that the schooner 'Sweetheart Abbey' was in fact built there.

Along with this quay mention should perhaps be made of a range of mooring posts marked on the O.S. map of 1850 in Airds Moss (NX 9865), close to the mouth of the Pow, as these may well have played an analogous part in the local coastwise navigation.

NEWBY HARBOUR. NY 184658.

The smugglers' landing-place of Newby[161] is probably to be identified with the 'Newby Harbour' marked on Crawford's map of Dumfriesshire (1804), at the inflow of the Old Mill Burn into the Annan Water estuary. At this point the bank of the estuary recedes to form a small cup-shaped inlet through which the burn debouches, its lowermost part being crossed by a ford and a footbridge, the latter built since 1899. A sketch-plan accompanying an English military intelligence-report, dateable on internal evidence to 1563-6[162], exaggerates the size of the burn considerably and marks a church, apparently in square NY 1866, which cannot be accounted for, but indicates no harbour-works; nor is any trace of former construction visible on the site today.

PALNACKIE or BARLOCHAN PORT. NX 822570.

Palnackie has a long history as a port, being referred to as early as the 1660s as exporting millstones of Glenstocken grit. In 1796 the minister of Buittle parish recorded the landing of lime, for local use, 'at a port on the Urr at Barlochan, or Garden Creek'[163]; and it was evidently this same creek that his successor had in

160. 'Ocean Gem', 60 tons; 'General Havelock', 70 tons; 'Ulverston', 80 tons; 'Agnes Glover', 90 tons; 'Sweetheart Abbey', no tonnage stated. R. Simper, *Scottish Sail*, 24, illustrates the 'General Havelock' at Bog Quay, the figure shown on deck being Mr Kingan.

161. *Smuggling*, 121.

162. Armstrong, R. B., *History of Liddesdale, etc.*, i (1883), Appendix lxx, opp. p. cxii. Reproduced in RCAM, *Inventory of Dumfriesshire*, xxxii, fig. 1.

163. *Stat. Acct.*, xvii, 122.

mind when he wrote, in 1844[164], that there was no 'regularly built' harbour at Palnackie, but only a 'temporary wooden quay' on one side of the creek, where six vessels could be loaded or discharged. Such facilities as mooring-posts, ring-bolts and an access-road were provided, and dues were charged. This description tallies with a record of 1847, which mentions a creek faced with timber for a distance of 300 ft., in which the water was 20 ft. deep at springs[165]. The parish minister of 1844 went on to suggest that improvements should be extended along the bank of the river, and also on the opposite side of the creek; and this advice had evidently been followed before the arrival of the earliest Ordnance surveyors, as the 6-inch map of 1849-51 shows that the creek had by then been replaced by a built dock, through which ran a stream regulated by a sluice. This dock perpetuated the old name of Barlochan Port, which in fact still appears on the 25-inch edition of 1973. Some details of this dock can be obtained from the edition of 1893, which shows it as lying obliquely to the river-bank and measuring 300 ft. and 220 ft. in length on its NW. and SE. sides respectively by 40 ft. in width; there is a slip at the outer end, a crane, and mooring-posts along the riverside upstream. It was no doubt in virtue of these improvements that ships of up to 350 tons were able to use Palnackie at the turn of the 19th and 20th centuries[166]; but even the unimproved creek must have enjoyed a considerable advantage over landing-places further upstream on account of the greater depth of water obtainable in the lower reaches. Thus, in contrast to Palnackie, the industrial quays at Steadstone and Oldland quarries (square 8358), about half-way by river to Dalbeattie Port, could accommodate ships of no more than 280 tons, while the maximum figure for Dalbeattie Port itself was 150 tons[167].

The dimensions of the harbour, as given above, remain valid, but the sluice no longer exists and the small stream that formed the original creek now enters the basin freely, by a culvert under a bridge which forms the basin's inner end. A slight difference in build between the culvert and the substructure of the bridge probably reflects alterations connected with the removal of the sluice. The sides of the basin are revetted with a variety of materials — rough masonry, sandbags and corrugated iron sheets — and these in turn are faced with rather heavy timbering which is beginning to deteriorate at the basin's outer end. A few bollards are present, of stone and wood; the floor of the basin is heavily silted notwithstanding the flow of the stream. The harbour still functions, but in a very small way.

PALNURE BURN. NX 455631.

In 1842 the parish minister of Minnigaff recorded that the Palnure Burn was navigable 'for a short distance', and that there was a small quay at Palnure Bridge which could be used by craft of up to 60 tons[168]; but his colleague in Kirkmabreck, two years later, stigmatised the place as 'not worthy of the name of a harbour'[169]. I. F. Macleod has identified the remains of a quay at the bridge[170], and states that

164. *NSA.*, iv (K), 212.
165. *Tidal Harbours*, lix.
166. Frew, Rev. D., *The Parish of Urr*, 142.
167. Ibid.
168. *NSA.*, iv (K), 139.
169. Ibid., 343.
170. *Gatehouse*, 15.

two ships were built in the burn in the middle of the 19th century; but when the site was visited in the summer of 1975 all its features were obscured by dense herbage. W. A. King-Webster has found the burn navigable as far as the bridge[171].

PORT MARY. NK 752455.

This site was not visited, but information regarding it was obtained from Mr J. Kenneth, formerly of Port Mary House. He stated that the track of an old road ran down to the head of the creek that forms the 'Port', presumably to give access from Dundrennan Abbey, and that the rocks flanking the creek had been cut back to allow vessels to come alongside. This cutting extended for some 60 to 80 yards out into the Firth. The parish minister suggested, in 1794, that the creek, from which Mary, Queen of Scots, is commonly said to have made her departure from Scotland, would merit improvement[172]. Cf. Abbey Burnfoot.

PORT WARREN. NX 879535.

J. M. Wood's record of smuggling carried on at Colvend, and of a smugglers' cave existing there[173], tallies with the presence of a cellar under the manse of Colvend, which was approached unobtrusively through a hatch in the parlour floor. For communication with this house from the sea, Port Warren, or perhaps Glenstoken, would seem a very suitable landing-place.

POWFOOT. NY 150657.

In 1793, Powfoot was described as a 'small harbour', from which grain was shipped[174], and in 1834 Queensberry Bay, into which the Pow debouches, could give small vessels shelter from northerly winds[175]. At the latter date a hamlet called Queensberry Village occupied both banks of the stream; but the earlier appearance of the place has been totally disguised by its development as a seaside resort, about 1900-6, by the then laird. The burn-mouth, however, in its natural state, together with the adjoining foreshore, would no doubt have served well enough for the shipping requirements of 1793, and for the contraband trade to which the place-name 'Brandy Loaning' significantly points[176].

RAVENSHALL. NX 5252.

Kass Cave and Whigs' Hole, situated on the coast below Ravenshall, are mentioned by I. F. Macleod as having probably served smugglers or political refugees[177]. J. M. Wood likewise notes a smugglers' landing-place with a cave at Ravenshall[178].

ROCKVALE QUAY. NX 636452.

This quay is situated on the E. side of Brighouse Bay (q.v.), within the tidal area at the latter's inner end — the shore-line here lying approximately north-east and south-west. It is approached by a short length of roadway contrived immediately above high-water mark and revetted on its outer side with boulders. Heavy

171. Personal information.
172. *Stat. Acct.*, xi, 41.
173. *Smuggling*, 28, 52.
174. *Stat. Acct.*, vii, 309.
175 *NSA.*, iv (D), 245.
176. *Smuggling*, 33.
177. *Gatehouse*, 18.
178. *Smuggling*, 42.

iron warping-rings are set at two points in this revetment. The road ends at a well-built drystone breakwater, in good preservation and probably of no great age, which is aligned north-north-west and bears two slender granite bollards of round section on square bases. Inside the breakwater, in the pocket between it and the shore, a tidal basin has been formed measuring about 67 ft. by 50 ft. and constructed of large, rough drystone masonry. Its landward (SE) side carries forward the line of the approach-road's revetment, and is supported from place to place by timber uprights; the SW. side parallels the inner side of the breakwater and the other two sides are open. Though perhaps older than the breakwater, the basin does not suggest a date earlier than the 19th century, nor does a small house, perhaps a fishermen's store, which stands on the slope above.

ROSS ROADS; ROSS BAY. NX 6543, 6544, 6444.

The 16th-century military intelligence-report mentioned under Kirkcudbright **(supra),** in describing the approach to that port, remarks that 'shippes at the ground ebb may arryve and lye within the yle of Ross'; and in 1794 the entrance to Kirkcudbright Bay was said to be on the east of Little Ross island, an anchorage between 200 and 300 yds. to the north-east giving from 16 to 40 ft. of water according to the state of the tide[179]. This roadstead, which was protected by the island, was described in 1847 as 'the best and only refuge' on this coast between Liverpool and Loch Ryan[180]. Ross Bay, an inlet in the W. shore of Kirkcudbright Bay, opens just north of the roadstead, and was mentioned in 1684 as 'a very famous and large harbour', and one of the best in the west of Scotland[181]. An anchorage is shown there in Mackenzie's **Maritime Survey** (1776)), and in 1794 the place is mentioned, under the name of Balmalgan Bay, in one passage as a small, safe harbour and in another as a safe and commodious one[182]. Smugglers are said, not unnaturally, to have used the bay[183].

SLATE HARBOUR. NX 671493.

The 6-inch O.S. map of 1850 marks a roadway here leading out across the tidal flats to a setting of posts. The analogy of the 'tramway' at Caskiel Point combines with the place-name to suggest some industrial installation rather than an ordinary harbour.

SOUTHERNESS. NX 978541.

In 1655, Tucker reported that small boats came from England to 'Satternis' with salt and coal[184]; and in 1795 an anchorage with depths of from three to four fathoms was noted at 'Salterness', together with a tower, set up as a sea-mark by certain Dumfries merchants engaged in the Virginia trade and subsequently heightened by Mrs Oswald of Auchencruive[185]. This was evidently the light-house marked on Roy's map (1747-55), the building of which is recorded in the Town Council minutes of 1748. In the 1790s the Town was still paying a keeper and

179. *Stat. Acct.*, xi, 11.
180. *Tidal Harbours*, lix.
181. Symson, A., *A Large Description of Galloway* (ed. 1823), 14, reproduced in *Geogr. Coll.*, ii, 65.
182. *Stat. Acct.*, xi, 11, 32.
183. *Smuggling*, 93.
184. *Early Travellers*, 180.
185. *Stat. Acct.*, xv, 127 f.

buying oil for the light. In 1847 Southerness was mentioned as one of the nine landing-places in the Nith estuary, the lighting of the tower being noted[186]. No evidence of harbour-works has been found, but the moderately sheltered anchorage of Gillfoot Bay lies close by to the north.

SARKFOOT. NY 324662.

In 1793 the Firth was regarded as navigable as far as Sarkfoot by vessels of 120 tons[187], and in 1834 craft of 100 tons were calling at various points with cargoes of coal and slate from Cumberland[188]. Landing-places in Gretna parish other than Sarkfoot in use at the same time were given as at Brewhouses and Redkirk Point[189]; and West records Port Stormont as having been used by smugglers[190]. The parish minister of 1793 mentions a mild form of smuggling, by remarking that coal brought in by water from Cumberland 'evaded' the Scottish import-tax by being landed on the English bank of the Sark[191]; while his successor of 1831 alludes to the cargoes of contraband tea, tobacco, brandy and gin that were formerly landed 'in every creek along the coast'.[192]

Many years ago, an old resident recalled having seen the remains of a pier, reduced to the decayed stumps of its uprights, projecting from the mud at the mouth of the River Sark.

TONGLAND. NX 6853, 6953.

The reach of the Dee, known as the Boat Pool, immediately above the river's confluence with the Tarff, played a part in the former navigation of the estuary. Ainslie's map of the Stewartry (1797) marks a 'port' at the upper end of the Boat Pool, itself named 'Tongueland Port' on the O.S. map of 1850, and earlier use of the place is implied both by Symson's record (1684) that the Dee was navigable above the town of Kirkcudbright[193] and by the existence of Carse Motte on the left bank above Tongland Bridge. The parish minister, writing in 1793[194], remarks on the advantage accruing to the local inhabitants through their possession of two harbours, one on either river, though the water on the tidal flats at the mouth of the Tarff must have made landing difficult here for all but the smallest vessels. In 1843 sloops of some 30 to 40 tons came to Tongland regularly, and occasionally a small brig with coal or lime[195]. I. F. Macleod, again, classes Tongland as an 'active centre' among the smaller shipbuilding ports of the same period.[196]

No remains of mooring-posts or shipyard installations have been seen either on the Dee at the Boat Pool or on the lowermost reach of the Tarff, but it is on record[197] that, in 1804, the Commissioners for Tongland Bridge considered the improvement of the harbour, and the protection of the bridge from vessels beating

186. *Tidal Harbours*, liv.
187. *Stat. Acct.*, ix, 519.
188. *NSA.*, iv (D), 269.
189. Actually 'Heidkirkpoint', presumably a misprint for 'Reidkirkpoint'.
190. *Smuggling*, 121.
191. *Stat. Acct.*, ix, 531.
192. *NSA.*, iv (D), 269.
193. *Geogr. Coll.*, ii, 109.
194. *Stat. Acct.*, ix, 332.
195. *NSA.*, iv (K), 95.
196. *Shipping* 1820, 4.
197. Robison, J., *Memories of Old Kirkcudbright*, 150 f.

against it. This suggests that a quay or jetty may have been situated close to one or other of the abutments.

TORRS COVE. NX 676445.

The evidence of an early landing-place that was found at the galleried dun of Castle Haven, in Kirkandrews Bay (q.v.), can be paralleled in the littoral cave at Torrs. This was excavated and planned in the 1930s by S. V. Morris[198], who discovered considerable remains of stone construction at and near its month. Finds in the occupation levels pointed to the Cove having been used as a landing-place over a period of many centuries ending, apparently, in the later Middle Ages. The parish minister, writing in 1794[199], opined that the cave might have been 'a hiding-place in ancient times', and was 'not improbably a Druidical cave'; while the 18th-century pottery found in the uppermost levels might well suggest use by the contraband traders of that time. A tradition of smuggling has been recorded[200].

List A

Sites for which no detailed information is available.

Ardwell Isle (S)
Auchencairn Bay (S)
Balmae Haven
Barlocco Bay (S)
Battlehill (S)
Brewhouses, see Stackfoot
Boatdraught
Brandy Cove (SC)
Brandy Cove
Carline's Cove
Clinking Cove
Corbie's Cove
Craigraw (S)
Ford of Munches (SC)
Glenstoken Sands, (S), see Port Warren
Heston (S)
Horse Isles Bay (S)
Kirkclough Quay
Kirkdale Port
Orroland (S)
Port Donnel
Raeberry Castle (S)
Raes Port
Rascarrel Bay (S)
Red Haven
Redkirk Point, see Sarkfoot
Ruthwell Sands (S)
Seafield (S), see Annan and Waterfoot
White Cove (S)
White Port, NX 722434 (S)
White Port, NX 755454
White Port, NX 840519
Witchwife's Haven

List B

Sites arranged in topographical order from east to west. (Sarkfoot to Ruthwell are in 100-km. square NY, and the remainder in NX.)

Sarkfoot 324662
Dornock 2265
Battlehill 218650
Seafield 205645
Waterfoot (Annan) 190646
Annan 188662
Millfield 185662
Newby 184658
Powfoot 150657
Ruthwell Sands 0866
Glencaple 994687
Kelton 990704
Kingholm 974736
Laghall Quay 973732
Dumfries 9775
Greenmerse 9870
Kirkconnel 986675
New Abbey Pow 977655
Kirkbean Pow 984603
Carsethorn, Carse Bay, 9959
Southerness 978541
Brandy Cove 884541
Port Warren 879535
Glenstoken Sands 8753
Raes Port 865529
Port Donnel 845536
Kippford 835553
Ford of Munches ? 8358
Dalbeattie 829603
Palnackie 822570
Horse Isles Bay 8352
Gibb's Hole 831530
White Port 784519
Auchencairn 8051
Balcary Bay 823495
Red Haven 816518
Rascarrel Bay 8048
Barlocco Bay 7946
Black Cove 788467
White Cove 787466
Orroland 774462
White Port 755454
Port Mary 752455
Abbey Burnfoot 742243

198. *PSAS*, lxxi (1936-7), 415.
199. *Stat. Acct.*, xi, 25.
200. *Smuggling*, 45.

White Port 722434
Mullock Bay 7043
Raeberry Castle 706436
Clinking Cove 690436
Balmae Haven 678443
Torrs Cove 676445
Witchwife's Haven 673452
Manxmen's Lake 6748
Slate Harbour 671493
Kirkcudbright 6851
Tongland 6953
Carline's Cove 658471
Ross Roads, Ross Bay 6444, 6543, 6544
Brighouse Bay 6344
Rockvale Quay 636452
Kirkandrews Bay 598480
Ardwall Isle 5749
Knockbrex Haven 582495
Gatehouse-of-Fleet 5955
Boatdraught 536518
Kirkclough Quay 534520
Corbie's Cove 527522
Ravenshall 5252
Dirk Hatteraick's Cave 518526
Kirkdale Port 509532
Carsluith 486546
Caskiel Point 4756
Creetown 473586
Palnure Burn 455631
Carty Port 431625
Craigraw and Heston have not been located.

Abbreviations used in the footnote references:—
Cal. of Docts. Calendar of Documents relating to Scotland.
Dumfries. McDowall, W., **A History of the Burgh of Dumfries.**
Early Travellers. Brown, P. Hume, **Early Travellers in Scotland.**
Gatehouse. Macleod, I. F., **Gatehouse of Fleet and Ferrytown of Cree.**
Geogr. Coll. Macfarlane, W., **Geographical Collections relating to Scotland.**
NSA. The New Statistical Account of Scotland.
NSA (D). Ditto, iv (Dumfriesshire), 1845.
NSA (K). Ditto, iv (Kirkcudbrightshire), 1845.
PSAS. Proceedings of the Society of Antiquaries of Scotland.
RCAM. Royal Commission on the Ancient and Historical Monuments of Scotland.
Shipping 1820. Macleod, I. F., **Shipping in Dumfries and Galloway: 1820.**
Smuggling. Wood, J. M., **Smuggling in the Solway.**
Stat. Acct. The Statistical Account of Scotland (1791-9).
Tidal Harbours. Parliamentary Papers, **Reports of Commissioners, Harbours,** xxxii (1847).

IRREGULAR AND CLANDESTINE MARRIAGES IN DUMFRIESSHIRE

by
W. A. J. Prevost

In 1641 the Scottish Parliament passed an Act which made it illegal for the men and women of Scotland to get married in England or Ireland 'without proclamation of Banes heir in Scotland and againest the order and constitutiones of the church and kingdome . . .' The Act was intended to stop the 'great abuse' which followed upon the frequent marriages in those other countries or persons who could not get married in Scotland under Scottish laws, and to enforce the Act those persons who were irregularly married were to be subject to certain penalties. Thus, in the case of a nobleman the fine was £1000 Scots, of a landed gentleman 1000 merks, and of a person of inferior quality 100 merks. One half of each penalty was to go to the king, the other half to the parishes in which the married parties resided, and 'incaise of the poore conditione of ony man so maried foirsaid ordeanes him to be punished by stockes and irones . . .'[1]

In a way the authority of the kirk was increased, though an entry in the Dumfries Kirk Session Minutes for 10 December 1640 shows that before the Act of 1641 the kirk was not altogether powerless. The minutes record that two couples from Dumfries crossed the Border to Rockcliffe in Cumberland where they were married by Sir Abimelech High or Heigh. Sir Abimelech was neither a baronet nor a knight, for at one time it was the practice to use the honorific title "Sir", placed before the Christian name of ordinary priests. According to a reference in the Carlisle Diocesan Act Book he is described as being curate of Rockcliffe from 1606 to 1608[2]. The transcription of the minutes is as follows.[3]

'Johne Maxwell one of the Elders of the sessione for accompanying his brother Adam Maxwell and Agnes Sharp over the march to there unlawfull way of mariage contrarie to the church discipline of this kirk is removed of the Sessione by the voyce of the whole members thairoff, and ordained to pay 20 Lib. to the poore.

'James Fergussone merchand for going over the march with Isobell Morisone to Sir Abimelech Hight, Parsone of Racliff, contrarie to the nationall Covenant of this Kirk and Kingdome and discipline established thairin, is ordained to sit ane day in the pillar (which is this approaching saboth) and declare before the congregatione his grosse fault, and pay ane hundreth pound to the poore.

'Siklyk Adam Maxwell for his going over the march with Agnes Sharp contrarie to the order aboue writtin is ordained conformis priori. Johne and Robert Diksones for witnessing this marriage ar ordained either of them to sit ane saboth in the pillar, and each of them to pay x lib. to the poore.'

The amounts of these fines had perhaps been estimated by the session accord-

1. *Acts of Parliaments of Scotland*, v (1870), 348.
2. Cumbria Record Office, Carlisle, Carlisle Diocesan Act Book 1606-8 (DRC 3/3). P. H. Reaney, *A Dictionary of British Surnames* (1958) gives Height or Hight.
3. I am indebted to A. E. Truckell for the transcription.

ing to the ability of the guilty parties to pay. The sentence to 'sit' or to stand in the pillar has been well illustrated by David Allan in an outline etching with the caption 'The Black Stool of Repentance', signed and dated 1786.[4] The young man guilty of fornication is shown standing 'in the pillar,'[5] on a platform while being vigorously rebuked before the congregation by the minister from his pulpit. However the matter of fines was not allowed to lie dormant, and when the Act of 1641 was abolished, since it was included among the Proceedings of all Parliaments and Committees of the Estates from the year 1640 to the year 1648 annulled by the General Act Recissory,[5] Parliament passed in 1641 another Act to deal with the same abuses.

This was an Act against clandestine and unlawful marriages[6] which added imprisonment to the penalties of those persons who got married in some clandestine way 'by Jesuits, Preists, deposed or suspended ministers, or any others not authorised by the Kirk. Any persons that do get married in a clandestine way without proclamation of banns That they shall be imprisoned for three moneths . . . And that they shall remaine in prison ay and whill they make payment' of the penalties which were the same as in the earlier Act. The celebrator of such marriages was to be banished the Kingdom, never to return under the pain of death. However, in 1696, the death penalty was reduced to a forfeiture of £100 for every offence, and the fine for every man so married was reduced to £10.[7] These amounts were in Scots money when the Scots pound was worth one shilling and eight pence English money.

A clandestine marriage has been defined as follows. 'When the order of the church is observed the marriage is called regular; when otherwise, clandestine. Clandestine marriage, though it is valid, has statutory penalties annexed to it.'[8] An irregular marriage is a marriage which is not in conformity with the rule of the church, but of which more hereafter.

There is evidence that the penalties of the Act of 1661 were sometimes enforced and there is the case of a Dumfries man who had been lying in prison for six weeks for being a witness at a marriage in England in 1706.[9]

Besides a regular marriage when the banns were proclaimed such as described in the Acts of 1641 and 1661, a marriage could also be constituted by declaration made by the man and woman that they do now take each other for husband and wife. These declarations could be emitted on any day and at any time and without the presence of witnesses, and either by writing or orally or by signs, and in any form which was clearly expressive of intention. An irregular marriage did not differ from a regular marriage in its validity.[10]

Marriage by declaration was obviously open to abuses. If a boy of fourteen said to a girl of twelve, 'I hereby declare that you are my wife', or 'I hereby take

4. In possession of the writer, but see a reproduction of an earlier version (1784) in *David Allan* 1744-1796, 74, by T. Crouther Gordon.
5a. *Scottish National Dictionary.*
5b. Act Charles II, 1661. c. 126. 'Recissory Act'.
6. Acts of Parliaments of Scotland, vii (1820), 231.
7. Act 7 Will. III c.35.
8. John Erskine of Carnock, *Principles of the Law of Scotland* (1809), 69.
9. Information from A. E. Truckell.
10. Patrick Fraser LL.D., *Treatise on husband and wife* . . . 2nd edition (1876), i, 282.

you for my wife', or words to that effect and she signify in any way her assent they were validly and irrevocably married.[11] Young people must surely have been warned by their parents that they were on no account to enter into any such agreement even in fun. Miss M. C. Smith, who wrote under the pseudonym of 'Claverhouse,' tells us that centuries ago the law of Scotland was framed to promote marriage and prevent concubinage in districts remote from officiating priest or Sheriff.[12] This form of marriage by mutual consent and by word of mouth could, and still can, give rise to difficulty afterwards, in case of dispute, to prove the fact that a contract really was entered into at a given time. An expensive and ruinous litigation might be required to prove that a marriage had been effected.[13]

There was one other form of irregular marriage to which it is necessary to draw attention and that was by promise **subsequente copula,** that is carnal intercourse having followed. The distinction between the two words **irregular** and **clandestine** in connection with marriage has been clearly defined though it appears that from time to time there is some confusion in their use. It is almost unnecessary to point out that Gretna became notorious for the clandestine marriages which were conducted in that village by men who turned marriage into a very profitable business.

'Allison's Bank Toll-House'[14] at the bridge over the Sark on the Scottish side of the Border and the near-by Gretna village were the first convenient halting-places for runaway couples from England who found marriage as allowed by Scotch law an easy way of evading the English Marriage Act, which required the consent of parents and guardians, publication of banns and the presence of a priest.[15]

It is said that the celebrated and so-called Gretna Green Parson, Joseph Paisley, had been exercising his calling for 60 years at the time of his death in 1811, when he was succeeded by Robert Elliot who then claimed to have been 'the sole and only parson of Gretna Green'.[16] This was a most bombastic statement and 'Claverhouse' writes that there were at least four other parsons active in Gretna at that time. He also stated that he had performed 3872 marriages, this sum total having been obtained from his register.[17] Registers kept by these parsons and presumably the certificates which they presented to the married couples are accepted as evidence in Law Courts.[18]

Official certificates of marriage could not be given in cases of marriage by consent, or by declaration **de presenti.**[19] but in order to obtain some kind of a certificate it was sometimes the practice for the parties to an irregular marriage who wished their marriage to be registered, to get themselves convicted before the magistrate or justice of the peace, on a complaint by the Procurator-Fiscal, of having celebrated a clandestine and irregular marriage contrary to the Act of

11. *Marriages, Regular and Irregular,* by an Advocate, (Glasgow 1893), 46.
12. 'Claverhouse', *Irregular Border Marriages* (1934), 137.
13. *Chambers's Encyclopaedia* (1874), s.v. 'Marriage).
14. Marriage certificate, 29 June 1844.
15. Chambers's Encyclopaedia (1874), s.v. 'Gretna Green Marriages'.
16. Robert Elliot, *The Gretna Green Memoirs* (1842), 3.
17. Ibid. 63. A table, compiled from the register, shows marriages performed in each year from 1811-1839.
18. 'Claverhouse', op. cit., footnote on page 136.
19. *De presenti,* now, at present.

1661 and other statutes. An extract of the sentence was given out and kept as evidence.[20]

The evidence adduced was simply the confession of the man and woman, and the judgment proceeded upon that confession. The whole proceeding was very much of the nature of a farce except that it procured in a formal kind of way evidence that the parties had interchanged declaration of consent to marriage.[21] This is illustrated by an amusing story from Lochmaben in the **Dumfries Weekly Magazine** of 11 May 1773 which concerns two men who had courted a lady of some wealth for a long time. After a long and painful servitude the woman 'gave it hollow' in favour of Mr A. The day was fixed and the banns had already been published in the parish church for the second time when the lady changed her mind 'and pronounced anew in favours' of the other man. Mr B, not wishing to trust to luck, persuaded the girl 'on an immediate matrimonial connection in the clandestine way'. It would be nice to know if the married couple lived happily ever after.

The marriage complications of another couple, Robert Burns and Jean Armour, have been recorded by various writers of the poet's life. The accounts of his affair with Jean Armour and their subsequent marriage give a most informative picture of an irregular and also of a clandestine marriage. The story begins after Burns and his brother Gilbert had taken a tack of the small farm Mossgiel in Mauchline Parish in 1783. It was there that Robert 'formed his connection with Jean Armour' and which, in the spring of 1786, 'could no longer be concealed.' Gilbert writes that for that reason the couple agreed 'that they should make a legal acknowledgment of an irregular and private marriage,' that he should go to Jamaica to make his fortune, and that she should remain with her father till Robert was able to support a family.

The first part of the plan was carried into effect and Burns gave Jean what was called in Scotland 'marriage lines,' his written acknowledgment that she was his wife. As has already been pointed out this irregular form of marriage was valid and any offspring of the union would be legitimate. However it was not until after the couple were 'irrevocably' married that Jean's father became aware of the real situation. He was most distressed and according to Gilbert wished his daughter to 'cancel' the written papers which related to the marriage. Jean agreed and in April the document was destroyed.

The contract was thus 'rendered void'[22] but had there been such a lawsuit 'Armour **versus** Burns' as to whether it was void or not it was most unlikely that a decision could ever have been arrived at. Nevertheless, in order to obtain a certificate from the minister that he was a bachelor, Burns and Jean who was described as an unmarried woman in the Kirk Session minutes, appeared before the congregation in Mauchline Kirk on 6 August 1786 professing their repentance for the sin of fornication. Having already appeared 'two several Sabbaths,' they were

20. *Encyclopaedia of the Laws of Scotland*, ix, 417.
21. Fraser, op. cit. 257, 303, 480.
22. Professor Wilson, *Burns' Works* (1859), i, p, cl, which includes the account by Gilbert Burns in Dr Currie's *The Life of Robert Burns*.

rebuked and absolved from the scandal. On 3 September Jean gave birth to twins; a boy Robert survived, the girl died.

It is common knowledge that Burns never went to Jamaica. He had every intention of doing so and partly to procure the money to pay for his passage he published a collection of his poems at Kilmarnock in 1786. Briefly, this turned out to be a great success, both financially and otherwise, and the poet remained in Scotland.

At this time most of the so-called irregular marriages contracted were actually clandestine marriages as already described. It seems that the Act of 1661 had almost fallen into abeyance and insofar as the penalties were concerned the Kirk Sessions conveniently omitted to follow the letter of the law and ignored officialdom in the shape of the Procurator Fiscal. This is evident in the Mauchline Kirk Session Minutes when Burns and Jean Armour appeared before the Session. The story goes that on Sunday, 3 August 1788, the couple contracted a clandestine marriage. The ceremony of what was called a Justice-of-Peace marriage took place in the writing chambers of Gavin Hamilton, a writer in Mauchline and one of the poet's early friends. Two days later they both appeared before the Kirk Session. This was recorded in the Session Minutes for 5 August and the transcription reads as follows.[23]

'Compeared Robert Burns with Jean Armour his alleged spouse. They both acknowledged their irregular marriage, and their sorrow for that irregularity, and desiring that the session may take such steps as may seem to them proper in order to the solemn confirmation of the said marriage the Session, taking this affair under their consideration, agree that they both be rebuked for this alleged irregularity, and that they be solemnly engaged to adhere faithfully to one another, as husband and wife, all the days of their life. In regard the Session have a title in law to some fine, for behoof of the poor, they refer to Mr Burns his own generosity. The above sentence was accordingly executed and the Session absolved the said parties from any Scandal on that account . . . Mr Burns gave a guinea note for behoof of the poor.' Jean went to live at Ellisland with Burns at the end of November.

A reference to couples obtaining certificates of marriage in Dumfriesshire has been recorded in a letter written by a visitor to the county in 1825 when he was staying at the **Blue Bell Inn** in Annan. The inn was a place where irregular marriages were celebrated[24] and the landlord, Mr Hope, was the 'magistrate' who usually officiated on these occasions. 'The ceremony', he writes, 'is very short and simple and the cost seldom above half-a-guinea. The parties merely declare before the magistrate that they have been irregularly married, for which he fines them in terms of a Scotch Act of Parliament.' He then gives them a certificate which, 'it would appear, is a sufficiently valid contract in the eyes of the law, though its validity is not recognised by the church.'[25] The Act referred to above is that of

23. A. Edgar, *Old Church Life* (1886), ii, 199.
24. Rev. James Roddick, writing in March 1834 (*New Statistical Account* (1845), iv, 273), states that priests were numerous in Gretna and in other places, more particularly about Annan and Coldstream where traders in clandestine marriages were very active.
25. *The Scots Magazine*, xcvii, January 1826, 41-42.

1661. An example of one of these certificates of marriage, with a note of the fine paid, follows hereunder.[26]

'At Hillside the twenty eighth day of July in the year seventeen hundred and ninety In presence of me one of His Majesties Justices of the Peace Subscribing Compeared John Bell in Corry Hill and Janet Carruthers, daughter of James Carruthers of Braconhill, who both Acknowledged judicially that they have been irregularly married.

[Signed] Jannet Crautherrs [Signed] John Bell

Which Acknowledgment being considered by me I fine and ammerciate (sic)[26] the said Johns Bell and Janet Carruthers in the legal penalties of their irregular Marriage which fine I restrict to two Merks Scots[27] and declare them discharged on payment thereof Reserving to the Kirk Sessions and other Church Courts competent to call the Said John Bell and Janet Carruthers to Account in all other respects competent to them

Given AS Above

Wm Stewart, J.P.

The justice of the peace on this occasion was William Stewart of the family of Fasnacloich in Appin[28] who, together with a man called Greig, is recorded in 1795 as sharing the factorship of the lower and upper parts of the Annandale Estates.[29] He died at Hillside near Lockerbie on 23 February 1822 in his 78th year,[30] and was succeeded by his son Charles, also of Hillside, who became 'factor upon the Estates of Annandale'[31] and also a very well-known personality in the county for which he did much useful work.

The lady in the case was Jannet (1760-1816), a daughter of James Carruthers of 'Braconhill' near Lockerbie. Her great-grandfather was another James Carruthers, known also as 'of Breconhill,' an offshoot of the family of Dormont whose lineage through Carruthers of Holmains dates back to 1361.[32] She was a lady whose parents might well have been particular about welcoming or discouraging suitors.

The man, John Bell, is referred to in the certificate as being in Corriehill, in the parish of Hutton and Corrie. Just over a decade later he is shown as being a tenant farmer in Parkcleughfoot in the same parish,[33] but beyond the fact of his marriage to Jannet nothing more is known about him. 'There seems to have been a curtain drawn around the episode of his marriage', writes one of his descendants. His antecedents are so far unknown and were they in order he could claim membership of a clan whose connection with Dumfriesshire dates back to at least 1304, so that John Bell's ancestry would have been just about as good as that of Carruthers. Nevertheless there is an informative entry in the Baptismal

26a. The original certificate is in the possession of Miss Elizabeth Young, Angmering, Sussex.
26b. Amerciate, to amerce, to fine.
27. A merk Scot equals 13 one-third pence sterling.
28. Memorials of Dryfesdale Parish, Ewart Library, Dumfries.
29. *Claim against the Earl of Hopeton*, 13 Oct 1796, in the Annandale Estate Office.
30. Memorials of Dryfesdale Parish.
31. Scottish Record Office, Sasine Abridgments, Dumfries, s.d. 20 Feb. 1840.
32. A. Stanley Carruthers and R. C. Reid, *Records of the Carruthers Family* (1934), 24.
33. Register of Baptisms, Hutton and Corrie, 5 March 1801. 'Percleughfoot' as spelt on a memorial 31 Jan 1747 in Corrie Common burial ground.

Register of Hutton and Corrie, made at 'Craighouse,[34] March 5 1801,' which reads as follows: 'The ages of the three children of John Bell were copied from their Father's Family Bible into which they had been taken down at the very time of their births.' Margaret was born on 18 May 1791, James on 3 April 1796,[35] and David on 21 June 1799.

It would seem that John may have made his peace with the Kirk of Scotland. It is certainly pleasing to note that his eldest child Margaret was conceived and born in wedlock. Still, the fact that John and Jannet did not get regularly married in their parish kirk undoubtedly calls for an explanation. They must have been well aware that the Church of Scotland and the local people were opposed to irregular marriages, and in particular to the trade in run-away marriages at Gretna and elsewhere which 'was ever disreputable and very scandalous.'[36]

In order to put an end to these whizz-bang weddings an Act of Parliament[37] was passed which provided that after 31 October 1856 'no **irregular** marriage contracted in Scotland by declaration . . . shall be valid unless one of the parties had at the date thereof his or her usual place of residence there, or had lived in Scotland for 21 days next preceding such marriage'. It was a step in the right direction and the Act certainly applied the brake, but it did not insist that a couple so married had to carry out registration, application for which had to be made to the Sheriff of the county in which the marriage took place.[38]

Twenty years later Lord Fraser wrote that upon the Borders the system of Justices of Peace performing these irregular marriages and imposing fines for celebration was still in observance, one of the parties coming for three weeks from England to Scotland and of course remaining there for that period. He pointed out that the imposition of a fine was illegal,[39] while another authority has stated that the certain small penalties to which the parties, the celebrators and witnesses were liable, were then never enforced in practice.[40] This form of marriage, with all its complications, was legal until Parliament passed the Marriage (Scotland) Act 1939[41] which was due to come into operation on 1 January 1940 but actually came into force on 1 July, the delay of six months having been caused by the war.

The important parts of the amendment are that a marriage must be preceded by either a proclamation of banns in a church of the Church of Scotland, or a publication of a notice at a registrar's office, to qualify for which a person must have resided in the district for 15 days immediately preceding the application for banns or notice. In the case of a notice the registrar will display it for 7 consecutive days after the date of receipt, after which he can issue his certificate of publication. Two witnesses must be present at each form of marriage, and in both cases an entry will be made in the marriage register, and if desired an extract may be obtained from the registrar. 'No **irregular** marriage by declaration **de presenti**

34. Craighouse, 3½ miles NE of Lockerbie.
35. James farmed at Howcleuch near Breckonhill 3½ miles south of Lockerbie, and afterwards in Conhess where he died of 'old age' on 22 Nov 1883 aged 87. He married Jean Bell of Minsca (1794-1870).
36. *Imperial Gazetteer of Scotland* (1854), iii, 21. 'Gretna'.
37. Act 19 & 20 Vict. c. 96.
38. 'Claverhouse', op. cit., 136.
39. Fraser, op. cit., 257, 303, 480.
40. Chambers's Encyclopaedia, 338a.
41. Marriage (Scotland) Act 1939, 2 & 3 Geo. VI c. 34.

and by promise **subsequente copula** contracted after the commencement of this Act shall be valid.'

The Act of 1939 was long overdue. Over a hundred years ago the Rev. James Roddick, minister of Gretna, had much to say about the evil practices associated with these irregular and clandestine marriages. Among other things he writes that 'the existence of the law by which the practice has been generated is certainly a reproach to our country . . . and surely, were the General Assembly of our church to send up a petition to Parliament on this subject, such pernicious practices would be prohibited by legislative enactment.'[42]

Nevertheless, to a much lesser degree, 'a grave problem' still lurks in the parish of Gretna, and it has come about in this way. The legal minimum age for marriage in Scotland is 16 and the consent of parents is not required by law. This, in spite of the various provisions of the Act, has enticed 'runaway' lovers from abroad to elope to Scotland and in particular to romantic Gretna where they can get married in a registrar's office if the legal requirements have been complied with.

The runaways were flocking into Gretna in large numbers in 1957 when the Rev. William Fraser of Gretna St. Andrews wrote that for over two years the local ministers had refused to conduct runaway marriages,[43] partly because many of the contracting parties were too young but also because they had serious doubts about marrying couples without (in the words of the 1661 Act) 'the concurrence and consent of their parents'.

The most of these runaways came from Germany where the minimum age for marriage was 21 and where the consent of the parents was necessary in order to legalise the marriage contract. That minimum age has been reduced to 18 but it was not until the important clauses of the 1939 Act were broadcast throughout Germany that the German Consulate in Edinburgh ceased rescuing young and penniless couples who had eloped to Gretna. Many had planned to celebrate a clandestine marriage when absent without leave for a short weekend which of course was quite impossible.

Since 1975 when he was inducted into the living of Gretna, the Rev. C. Bryan Haston has married no runaway couples though he has directed many to Miss Patricia Bryden, the registrar, who 'manages to converse in German and French'. This has proved to be an invaluable accomplishment which has enabled her to deal with 51 runaway couples in 1976 from different parts of the world and from whom her office took particulars. Of this number 16 couples left without being married, either because they had not sufficient money to stay the required number of days, or because their parents came and collected them with a promise that in two years time they would be allowed to marry. She married the remaining 35 couples whose particulars are shown in a precis in the appendix.

Miss Bryden writes that from her years in the Gretna registrar's office 'anecdotes spring readily to mind.' Some couples who are already married come to get married, there is a barge on a German canal named **Gretna Green,** and so on. Two

42. 'Graitney', revised in 1834. *The New Statistical Account of Scotland* (1841), 273.
43. *Third Statistical Account of Scotland : Dumfriesshire* (1962), 436.

of her stories must suffice to bring this paper on clandestine marriages to an end.

'One which always must bring sorrow was where a young German couple eloped here much against their parents wishes. After marrying here they returned to Germany to another town, their parents forbidding them to come home. However, Christmas was nearing and the parents relented, asking the happy pair back home for the Christmas vacation. Unfortunately, while driving home, their car skidded, went over the parapet of a bridge and both were killed.

'On a brighter side, last summer a family arrived to see me from France. I had married the parents many years before and they were extremely happy. I asked them what they would say if their son or daughter ran away to Gretna to marry and their reply was, "If they are as happy as we are now, we would never stand in their way".

Acknowledgment.

I am greatly indebted to Dr Athol Murray who has most carefully edited my manuscript.

Précis of Marriages in the District of Gretna for year 1976

Place of Residence	Total	Both Parties Over 18	Both Parties Under 18	One Party Under 18	Persons Only 16	Divorcees
America	½	½	—	—	—	—
Australia	1	1	—	—	—	—
Belgium	7	6½	½	—	—	4
England	10½	2½	—	8	4	2
Germany	9	2½	½	6	3	3
Holland	5	2	1	2	—	1
Italy	1	1	—	—	—	—
Switzerland	1	1	—	—	—	1
Scotland	6	6	—	—	—	3
Local Church	23	20	1	2	—	2
Local Registry	9	8	—	1	1	8
	73	51	3	19	8	24

NOTE: Each ½ represents one person who has married a person of different nationality.

LOCHMABEN COUNCIL MINUTES

further notes by Dr J. B. Wilson

Lochmaben and the Second Marquis of Annandale

James Second Marquis of Annandale had, like his father the First Marquis, close ties with Lochmaben, for from the year 1703 until his father's death in 1721 they alternated each two years as Provosts of the Royal Burgh. In the Lochmaben Town Council Minutes of 23rd October 1704 the First Marquis is described as "ane high and mighty prince — William Marquis of Annandale Earl of Hartfell and President of her majesties most honorable privie Council Lord Provost of the aforesaid Burgh."

Shortly after his father's death James was approached by Lochmaben Town Council who pointed out "that Lochmaben being the head Burgh of the Stewartry (of Annandale) and by constant law and custom the seat of the Stewart Courts (these courts) ought to be regularly kept and held thereat." They hoped his Lordship would give orders to his deputy and substitutes to observe this practice in all times coming except upon extraordinary cases.

This grievance, along with others, his Lordship promised to redress so far as was in his power and consistent with justice.

After making this outspoken criticism of their provost the relationship of the Town Council to the provost reverted to that of master and servant for in three different disputes — the building of Lochmaben Tolbooth, the purging of Sir William Johnstone of Westerhall from the Town Council and the planting of a new minister in the parish the councillors, almost to a man, followed the lead of their provost — James Marquis of Annandale.

Annandale and Lochmaben Tolbooth.

In November 1720 Lochmaben Town Council taking under their consideration "the great loss the community of the Burgh is at through the want of a Tolbooth" decided that any spare money should be applied toward its construction, but since the Town Council could not of themselves finance this venture they resolved to ask Sir William Johnstone of Westerhall Bart. to make application to the Convention of the Royal Burghs and also to James Lord Johnstone, their provost, for additional funds.

Next year several wellwishers of the Burgh expressed their willingness to contribute towards the building of a Tolbooth. To avoid any misapprehension about their motives in subscribing this money the Town Council resolved that the giver declare by means of a writ that the money was not being given with an eye to the elections of the Burgh but given as "a free gratuity, go the elections as they will!"

A few days later the Marquis of Annandale offered a further sum of 750 Scots merks over and above the 500 merks he had already promised. Three months later a plan of the proposed town house was considered by the council.

The Tolbooth was eventually completed in 1723 then in 1741 George, Third Marquis of Annandale, from, so he said, his regard to the Burgh, made the Town Council a present of £150 for building a meal house and adding a steeple to the town hall in place of the existing cupola.

Annandale's £150 does not, however, seem to have been given from any disinterested motive for another councillor My Lord Advocate, Charles Erskine, indignantly protested that at the recent elections a show of force in the town had been followed by a promise of money by a certain noble peer provided his wishes in the election were followed.[1]

In view of the Lord Advocate's strictures on Annandale's gift in 1741 his brother's donation in 1722 was perhaps less disinterested than the minutes would suggest.

Even this was not the end of the tangled story of Lochmaben Tolbooth for in July 1749 a summonds was brought by the Town Council against Robert Robison late bailie and treasurer from 1719 to 1723 but by then deceased. He had been appointed along with two other councillors to uplift and receive the subscription money for the building of the Tolbooth in the Burgh—a total of £2402.18.0d This money along with a further sum of £20 for damages and expenses was claimed by Lochmaben Council from his son. The Town Council Minutes for November 1730 show however that Robert Robison had that day presented a scheme of his accounts to that body on that day and his account of these moneys seems to have satisfied the Town Council. Unfortunately the Town Council Minutes are missing from 1743 to 1750.

The Turning Out of Sir William Johnstone of Westerhall from Lochmaben Town Council in 1721.

The origins of the quarrel between the Second Marquis of Annandale and Sir William Johnstone of Westerhall, Bart. are unknown but Westerhall had been a member of Lochmaben Town Council from 1712 and a Bailie from 1714, while his son James had been elected to the Council in 1720. In addition Sir William had been Lochmaben's Commissioner to the Convention of the Royal Burghs in 1715 and continued in that capacity until 1721.

However in September 1721 James Johnstone was voted out of the Town Council on the same day the new Marquis of Annandale (James) was elected Provost. Next day Annandale quite arbitrarily proposed that for

> "The more favourable Government of the Burgh of Lochmaben and the promoting the interest thereof the Council should be further purged and reformed by the exclusion of two councillors, viz. James Johnstone of Westerhall Junior and George Kennedy of Halleaths"

The Council approved this high handed action and elected in their place Colonel James Johnstone of Graitney and John Harvie. The only voice raised against this move was that of George Dickson and in spite of a Summonds of Reduction by Westerhall the remainder of the Council declared that they would

1. *"The purging of My Lord Advocate from Lochmaben Town Council"* (1973) J. B. Wilson. Trans. D. & G.N.H. & A. Soc. p 95.

support and defend the election of the two new councillors—"in fact they would act the same parts over again by re-electing the same persons as far as consistent with law!" Three weeks later Gavin Johnstone of Elsieshields was elected Commissioner to the Convention of Royal Burghs in place of Westerhall.

On the 27th January 1722, Westerhall presented a petition to the Convention of the Royal Burrows in Edinburgh[2] complaining against the Michaelmas Elections of the magistrates and town council of Lochmaben and claiming irregularities in them. The Town Council, on their part declared the petition to be a most false and groundless lybel. The accusations of Bribery, Corruption and Perjury and that their provost had allowed the election by an armed force, they rejected as false and calamitous; in fact the elections had never been carried out more quietly and regularly or more to the satisfaction of the Inhabitants!

Westerhall wasted no time in presenting his complaint to the Convention of the Royal Burrows for it was read to them on the 14th December 1721. The dispute was however referred to a small committee and out of respect to the most Honorable the Marquis of Annandale who was then out of town they delegated a selected group to wait on his Lordship on his return. As neither the Marquis nor the representatives of Lochmaben Town Council appeared within the stipulated time the committee ordained their agent to concur with the petitioner in the process against the **pretended** magistrates of Lochmaben!

Though Westerhall had won his point, there the matter seems to have rested. The existence of some personal animosity between Annandale and Westerhall gains support from the election of Westerhall to be provost of Lochmaben immediately after Annandale's death in 1730. The same year he was once more elected Commissioner to the Convention of Royal Burrows.

The Planting of Lochmaben Church

After the death, in August 1722, of the Rev. William Steele of Lochmaben Church, three clergymen were presented for the vacancy by three competing patrons.

The Crown, that is George the First or his doers, along with about 150 parishioners, presented the Rev. William Carlyle minister of Cummertrees, while the Marquis of Annandale, whose influence throughout the Presbytery of Lochmaben was considerable, presented the Rev. Alexander Shank; the third clergyman, the Rev. George Hall, was presented by the Viscount Stormont, Patron of Lochmaben church.

Not surprisingly the Presbytery of Lochmaben supported the nominee of the Marquis of Annandale who was at that time said to be out of fettle with the Ministry. On the other hand the Synod of Dumfries which included, besides the Presbytery of Lochmaben, the Presbyteries of Penpont, Middlebie and Dumfries, favoured the call to William Carlyle. When the Presbytery delayed Mr Carlyle's appointment the Synod of Dumfries ordered Lochmaben Presbytery to moderate the call.

The dispute was eventually taken to the General Assembly though the High

2. Records of the Convention of Royal Burrows pp. 307-308. Volume 4.

Commissioner, the Earl of Hopetoun, was brother-in-law to Annandale. The Assembly on 20th May 1723 ordered the Presbytery of Lochmaben to try the inclinations of the people, but since in any free vote Mr Carlyle would almost certainly have been successful Annandale and Viscount Stormont joined, in a most irregular move, in proposing a new nominee, Mr Edward Buncle. At the meeting of Lochmaben Town Council on the 27th August 1723 Mr Buncle's nomination was strongly supported, for was not their provost no less a personage than Annandale himself! The Town Council's full support and adherence to the case of Edward Buncle was reiterated at their meetings of 10th February, 9th April and 11th May the following year.

The Presbytery of Lochmaben shuffled Mr Buncle through his trials with unseemly speed and ordained him minister of Lochmaben Church on 27th September 1723. The Synod of Dumfries however refused to enrol him. Woodrow recounts an interesting anecdote in relation either to Mr Buncle's ordination or the moderating of his call[3]. Apparently the Lochmaben Burgh Officer had come among the mob in a fool's garb with horns on his head, asking everyone if they had seen the king's horns. When he came to Annandale's coach with the same enquiry the Noble Marquis had chased him off as drunk.

The Commission of the General Assembly declared, on the 19th November 1723, Mr Buncle's settlement null and void and forbade Mr Buncle to officiate in Lochmaben: the Presbytery of Lochmaben was ordered to proceed with the admission of William Carlyle. Should they refuse, the Synod was empowered to ordain him. Mr Carlyle was ordained to the Lochmaben charge on 10th March 1724. Since the Town Council was actively supporting Mr Buncle this action must have given rise to many problems, just as many years later the existence of two town councils caused so much trouble in the same Burgh[4].

The **Fasti Ecclesiae Scoticanae** records that at this stage, that is May 1724, party strife ran so high as almost to threaten division of the church, for Annandale was still determined to oust Mr Carlyle. The Assembly debated on the 22nd May 1724 "The Affair of the planting of the Parish of Lochmaben" long and anxiously.

The Assembly eventually found that the Commissioners had exceeded their powers and that a new call should be moderated that the true choice of the people might be known. Some members were in favour of laying aside both calls but others reasoned that this would not remove the difficulty arising from His Majesty's presentation of Mr Carlyle supported by the call of the people. The advice of the Lord Advocate was sought and he, with some of Solomon's Wisdom, suggested that His Majesty from his Goodness and Concern for the peace of the Church should not press his nomination though it was undoubtedly proper.

Next day both calls were set aside and Mr Carlyle restored to Cummertrees. The Assembly decided that the conduct of the Presbytery of Lochmaben had been irregular and precipitate; it was admonished to be more cautious in the future and the Synod was recommended to bury all heats which the affair had caused. Both the Synod of Dumfries and the Presbytery of Lochmaben were instructed

3. *Woodrow's Analecta*, Volume 2, Maitland Club, 1842, Edinburgh, p. 386.
4. *Strong Arm Politics*, 1973 J. B. Wilson, Trans. D. & G.N.H. & A. Soc. p. 91.

not to enter any papers not already recorded "that all memory of the differences that had arisen about this affair might be utterly extinguished."[5,6].

Unfortunately the Presbytery of Lochmaben Minutes for this period are missing, while the Synod of Dumfries Minutes make only passing reference to the dispute — presumably because of the Assembly's recommendation to enter no papers not already recorded. The Synod merely records that at its meeting of 13th October 1724 a call had been made to the Rev. William Carlyle by the parish of Salt Preston or Prestonpans and the Presbytery of Lochmaben were ordered to plant the parish of Lochmaben as speedily as possible. On 30th March 1725 the Rev. Patrick Cumming was translated from Kirkmahoe to Lochmaben.

As a member of the Synod of Dumfries, Patrick Cumming had already taken some part in the dispute. From Lochmaben he was translated to St. Giles Old Kirk where he became, before the rise of Principal Robertson, the leader of the Moderates and three times Moderator of the General Assembly.[7]

As a result of this dispute, and many other similar cases, the Assembly in 1731 sent down to presbyteries, under the Barrier Act, a proposal that in such cases the choice of Minister should be made by the elders and heritors in country parishes and by elders and town councils in Burghs.

The basis of this complicated dispute is difficult to determine but Woodrow sees the roots of it in the Constitution of the Commission to the General Assembly which many, including Annandale, seemed to wish to wreck. The whole matter of Patronage too was even then being seriously debated and its ethics questioned.

Commentary

Study of the long list of Lochmaben provosts[8] provides insight into their relationship with the affairs of that Royal Burgh, for up until 1692 the Lairds of Elsieshiels were usually provosts of the Burgh: the Annandales took over until 1729: then for the next 20 years members of the local gentry held that office: thereafter the townspeople of the Burgh provided their provost from their own number. Furthermore this study demonstrates, sometimes indirectly, the benefits to be gained from dabbling in Burgh Politics in these times and the advantages membership of Lochmaben Town Council and the office of Provost brought to their holders.

Though the Second Marquis of Annandale does not seem to have aspired to the considerable political power gained by his father, he must still have been quite an important national figure for he is buried in the North Cross of Westminster Abbey. Charles Erskine, who was provost in 1732 and 1733, later became Lord Advocate, taking the title of Lord Tinwald. He was by virtue of his Judicial Office perhaps the most powerful figure in Scotland at that period.[9] What interest could these two magnates have in the Royal Burgh of Lochmaben?

The two principal advantages of being a member of Lochmaben Town Coun-

5. Correspondence, Woodrow Vol. III p. XXVI.
6. Assembly Register for 1724 in Register House.
7. *"The Churches of Lochmaben"*, Vol. 2, 1971, J. B. Wilson, Grieve, Dumfries. p. 9.
8. *"The Royal Burgh of Lochmaben"* (1974) J. B. Wilson, Grieve, Dumfries, Appendix.
9. *Scotland the Shaping of a Nation* (1974), Gordon Donaldson, David & Charles, p. 134.

cil were, firstly, that each councillor had a voice in nominating a member of parliament for the Dumfries Burghs, a position of importance through the powers of patronage it carried. Largely through the influence of the Johnstones in the area, a Johnstone, Lord John Johnstone, was elected Member of Parliament for the Dumfries Burghs in 1741. Secondly, each councillor had some say in determining how the Burgh's revenues would be spent. Just how important the office of provost was and the influence which its holder wielded was shown by the Westerhall's abrupt exit from the Town Council through the machinations of his kinsman the Marquis of Annandale.

Before his death in 1721 the First Marquis of Annandale had, as the whole Town Council lost no time in pointing out to his son, their provost at that time, been riding roughshod over the Burgh's interests. Besides taking into his own hands the five merk land of Thorniethwaite his servants had not been paying their feus to the Burgh.[10]

The three different incidents detailed here throw some light on Lochmaben affairs at that time, dominated as they were by the Second Marquis of Annandale. The reality of his influence in the Royal Burgh is apparent in them. In the affair of the Lochmaben Tolbooth Annandale was obviously willing to pay for the privileges which went with the office of provost. The influence he obtained through the office he used unscrupulously to turn out young James Johnstone but unsuccessfully in the affair of the planting of the parish minister.

At this time the feus of the Burgh were augmented each year by the Roup of the Customs, the Blaemeadow and Croftfoots, the Grummel Loch and the Crooked Acre and every three years by the Roup of Priesthead, but the money obtained from these assets probably did little more than allow the wheels of the Burgh administration to tick over. Interestingly enough these were each year usually rouped to members of the Town Council. Most of the benefits to be gained from the office of Provost must have been in the form of patronage and the benefits accruing from it, perhaps largely in the letting of the burgh feus.

Lochmaben, a Royal Burgh since 1470, by virtue of its proximity to a Royal Castle, was in the 1720's probably no different from any other Royal Burgh in Scotland but the accounts of these disputes throw some light on the personalities who then influenced affairs in Lochmaben.

10. *"The Royal Burgh of Lochmaben"* (1974) J. B. Wilson, Grieve, Dumfries. p. 14.

SOME POOR'S-HOUSE CORRESPONDENCE

by Alex McCracken, B.Sc., F.S.A.Scot.

Acknowledgement.

During recent work in a Langholm house, the owner, Mr Ritchie, found a number of letters which had been sent to Mr George Todd, parish schoolmaster and Inspector of the Poor in Langholm in the 50's and 60's of last century. The writer wishes to express his thanks to Mr Ritchie for making these letters available for the purposes of this article. The letters are to be preserved in the house in which they were found.

Introduction.

The poor have been with us always, but they have not always been treated with compassion or with fairness. Charity has always been regarded as a Christian virtue, and for centuries it was the Christian church which undertook the duty of collecting money for the poor, and distributing it to the needy.

During the reign of Charles II, an attempt was made to put the care of the poor on some sort of legal footing. A Poor Law was passed with the object of suppressing beggars, which allowed only the lame, the blind and the paralysed poor to beg. At the same time, the heritors and kirk session of any parish were permitted to levy a poor's rate. By an Act of 1663, half of the rates were to be levied from the heritors, the other half from the tenants on any property. Furthermore it stipulated that "correction houses", where able-bodied vagabonds could be made to work, could be built. Few parishes took advantage of this privilege. "Official" beggars were issued with lead or pewter badges, and were entitled to appeal to the charitable feelings of their neighbours.

In fact, most kirk sessions used a variety of methods to raise funds to support the poor. Some of these were common to most parishes. The dues for proclamations in church went to the poor's funds, as did fines for irregular marriages, immoral conduct etc. A fee was charged for the use of the mort-cloth. Extra collections were taken in church from time to time, and sometimes wealthy parishioners left sums of money, or property whose rent was applied to the relief of the poor. Sometimes, instead of money, a collection of meal and potatoes was made around the parish, after the minister had intimated the number of poor, and their requirements.

Other methods of raising funds were more unusual, and were restricted to a single, or just a few parishes. A search through the pages of the New Statistical Account will bring many of these to light. The minister of Ruthwell parish mentions the custom of holding a "drinking", a sort of ball, to which the inhabitants of the parish were invited by the poor who expected to benefit. By 1834 this custom had fallen into disuse. In Hoddam and Canonbie parishes, the poor owned the hearse, and thus benefitted from the fees paid for its use. In Wamphray, the ash trees in the churchyard were cut down at intervals, and sold for the poor's benefit.

In any case, should these various fund-raisers fail to provide enough to support the poor, the heritors had to make up the deficit, either through some system

of regular assessment, or by voluntary contributions. Thus unscrupulous heritors made a point of removing from their parishes, wherever possible, as many would-be paupers as they could. Aged workers could be forced from their homes, and crippled beggars were hurriedly transported from one parish boundary to the other, lest they become a burden on the poor's rate.

The Disruption of 1843 finally forced the abandonment of this ancient, haphazard system, for between the Established Church and the newly formed Free Church feelings ran high. Established ministers went so far as to blame the Disruption for bringing the terrible potato famine of 1846 as a judgement on the land. When it came to the relief of the poor, the Dissenters were in a hopeless position. Most of the funds were under the direct control of the Church of Scotland, which showed little inclination to assist its antagonists, as they were regarded. So the dissenting churches demanded that funds for the relief of the poor should be raised by public rating, and distributed without prejudice to those in need. This agitation led directly to the Poor Law of 1845.

The 1845 Act set up in each parish a Board of Managers of the Poor, made up of heritors, kirk session and magistrates (if any) of the parish. The Board was responsible for deciding on the assessment, building a poor's house if necessary, compiling a poor's roll, and fixing the amount of relief. A Board of Supervision in Edinburgh kept a watch on things in general. This Act, of course, applied only to the sick or aged poor. The able-bodied poor were not included.

The tables below show some statistical details for five Dumfriesshire parishes, before and after the 1845 Act.

TABLE 1

From "New Statistical Account" compiled mid-1830's

	Population	No. on Poor Roll	Sum Distributed	Amount Allowed
Langholm	2676	62	£400	£2 - £8 per year
Dumfries	11606	560	£1500	?
Annan	5700	121	£590(?)	1/- — 2/6 weekly
Sanquhar	3268	50	£70	£1 yearly
Moffat	2221	50	£120	?

TABLE 2

From Official Report for 1856

	Population	No. on Poor Roll*	Sum Collected	Sum Distributed	Casual Poor Relieved Thro' Year†
Langholm	2990	93	£652	£565	143
Dumfries	12298	524	£3783	£2602	1263
Annan	5848	278	£1113	£1117	35
Sanquhar	4071	102	£458	£397	229
Moffat	2304	83	£477	£437	102

*Registered Poor and their dependents

†And their dependents

THE LANGHOLM LETTERS

The letters and documents found in Langholm refer to the years 1848 to 1856. They show to perfection how the system operated in all its rather cumbersome details. A representative selection is given below. Little comment on the documents is required, all that is necessary being given as footnotes to such letters.

In order to qualify for relief, a medical certificate was necessary, and furthermore a residence of at least five years was essential in that parish. If the pauper had less than the limit of five years, then he was a charge on his native parish. Much of the correspondence deals with the transfer of expenses from parish to parish, or concerns claims made by one parochial Board on another, for money expended in relieving the other's paupers.

1. **Extract from a Printed Circular**

15th January 1846

8 & 9 Vict. 69

"And be it enacted, That in every Parish or Combination it shall and may be lawful for the Parochial Board and they are hereby required, out of the Funds raised for the Relief of the Poor, to provide for Medicines, Medical attendance, nutritious Diet, Cordials, and Clothing for such Poor, in such Manner, and to such Extent as may seem equitable and expedient."

2. **Small Certificate**

I hereby certify that the bearer, Elizabeth Little is in bad health, has no fixed abode, is utterly destitute and in want of the accessaries of life.

William Maxwell, Surgeon.

3. **Letter**

Hawick 19th March 1856.

Dear Sir,

I enclose medical certificate regarding Thomas Graham who was an enrolled pauper of yours till Whitsunday 1853 — An acknowledgement will oblige.

Yours truly
William N. Kennedy, Inspector

4. **Letter**

Hawick 19th March 1856

Dear Sir,

As you request that I repeat to you the case of Thos Graham, Weaver, a young man about 19 years of age. He has been under our medical care for the last 12 days with piles, and cannot sit at work on account of the pressure. He is however, on the way of improvement.

Yours truly
J. Douglas

To Mr Kennedy
(His mother says he is aged 17. W.N.K.)

5. **Account**

The Parochial Board of Langholm
To Dr Borthwick, Dumfries
To visiting John Murray in Dumfries Prison and certifying to his insanity. 10/6d.
Dumfries 14th May 1856.

6. **Account**

Crichton Royal Institution.
1st August 1857.

For board from Lammas to Martinmas 1857.
Each of List annexed £17

26	Thomas Cairns	£4.5
74	Peter Telford	4.5
75	Thomas Telford	4.5
450	George Henry	4.5

Rob. Adamson, Treasurer.

7. **Letter**

My Dear Sir,

I have just received Mr Cliffe reply to my letter inclosing your last. He bids me to say that at present he cannot increase the allowance he has been in the habit of making viz. 9s per week 7-6 of which should be applied towards the maintenance of the children and the other 1-6 towards the support of the father. Probably hereafter something more may be done for the children when they are able to go out to work or service. If the children are to be with the father all allowance will be entirely withdrawn. Mr Maxwell mentions that Hyslop is writing begging letters to his friends, but who they can be I do not know, at any rate. He must be stopped, as any money obtained for the support of the children ought to be paid into your hands. I cannot help thinking that W. Cliffe has had recourse to the Begging Letter System as he could not have got so much drink with the allowance from home, as he seems to have been in the habit of indulging in. He had some money about a year or perhaps rather more since to buy some furniture for his house, but I suppose all that is disposed of, if ever it was bought. I think I told you in my last that he had no claim whatever on any property, nor yet on his relations towards whom he has shown the greatest ingratitude. I am very much obliged both to you and Mr Maxwell for your communications, and wish I had better information to give you. And Believe me Very Truly Yours

Edwd Watkin

Clifton on Teme. Nr Worcester Octr 22nd 1849.

P.S. I sent Mr Maxwell 1£ last week and about the 1st of October 1£ to Mr Cliffe which I suppose Hyslop received but did not acknowledge.

(NOTE. There is no evidence to show who Hyslop, mentioned here, is. Perhaps he was one of Cliffe's cronies.)

8. **Letter**

My Dear Sir, Sat Nov 3rd 1849

I have just received yours and have inclosed the first half of a 5£ note which I received from Mr F. Cliffe yesterday, when the other half arrives I will forward it to you. I cannot say I much regret the death of Wastel Cliffe as far as his Temperal affairs are concerned, Tho' I hear he is not over well prepared to meet his Maker. But He who knows the Heart is alone the Judge of that. With regard to the Children I cannot tell what is to become of Them. The brothers cannot have them and tho' they may contribute according to their power towards their Maintenance, they cannot be expected to do more. When I receive the other half of the 5£ note Mr Cliffe will probably say more than he did in the last, but he was called to Holyhead, and I cannot write to him for a week. I am with much respect

Yours Very Truly
Edward Watkin
Clifton on Teme.

9. **Letter**

Dear Madam, (No date.)

I feel very much obliged to you for your kind and considerate letter, and wish Mrs Watkin was capable of giving you advice or assistance. But it grieves me to tell you her mind is

perfectly gone and tho' I have told her of her brother's death I do not suppose she remembers it even till this time. I am not aware that there is any complaint of that sort in the family tho' it would almost appear that poor Wastel was hardly sane, but that entirely arose from his habits of Intemperence. Had it not been for that, he had a much better chance of getting on in the world than either of his brothers, who by dint of hard work have contrived to maintain themselves in decent comfort, while he by every means fair and foul was endeavouring to wrest it from them. I have inclosed one 5£ note to Mr Todd, and I may probably send another in a few days, but I cannot give hope that much more will be sent, except as a weekly payment. I am with many thanks yours very truly

Edwd Watkin.

10. **Account.**

Parochial Board of Langholm

			To Geo Scott
1849			
Nov	1	To a sheet for W. Cliffe	2/6
	3	Pint Wine for Jno Little	1/6
	6	5 qrs post paper @ 7d	2/11
Dec	5	2½ dozen india rubber rings @ 3d	7½
	11	4 yds flannel @ 15d	5—
		Ro. Johnstones wife Thread Buttons etc	6
1850			
Jan	5	Pint Wine for H. Thomson	1/6
Jan	11	Tea and sugar for travellers	7
	29	Sheet for Eppy Scott	2/6
Feb	16	Pint wine for H. Thomson	2/6
Mar	7	3¾ yd moleskin @ 20	6/3
		Boy Jardine 3¾ yd Cotton @ 3½	1/0½
		Thread & Buttons	9
	14	Pint wine for Wm Lamb	1/6
	16	Do for H Thomson	1/6
	18	10 qrs note paper	4.-
	26	? for Wm Lamb	7
Apr	11	Sheet for travelling Womans child	1.-
	29	" for poor man at Widow Scotts	2/6
			£1 18 3
May	3	Pint wine for Wm Lamb	1 6
			£1 19 9

6 May 1850 Settled.

Note. The sheets mentioned in the above account are winding sheets. It will be seen that Wastel Cliffe, the subject of three preceding letters, had a pauper's funeral. Frequent accounts for wine occur among the documents, sometimes marked as being on Dr. Carlyle's order. No tailor's accounts occur. Those poor given material must have been responsible for making their own clothes.

11. **Letter.**

Langholm
November 3rd 1848

To the Hon.— The Parochial Board of Langholm.

The Petition of Andrew Hyslop

Humbly I herewith on account of the small allowance that I find it impossible to subsist for any length of time — Before we find fire and candle for night and day **what is there left**

to eat out of two and sixpence per week — I leave the Honourable Board to judge — I have been confined about six months to bed, reduced to a skeleton — every joint seized from head to foot, and quite unable to do anything for myself — I am not sick thank God, and could eat if I could get it — Therefore I hope your honourable Board will consider our case and grant what you think reasonable

And your Petitioner will ever pray & c

(On the outside of this letter is marked "Granted")

12. **Letter.**

Galashiels
2nd April 1856

Dear Sir.

I duly received yours and in Answer have to state that in the parish of Galashiels we adopt the following Assessment. We charge on both Lands houses and Machinhouses, one half from the owner and the other half from the Occupier. I follow the Rule from the 43 sec. of the Act & charge the tennent for the whole & he retains the Landlords half when he settles his rent by production of a receipt granted by the Collector of such assessment. As to the classifications I allow 20 per cent of all Machinhouses & Household property from real rental and on Lands 15 per cent of real rental. I am of opinion that 15 per cent is rather much for Land but more especially on rural farms when only sheep are kept.

I had an Application from Alloa lately asking our mode & opinion as they intend altering their Mode also.

Yours most Respectfully
John Thorburn
Insp.

Note. This letter is typical of several, from different parishes, all dated about this time. Apparently the Langholm Board was considering a change in their method of assessment. A further example is given.

13. **Letter**

Hawick
3rd April 1856

Dear Sir,

The assessment of this Parish is levied on the actual annual value, one half upon owners and one half upon occupiers, subject to the following deductions — Houses 25 per cent off. Factories 27½ per cent off, Land 12½ per cent off.

Yours truly
William N. Kennedy
Inspector

14. **Letter.**

Hawick
13th December 1856

Dear Sir,,

We are in the practice here of exempting from payment of Poor Rates such premises as are unoccupied but only for the proportion effeiring to the occupier's share. The owner pays whether his property is let or not. If a house or room is let previous to Martinmas I charge it (that is the occupiers share) for the whole year if below a £4 rental. If above that rent I assess the tenant on his rent whatever that may be.

Your truly
Wm Norman Kennedy
Insp.

15. **Letter.**

Esk Cottage
16th June 1856

Dear Sir,

I understand that a meeting of Langholm Parochial Board is to be held tomorrow evening, and I would feel obliged by your submitting the following information.

John Cambell with his wife and children (4) sailes from Liverpool on the 7th inst per the "Culloden" for Quebec. The correspondence and negotiation in the case is known to one of your number, Mr S. Hyslop, and I shall not say more of it than it shews Campbell to have been anything but a true man.

The correspondence is at the service of the Board if required. The outlay in making up the deficiency of passage money was £7-15/-. Of that I have received £5-10/- and have the promise of £1-5/- or £1-7.6 leaving a balance of £1 or 17/6 to make up.

Whilst £7-15/- is a large sum to expend on such a man as Campbell, yet it is by no means an unfavourable Quit-bargain for the Parish of Langholm. There can be no doubt but sooner or later Campbell would have become a parochial charge, or at least a very great annoyance to the Distributors of Public and Private Charity; besides, his residence in Langholm, or in this country in general, would have proved the means of attracting towards Langholm his two sisters who would have even less scruple than their brother in the matter of begging or beseiging a Parochial Board.

In presenting the above statements I present no demand, but simply request the attention of the Board. I consider the Board acted according to rule in refusing Campbell's petition for aid to emigrate, but it may be that some means may be adopted which would spare me the somewhat delicate task of asking contributions for aiding in the emigration of a man whom I cannot recommend on any other ground, than that his character was such that his emigration is a public boon.

I propose writing by Thursday's mail the sister-in-law of Campbell who sent the £8, intimating what has been laid out and asking her, if she has it in her power to refund in whole or in part, it will be gladly received. Should this appeal be successful the parties who have contributed to the £7-15/- will be repaid.

Begging the Board will excuse this encroachment on their time and attention

I remain

Yrs respectfully

William Watson.

A ROMAN INTAGLIO FROM BIRRENS.

by Dr. Martin Henig.

The Roman signet gem shown on plate XII, was found in the campaign of 1937 on site XXII, a barrack block[1]. It does not appear to have been published before and with the kind permission of the excavator Mr (now Professor) Eric Birley, the piece is discussed here for the first time.

As is the case with many other intaglios from Scotland, 'gem' is a misnomer: The material is a glass paste, imitative of nicolo — an onyx with a blue surface on a dark ground[2]. It is oval in shape, 13 mm long by 10 mm wide, with bevelled sides that reduce the flat upper surface to 11 mm by 7 mm[3].

Fortuna, moulded in intaglio, clad in stola (chiton) and palla (himation) is represented with her body to the front but facing to one side. She holds a horn of plenty (cornucopia) and patera. The type is common and a number of examples are recorded from British sites including one from Newstead.[4] No doubt its owner hoped that it would bring him luck. Amongst epigraphic material from Birrens is an altar dedicated to Fortune by the Cohors I Nervana Germanorum, a little private altar to the same goddess and — most significant of all — an inscribed pedestal for a statuette erected by a freedman called Celer for his Master, P. Campanius Italicus.[5]

The unusually good execution of the device calls for comment. The clarity and attention to detail are unusual in second-century nicolo pastes but can be matched at Auchendavie in a paste showing Good Fortune (Bonus Eventus): Was the same workshop, either in Britain or elsewhere, involved?[6]

It remains only to thank Mr John Casey for bringing the intaglio, only the second from Birrens, to my attention, and Mr Robert Wilkins of the Oxford University Institute of Archaeology for the photograph.[7]

1. cf E. Birley, 'Excavations at Birrens, 1936-1937' *PSAS* LXXII, 1938, 275-347 and especially 295-302 for the excavation.
2. note example from Birrenswark which I published in 1969 volume xlvi (3rd ser) of this journal, 107f. also *Glasgow Arch. Journ.* iii, 1974, 71ff, for the Auchendavie and Old Kilpatrick pastes..
3. thickness *c* 2.25 mm.
4. M. Henig, *A Corpus of Roman Engraved Gemstones from British Sites,* BAR 8(ii), 1974, Nos 328-337 especially No 335 (Newstead).
5. *RIB* 2093, 2095 and 2094 respectively.
6. Henig in *Glasgow Arch Journ,* loc cit.
7. For the other gem which depicts victory *cf* Anne Robertson, *Birrens* (*Blatobulgium*), Edinburgh 1975, 124f Iron No. 2=Fig 41,4.

A POSSIBLE ROMAN RUBBISH-PIT AT CARZIELD, KIRKMAHOE, DUMFRIESSHIRE.

by James Williams, F.S.A.Scot.

During 1968 work continued at the rubbish-spread, in field No. 893 of the Ordnance Sheets, adjacent to Carzield Roman Fort. (For previous publications see these Transactions III/46 pp 100-9.) Contrary to previous excavation in the field, which was conducted in the S.E. corner of the field, the 1968 season was confined to the S.W. corner where a possible large rubbish-pit was indicated on one of Dr. J. K. St. Joseph's aerial photographs. A series of five-foot squares was laid out on the field as shown on fig. 1: These squares were situated some 40 feet from, and run parallel to, the public road between Carzield and Bellholm; they were spaced twenty feet apart and commenced twenty feet from the south-western boundary of the field. The results of the examination of these five foot squares are detailed below:—

Trench 1. Not excavated.

Trench 2. Not excavated.

Trench 3. Eight inches of gravelly top-soil with little or no archaeological material — only 30 grams of burnt clay fragments (daub) and one fragment of charcoal.

Plate XII — A Roman Intaglio from Birrens — Scale x 4. (See Addenda) — Photo R. Wilkins.

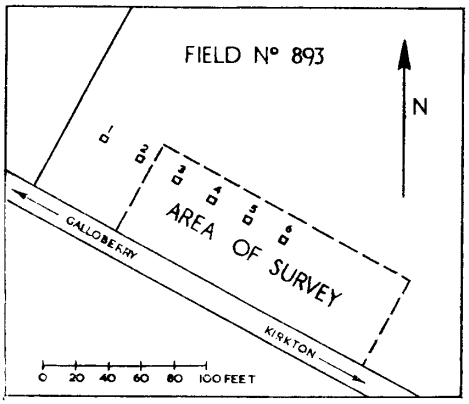


Fig. 1. Carzield — Plan showing area of survey.

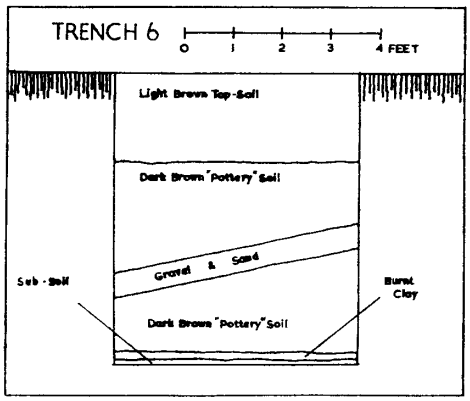


Fig. 2. Carzield — Section of trench 6.

Trench 4. Ten and a half inches of gravelly top-soil with 15 grams of daub.

Trench 5. Eight inches of gravelly top-soil with a sandy clay, bearing flecks of carbon, at a depth of seventeen inches. A single brown iron-stain, some five to six inches in diameter, was met at a depth of twelve inches. There were more frequent signs of burning in this square — 20 grams of charcoal, 5 grams of daub, and one nail-head were recovered.

Trench 6. As there were early indications of some basic differences within this square ony half the area was excavated. Initially there was a 22 inch thick layer of light brown gravelly top-soil and below that there existed some 46 inches of a dark-brown to black soil containing fragments of pottery, iron-work, daub and charcoal. This pottery-bearing layer was split by a sloping band of clean gravel some six inches in thickness. The natural sub-soil was sealed below a two inch thick layer of burnt clay. (See fig. 2).

The materials recovered from Trench 6 are as detailed below:—

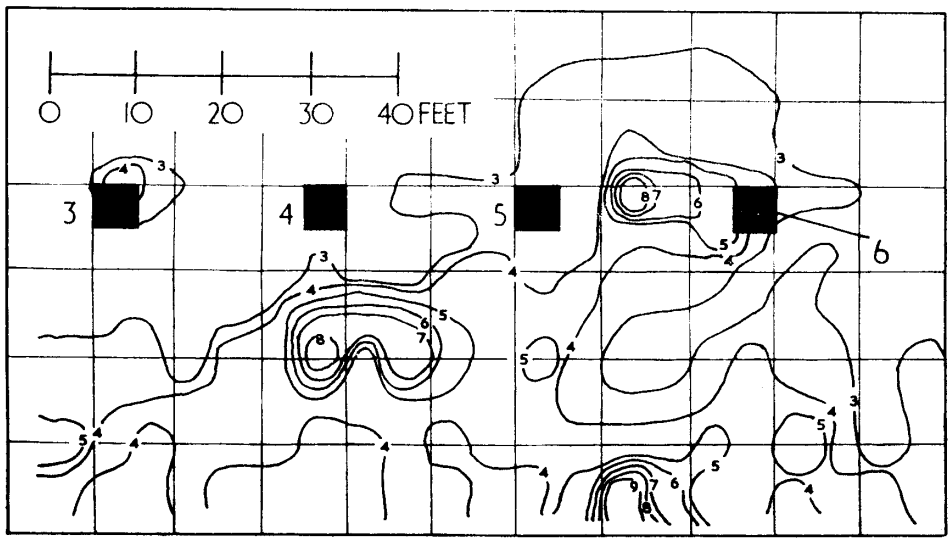


Fig. 3 Carzield — Resistivity survey.

Lava (39 grams). This material is frequently used in preparing quern-stones and possibly comes from Andernach in the Rhineland. **Charcoal** (36 grams), **Daub** (557 grams), **Iron** (217 grams), **Amphora** (56 grams), **Samian Ware** (48 grams) and **Coarse Pottery** (black burnished ware — 284 grams, and others — 190 grams). The ironwork, which included four complete nails (5 cms in length with heads 2 cms in diameter) and a possible bracket 7.5 cms in length and with a cross-section of 2.2 x 0.3 cms), was all heavily corroded but the pottery, although fragmentary, was in a very fine fresh condition. Among the coarse-ware fragments there were examples of the usual black burnished cooking pots as well as fragments of terra-cotta and pipe-clay-like fabrics. The samian included examples of the Dragendorff forms 33, 35, and 37 — all undecorated excepting one fragment of form 37.

As a member of this Society, Mr Gordon Anderson of Collin near Dumfries, was at that time conducting experiments in soil resistivity measurement the opportunity was taken of carrying out a survey of the area indicated in fig. 1 — this survey was carried out during the 1969 season. The Resistivity plot obtained, the scale of units is an arbitrary one, is reproduced in fig. 3 and can be seen to show several obvious anomalies. These, bearing in mind the evidence obtained during excavation, may indicate the presence of large rubbish pits and should encourage us to carry out some of our more extensive future excavations in this corner of the field.

ST. NINIAN — AN ONOMASTIC NO'IE

by P. A. Wilson

It has been pointed out to me by two correspondents that in my examination of some aspects of the Ninianic problem[1] I have made use of an argument that is quite unacceptable On reflection I now recognize that I was wrong, and lest others should be led astray, I should like to take this opportunity of retracting what I said in the past.

The bearing of the argument is on the trustworthiness or otherwise of the later traditions about the saint, dating from the period after the refoundation of the see of Whithorn in the 1120s. I am not here going to attempt to assess their trustworthiness, but only to show that at least one of the arguments used against them cannot be sustained.

The argument was first given prominence, I believe, by Watson,[2] and it is strange indeed that the foremost professional Celticist in the Scotland of his day should have been guilty of what we can only now regard as an onomastic howler.

The saint's name is first recorded in the pages of Bede,[3] **Nynia** in the ablative case. This could be the ablative of **Nynias;** but the evidence of the **Miracula**[4] makes it clear that the Latin nominative would have been **Nynia,** and the vernacular British a form corresponding to the **Nynyaw, Nynniaw,** &c., of the early Welsh genealogies.[5] In any case it cannot have been the ablative of the **Ninianus** of Ailred of Rievaulx; yet this is the form which was to become standard in liturgical usage from the 12th century onwards. "In the numerous commemorations of Ninian," Watson wrote,[6] "his name never appears in its native form; what appears is either the latinized form or a Gaelic derived therefrom through Scots vernacular;" which "points to a tradition broken and subsequently revived."

Since Watson's time two spellings, both of Scottish provenance, have come to light where the intrusive final -n- is absent;[7] while the names "Ninewells" in the glebe at Brampton (Cumbd.), and "Ninekirks" (of the church) at Brougham (Westd.), have never been satisfactorily explained except as commemorative of the saint, whose name in the form "Rinnion" was once a favourite baptismal name in the parish of Brampton.

(1) *D. & G. Trans.*, XLI (1964), 158 and XLVI (1969), 140.
(2) W. J. Watson, *Celtic Place-Names of Scotland* (1926).
(3) *Eccl. Hist.*, III, 4
(4) *D. and G. Trans.*, XXXVIII (1961), 21 ff.
(5) *Early Welsh Genealogical Tracts*, ed. P. C. Bartrum (1966), 45, 105, 119, 122.
(6) *Celtic Place-Names*, 295, 296; and see also 170.
(7) *Innes Review*, XIX (1968), 133 n. 12.

What is so strange is that in this instance Watson should have overlooked the fact (of course perfectly well know to him) that in Celtic liturgical and hagiographic practice variant forms of saints' names abound. For an exact parallel to the case under discussion we need look no further than St. Columbanus, whose original name, in religion at any rate, was Columba;[8] and in our own area we have Finian (as in Chapel Finian) and other variants of an original Irish **Findbarr. Ninianus** can be from **Ninia** as easily as Columbanus from Columba; and I now withdraw unreservedly anything I have said to the contrary.

It only remains to add that this in no way affects the question whether or not one of the tales in the **Miracula** derives from a life of Finian rather than Ninian.[9]

(8) G. S. M. Walker, *Sancti Columbani Opera* (1957), lvii, citing Jonas, 1, 2.
(9) *D. and G. Trans.* XLVI (1969), 142.

A NOTE ON ST. CUTHBERT

by Alexander Boyle

If one plots on the map the dedications to St. Cuthbert in Scotland south of the Forth, it is noticeable that they are conditioned largely by the history of the area. There are thirty-seven described by Mackinlay and Forbes[1] of which only one is found in Wigtownshire, one in Kirkcudbrightshire, seven in Ayrshire, and none in Lanarkshire, Renfrewshire or Selkirkshire. The remainder are to be found in a fairly homogeneous scatter over the rest of the area.

Cuthbert was regarded as an English saint, and as he lived during the time of Northumbrian expansion in the region we are considering, it is natural that his cult should have been strongest in the central and eastern areas, i.e. in the old territories of Rheged and the Gododdin. Where the British kept their independence, as within the shifting boundaries of Strathclyde, one would not expect to find dedications to Cuthbert in the early period (seventh to tenth centuries)[2], which is indeed the case.

Selkirkshire seems to be an exception to this rule. Watson[3] thinks it was originally a British kingdom, the Goddeu mentioned by Taliesin. If it is also the same as the Cadzow mentioned in the Breviary of Aberdeen[4] as being the native place of Rhydderch Hael's queen, it would probably be in alliance with Strathclyde. There is a well-known inscription on a monument at Yarrow in Selkirkshire. Although the Latin is not easy to decipher and some of the readings are disputed[5], it would appear to carry a reference to a ruler Nudus Liberalis, who is taken to be the Nudd Hael of the later genealogies, a contemporary and cousin of Rhydderch Hael of Strathclyde. The memorial is to two of his sons, and may be placed therefore in the first half of the seventh century. In view of the dynastic connection with Strathclyde, support from the latter would doubtless be forthcoming against the Northumbrian advance, and may have held up penetration and settlement until later than was the case with the other British kingdoms[6]. An additional factor was its densely-wooded nature, from which it is said to have got its original name and which would make settlement by the invaders, at least in the early stages, less desirable than along the south-east coast and its hinterland. All this would help to delay the initiation of a cult of St Cuthbert and may be

(1) J. M. Mackinlay, *Ancient Church Dedications in Scotland* (Edinburgh, 1914) II, 243-58. A. P. Forbes, *Kalendars of Scottish Saints* (Edinburgh, 1872) 319.
(2) Although some of the dedications we are considering would be later than this period, the majority must be allocated to the years immediately after Cuthbert's death when his cult was so strong as to lead to the writing of two separate versions of his Life, that of Bede and that of the anonymous author, within a few years of his death. No doubt in the earlier period before the coming of the Norsemen it would be from Lindisfarne and Melrose that the early dedications would be made.
(3) W. J. Watson, *History of the Celtic Place-Names of Scotland* (Edinburgh, 1926). 343-4.
(4) *Breviary of Aberdeen* (London, 1854) I. fol 29r b.
(5) Cf. H. M. Chadwick, *Early Scotland* (Cambridge, 1949). 145; Watson, ibid. 26-7.
(6) Cf. Kenneth Jackson, *Language and History in Early Britain* (Edinburgh, 1953), 214. The latest survey of Anglian influence in south-west Scotland is to be found in 'The Angles in Scotland and the Mote of Mark' by Lloyd Laing in *Transactions of Dumfries and Galloway Natural History and Antiquarian Society* 50 (1973) 37-49. The accompanying map showing evidence for Anglian settlement should be compared with what is said in the present article.

one explanation, although hardly the only one, for the lack of dedications to the saint in this county.

We now come to the remaining problem, why there are so few dedications to St Cuthbert in the area to the west. These are, if one proceeds from south to north, Kirkcudbright, Kirkcolm (Stewarton), Ballantrae, Girvan, Straiton, Maybole, Prestwick, Catrine (Mauchline). One obvious featuure is worth noting. All of the eight dedications except two are on or near the coast and not inland as is mostly the case with the other counties. Even the two which lie farthest inland (Straiton and Catrine) are only ten or twelve miles from the sea. This would suggest that those who made these dedications came from the west and spread along the coastal areas. As they filtered from here through the Galloway hinterland, they would come into contact with the English advance from the south and east. This must have led to unsettled conditions in most of the shires of Wigtown and Kirkcudbright at a time when the English were consolidating their hold on Dumfriesshire and the rest of the south-eastern counties. Under such conditions a flourishing cult is difficult to establish or, if established, survive. Thus the dedications of local saints in the Breviary of Aberdeen, which may be taken to represent on the whole cults which had survived from early times, show a remarkable scarcity in those areas of the north and central Highlands and the Western Isles where the pagan Norse were strongest.

Who, then, were these settlers from the west? Historically, they can only have been Norse, mixed Norse-Irish (the Gall-Ghaidhil)[7], or the Irish themselves. The former would not have been christianised until two or even three centuries after most of the southern Scottish dedications to St. Cuthbert had been made; and, in any case, there is no evidence in our records that they were interested as a people in the cult of this saint. The Gall-Ghaidhil who entered Galloway and Cumberland, and who presumably with the language had adopted the religion of the Irish as well, would also be much later[8].

We are left, then, with the Irish, and why, it may be asked, should they have had a devotion to St. Cuthbert, if one assumes that there were enough of them around the coastland of Ayrshire and Galloway to leave their mark on the religious history of this district? As far as the latter point is concerned, it has been argued with a good deal of probability that they have greatly influenced the place-names of Galloway and the Rinns[9]. This largely Irish settlement may be dated from the fifth to the seventh century, with a secondary phase from the seventh to the twelfth century[10]. (From the latter period, as has been said, or even earlier, it was largely under the control of a community of mixed blood, Irish-speaking and coming from Ireland and the Western Isles and, at least initially, from Scandinavia). It is hardly likely that their influence would have stopped at the present boundary between Galloway andAyrshire. It is likely to have extended, at any rate on the coastal regions, as far as Carrick and even further north.

From where did they get their devotion to St. Cuthbert? Did they take over existing dedications which had spread from the east to the coastal plain? If so, why are Kirkcudbrightshire and Wigtownshire almost void of examples of this cult? Surely what is more likely is that these two counties, especially on the north contiguous to Lanarkshire and Ayrshire, were subject to continual pressure from Strathclyde and so the spread of devotion to one who was looked on as an English saint was impeded, especially in the century following his death when one would expect his cult to be at its height in territory fully under English control.

(7) Cf. references in E. Hogan, *Onomasticon Goedelicum* (Dublin, 1910) s.v. *gall-goidil;* Watson, ibid. 172-4

(8) J. Bannerman in *Who are the Scots?* ed. G. Menzies (London, 1971). 79.

(9) J. MacQueen in *Archivum Linguisticum* 8 (1956) 145, and *Scottish Studies* 17 (1973) 26, 28; W. F. H. Nicolaisen in *Scottish Studies* 9 (1965) 98-9, 103, *ibid.* 13 (1969) 157-66, and in *Transactions of the Gaelic Society of Inverness* 45 (1967-8) 126-7. Cp. Charles Thomas, *Britain and Ireland in Early Christian Times* (London, 1971). 56-7, 110; the same author (with specific reference to the Ardwall Isle excavations) in *Medieval Archeology* 11 (1967) 127-88, especially pp. 128, 172, 174, 177-83, and in *Transactions of the Dumfries and Galloway Society* 43 (1966) 84-116, especially 112-16, with later references in *Early Christian Archeology of North Britain*]*London,* 1971). 72, 78. A. A. M. Duncan, Scotland: *The Making of the Kingdom* (Edinburgh, 1975). 87-9.

(10) Duncan, *ibid.* 88.

If, then, the newcomers did not take over existing cult-centres of St. Cuthbert, they must have established them themselves at some time from the early eighth century on. But what connection could there have been between them and St. Cuthbert? The question would be hard to answer but for the existence of a twelfth-century Latin Life of the saint[11] which states that he was Irish, born in Kells and taken by his mother to Britain. He was known as Mulluc **(Mo-Lu-oc)**, a hypocoristic form of Lugaid. Modern scholars[12] have tended to treat this story as a pure fabrication. Apart from its lateness, the Life shows some resemblance to that of Moluag of Lismore in the Breviary of Aberdeen[13] who bears the same name as the alleged Irish one of Cuthbert. On the other hand, there are certain features of the narrative which should be borne in mind and which are discussed more fully in the Appendix to this article. It purports to be a compilation from earlier Irish sources. These may have contained a kernel of tradition which was so meagre as to need padding out. The Libellus says that Mulluc landed at Rintsnoc in the Rinns of Galloway, and this may well have been believed by Irish-speaking settlers in this region, forming a basis for a later cult of St. Cuthbert in the area. Watson[14] has shown that Rintsnoc (**Rind Snoc** in certain Irish texts of which he gives an analysis) must be north of Portpatrick and suggests 'the double promontory from Corsill [Corsewall] Point southward.' Not far away on the Loch Ryan side of the parish of Kirkcolm, where we have Killiemacuddican. It is with hesitation that I go against the opinion of Watson[16] who held that this stands for **Cill-mo-Chudugan,** St. Mochutu's Church. It seems to me that it is equaully probable that it is for **Cill mo Chuducain,** St. Cuthbert's Church, **Mo Chuducan** being a diminutive form of Cuthbert. Of the three Scottish dedications to St. Machutus mentioned by Mackinlay[16], one is attested only in the eighteenth century under the form of St. Malo. S. Machutus of Lesmahagow is possibly a substitution for an earlier saint, Féchín of Fore[17]. There may have been a similar substitution with regard to the third example — S. Machutus, patron of the parish church of Wigton who is 'S. Mathuri' in 1326 and later (1451 and 1495) and becomes 'S. Macuti'[18]. A strong reason for thinking that the **-cudd-** of Killiemacuddican refers to St. Cuthbert is the use of the abbreviated form 'Cuddy' in southern Scotland to refer to him.

It is uncertain when the original dedication was made. It may have been originally called after Mulucc rather than Cuthbert. However, it is more likely to have been called after Cuthbert from the beginning, even though the memory of the name Mulucc may have persisted in local tradition, as it evidently did at Kells. The reason for this is that it was quite common to find a saint called by two (or even more) different names[19]. In this case, as time went on, the better-known name of Cuthbert would supersede that of Mulluc. If we are right in regarding Killiemacuddican as the first popular dedication to the saint in the area, springing from an early tradition about an event in his life, rather than one due to the spread of his cult from the east, we can regard the others in Galloway and Ayrshire as spreading along the coast-line later, although other centres, notably Kirkcudbright[20], may have been more important. This seems a tenable theory in explanation of at least one of the puzzling gaps in the continuity of a devotion which is so widespread elsewhere in southern Scotland.

Appendix

It is customary to reject the narrative of the Libellus almost, if not entirely, **in toto.** This, certainly, is the viewpoint of such well-know scholars as Sir Edmund Craster[21], P. Gros-

(11) *Libellus de Ortu S. Cuthberti,* ed. J. Raine in *Miscellanea Biographica* (London, Surtees Society, 1838).
(12) Discussed — C. McGreevy in *Riocht na Midhe* III 2 (1964) 155 sqq. See Appendix to the present article.
(13) II 5v a - 8r b.
(14) *Ibid.* 157-8.
(15) *Ibid.* 166.
(16) *Ibid.* 206-8.
(17) Watson, *ibid.* 197.
(18) Watson, *ibid.* 165.
(19) Cf., for example, apart from the use of 'religious' names, Columba/Crimthann, Moling/Dairchell, Ite/Deirdre, Brigh/Aibhf,h)inn, to name a few Irish examples. Kentigern/Mungo may be added to the list as, although Professor Jackson has shown ('Sources for the Life of St. Kentigern' in *Studies in the Early British Church,* ed N. K. Chadwick (Cambridge, 1958). 298, 348) that Mungo is a hypocoristic form of Kentigern, this was obviously lost sight of in the Middle Ages and the two names considered to be separate.
(20) Ralegh Radford (Medieval Archaeology 11 (1967) 118) thinks a monastery of Celtic type survived here 'well into the 12th century.'
(21) *English Historical Review* 40 (1925) 507.

jean[22], M. A. Dodds[23], and B. Colgrave[24], who have examined it in greater or less detail. However, there are certain points which ought to be taken into consideration and do not appear to have received much, if any, attention.

1. The Life of St. Moluag from which the Libellus is said to be derived is not extant. The fullest account we have of this saint is in the six lectiones allotted to his feast on June 25 in the early sixteenth-century Breviary of Aberdeen[25]. Although Grosjean praises Craster for having "put his finger on the sources of the first twenty three chapters" of the Libellus, he does not say what they are, or discuss them in detail.

2. The miracles supposed to be common to both the Breviary and the Libellus are only two in number, the fashioning or repairing of his bell and his crossing from Ireland in a boat of stone. There are no verbal similarities between the two accounts apart from the words **fasciculus** and **cirpi.**

3. The Libellus is not an account of Mulluc's childhood only, as Craster seems to infer. Both Breviary and Libellus are concerned with his whole life.

4. The Breviary omits all sorts of details which are to be found in the Libellus — for example, his parents' names, his birthplace, any references to Galloway, Rintsnoc, Argyll, or the Hebrides, his meeting with St. Columba, the names of his uncles, his sojourn in Pictland.

5. There are many incidents in the Breviary which are not to be found in the Libellus, such as the references to St. Brendan, and to Lismore, Melrose, the Shetlands, and Ross.

6. Neither of the two Lives of St. Cuthbert knew the names of his parents, only that of his foster-mother. This would be consonant with his being illegitimate, of noble birth[26], and a stranger to the district in which he was later brought up.

7. Melrose, which figures largely in Cuthbert's life, is in origin an Irish name[27] and was probably founded by Irishmen working in the Columban tradition. There is nothing unlikely in an Irish boy being sent there for educataion and upbringing.

8. Too much should not be made of Moluag's connection with Melrose, where the Libellus is said to be written. Nearly all the dedications to this saint occur north of the Forth[28].

9. The author of the Libellus refers to his authorities, both oral and written, on no fewer than six occasions[29]. This suggests that he did not invent Cuthbert's Irish origin by himself, and was firmly persuaded that the Irish tradition was correct, but felt it would not be believed elsewhere, especially in England. Hence the emphasis.

10. In order not to have to believe in an Irish tradition (whether true or false) about the birth of St. Cuthbert, Grosjean[30] gives the most complicated of explanations regarding the entry in the Martyrology of Tallaght at March 20 which refers to St Cuthbert. This is Muccin. Cutbricti Saxonis .i. Inis Menóc. He holds that an original Mucci among the Continental saints was thought of as an Irish saint and mistakenly written Mucci (expanded to to Mucín). This was also written Mucc, the entry being now interpreted as Mucc .i. Cuthbricti Saxonis, where Mucc was taken to be an abbreviated form of Mulucc. All this was done at Melrose, where the presumed original Life of Moluag supplied the basis for the narrative. There is not a shred of proof for any of this.

It appears to the present writer much simpler to regard the Libellus as a genuine piece of Irish hagiography possibly enshrining an old, even if mistaken, tradition which associated Cuthbert's early years with Ireland and filled in the narrative where required from other sources, one of which was probably a lost Life of Moluag.

(22) In *Relics of St Cuthbert*, ed. C. S. Batticombe (Oxford, 1956) 144-54.
(23) *Archaeologia Aeliana* 6 (1929) 52-94.
(24) *Two Lives of St. Cuthbert* (Cambridge, 1940). 23, n.5.
(25) II fol 5v a - 8r b.
(26) See Colgrave, op. cit. 344.
(27) Jackson, op. cit. 327.
(28) Watson, op. cit. 292-3; *Kalendars of Scottish Saints*, ed. A. P. Forbes (Edinburgh, 1872), 410-11.
(29) *Ibid*, pp 61, 63, 64, 74, 77, 86-7.
(30) Op. cit. 147-51.

A TAX ROLL FOR THE PRIORY OF SAINT MARY'S ISLE

by John Dunbar Lidderdale

In 1608 the ancient Galloway monastery of the Priory of Saint Mary's Isle was dissolved. On 10 February of that year, by charter, it was granted to James Lidderdale of St. Mary's Isle, and made into a free tenendry for him — virtually a repetition of the charter to him of 1587. The connection, however, of the Lidderdales with the Priory began in the person of Master Stephan Lidderdale, possibly a Churchman, uncle of James, to whom certain lands and the manor place of St. Mary's Isle were leased by Master Robert Richardson, Prior of St. Mary's Isle, by charter, 2 January 1558. The speed with which the control of the Lidderdales of that religious house was consolidated, was, perhaps, increased by a marriage connection between them and the Richardsons. Before 1572 Kathleen, daughter of Robert Charteris of Kelwood[1] — nephew of Robert Charteris of Amisfield, son-in-law of John, fourth Lord Maxwell — and Katherine, sister of Master Robert Richardson, Commendator of St. Mary's Isle and Treasurer of Scotland, married James Lidderdale and was mother of Thomas, his heir. Thomas Lidderdaill of Sanct Marie Ile (mentioned below) was served heir portioner to Master Robert Richardson, Commendator of Sanct Marie Ile, his great-uncle, 4 May 1630.[2]

A Tax Roll for the Priory of St. Marie Ile for 1630[3] came to light during some researches into the history of the Lidderdales. The document is reproduced below, somewhat condensed, and is signed by Thomas Lidderdaill of the Ile, Prior, James Lidderdaill, Bailie, and the latter's clerk, Mr John Meikle, probably the Kirkcudbright notary of that period. The annals of the Scottish Parliament record the Prior of St. Mary's Ile[4] convening his feuars and vassals in the years 1613, 1617, 1621, 1626, 1630, 1634, and 1665, showing that other similar Tax Rolls should exist.

"In court held by James Lidderdaill, Bailie, at Kirkcudbright, 13 October 1630, Thomas Lidderdaill of the Ile, Prior of St. Marie Ile, appeared and produced:—

(1) Act of the Convention of Estates for relief of prelates and beneficed persons in taxation, granted in July 1630.

(2) An extract written and signed by James Prymrose, Clerk to the Privy Council, testifying that the said Priory in every one of the terms of Taxation is to be taxed at £103-6s-8d.

1. Thomas Lidderdaill, Prior of St. Marie Ile:— yearly rent of Priory 2000 merks; blench duty to Crown £86; free rent remaining £1253-6s-8d; tax £36-10s-5d.
2. William Tailyefear of Haircleuch, wadsetter of the five pound land of Little Galtway:— yearly rent 450 merks; tax £8-15s-0d.
3. The said Tailyefear, as wadsetter of the five pound land of Torris:— yearly rent 450 merks; tax £8-15s-0d.
   (Both the above had been cancelled as William Tailyefear is not due any relief in respect of the said Priory.)
4. William Quhitreid of Mylnhous, feuar of the mill and mill lands of Grange:— yearly rent 500 merks; tax £9-14s-6d.
5. Sir Robert McClellane of Bombie, Knycht, and David Ramsay, indweller in Edinburgh, feuars of the twenty merk land of Eitoun[5]:— yearly rent £1000-0s-0d; tax £29-3s-4d.
6. John Dunbar of Pankill,[6] as feuar of the five pound land of Pankill:—yearly rent 500 merks; tax £9-14s-6d.

1. Abs. Comm. Court Reg., Kirk. F. 191 b, p. 148.
2. Inqu. Generales. 1631.
3. Seventeenth Century Exchequer Rolls. Unprinted, unindexed.
4. Acts of the Parliaments of Scotland, General Index, p. 1082.
5. Eitoun, or Yettoun, was a tiny ecclesiastical barony, probably in the ancient parish of Kirkmadryne, Wigtownshire, which was a patrimony of the Priory of St. Mary's Isle.—Chalmers, Caledonia.
6. Dunbar of Pankill succeeded to the barony of Mochrum in 1656. His mother, Nicolas Stewart, was sister of Alexander, first Earl of Galloway, being advanced to the Earldom 19 September 1623.—P. H. McKerlie, Lands . . . in Galloway.

Teinds.

1. Sir Robert McClellane of Bombie, for the teinds of Anwoth, estimated in his absence to be worth yearly, 17 chalders, 8 bolls of victual at £80 the chalder:— £1400-0s-0d; tax £40-6s-8d.
2. Kirkmadryne Kirk. Alexander, Earl of Galloway, for the teinds of the lands of Egerness, estimated in his absence to be worth yearly, 28 bolls of victual at £80 the chalder:— £140-0s-0d; tax £4-1s-8d.
3. John Dunbar of Pankill, for the teinds of Pankill, worth yearly, 28 bolls of victual at £80 the chalder:— £110-0s-0d; tax £3-0s-0d.
4. — — Dunbar in Orcharstoun, for the teinds of the five merk land of Orcharstoun, worth yearly 24 bolls of victual at £80 the chalder:— £120-0s-0d; tax £3-0s-0d.
5. — — Gordon of Craiglaw (Crauchlaw), for the teinds of the lands of Culskadden, worth yearly 2 chalders of victual at £80 the chalder:— £160-0s-0d; tax £4-13s-4d.

(Signed by) T. Lidderdaill
J. Lidderdaill,Balye
Mr John Meikle, Clerk"

KIRKCUDBRIGHT : SOME VANISHED LANDMARKS

by Angus Graham

The history and antiquities of Kirkcudbright were described by J. Robison in his **Kirkcudbright** (1926), and I. F. Macleod has recently done much, in his pamphlet **Old Kirkcudbright** (1975), to make up for Robison's deficiencies; but the town has seen such changes in the last two hundred years that fuller consideration of some of its vanished features seems to be called for if its earlier condition is to be clarified. The present paper will accordingly discuss three of the most important of these features, namely, the motte, the creek, and the fosse — the last evidently a ditched fortification.

The Motte. As Robison and Macleod both point out, the basic topographical features of the site were a raised ridge of dry ground overlooking the bank of the Dee, and a creek and swamps cutting off its N.E. end and bordering it to east and south-east. That the ridge once carried some kind of defensive work is vouched for by constant references in the **Town Council Records** to the 'mote', 'moat' or 'moit', and by the place-name Mote Brae which is still attached to the terminal portion of the ridge. It is natural to think of this work as an ordinary motte, that is to say, an earthen mound shaped like an inverted bowl and probably associated with a bailey, and to place it at or near the N. end of the W. section of the High Street — an inference for which much supporting evidence could be cited. For example, the arrangement of an axial street resting its inner end on a superior's castle was normal in early burghs, and an entry in the **Town Council Records** of 1579 describes the street as leading from the motte to the market cross[1]. The terms 'mote woll', 'mote wall' and later 'mote well', are frequently used of a well (Sc. woll) in this same vicinity, and No. 2 High Street appropriately bears the name Motewell House. On this showing, too, four properties described as lying between the motte and the Dee, which were let by the Town in 1584[2], would fall into place on sites roughly corresponding with the N. side of Castle Bank; while the motte's close connection with the harbour and landing-place appears in a number of contexts — the provision of two ferry-boats 'at the Moit' in 1597[3]. the 'arryvell of the schip at the Moit' in 1611[4], the removal of coal from a vessel 'at the Moit wall' in 1640[5], and the Town's application to the Convention of Royal Burghs in 1608 for help in the 'reparatioun of thair heavin and mott'[6]. On the other hand, it does not necessarily follow that the works

1. *KTCR*, 1576-1604, 95.
2. Ibid., 200 f.
3. Ibid. 347.
4. *KTCR* 1606-1658, 99.
5. Ibid., 612.
6. *Records of the Convention of Royal Burghs*, ii, 266.

at Kirkcudbright embodied a regular basin-shaped mound, as an inventory of related material shows that the term 'mote' is popularly applied in this region to works of the most diverse origins. Some examples in point are the Mote of Mark, basically a vitrified fort, which also provided evidence of Dark Age occupation; Bargrug Mote, an enclosure, and the Motes of Doon, Hall Hill and Ingleston, all patently forts. Further confusion is introduced by the analogy of 'moot', understood as meaning a place of popular assembly for public discussion. Again, true mottes differ widely among themselves in size and plan. It is therefore quite possible that the Kirkcudbright 'mote' may in fact have been some kind of fort. with earthworks of modest height but a considerable system of baileys and outer enclosures, sufficient, perhaps, to have covered much of the Moat Brae site. This hypothesis would help to explain, what is otherwise puzzling, the disappearance of the putative basin-shaped mound. Conceivably it might have been slighted for security reasons by the builders of the Royal castle at Castledykes, just outside the town, or again it might have been left to natural decay and the depredations of the townsmen; and this latter alternative is perhaps not unduly far-fetched in a community where clay might, on occasion, actually be stolen from a street[8].

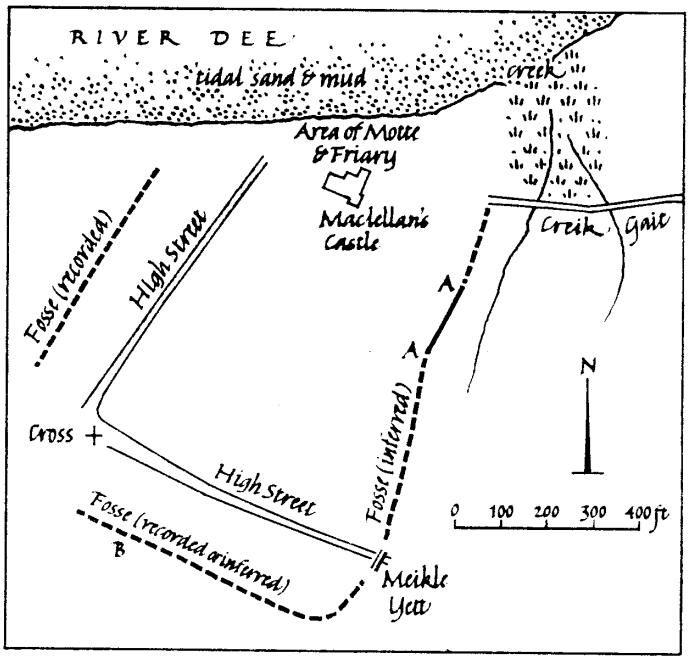


Fig. 4. Conjectural plan of Kirkcudbright about 1650, illustrating vanished Landmarks. AA, remains of fosse visible in 1976: B, fosse recorded hereabouts in 1581.

But in any case the site as a whole was evidently ready by about 1455 to receive a Greyfriars convent, with its church and graveyard[9], and Maclellan's Castle followed in the 1580's both of which facts would agree with the idea of an abandoned bailey or earlier fortified enclosure lying waste. There seem to be no grounds for Robison's statement[10] that the motte was 'levelled' when the harbour was reconstructed at the beginning of the 19th century, if this is taken as implying the digging-away of a mound, though his language would cover the superficial smoothing out of disturbed ground. Any theory regarding the disposal of a mound

7. *PSAS.*, xxvii (1892-3), 93 ff.
8. Cf. *KTCR* 1606-1658, 382.
9. This approximate date is accepted by Cowan, I. B., and Easson, D. E., *Medieval Religious Houses in Scotland*, 2nd edn., 126
10. Op. cit., 146.

should in fact be treated with caution; and it seems particularly unlikely that the Mote Brae should have acquired its present form through the piling-up of the contents of a mound as it may be calculated that 50,000 cubic feet of earth[11] spread evenly over the Mote Brae and the surroundings of Maclellan's Castle, an area estimated at about 36,000 square feet, would only raise the surface about 15 inches.

The Creek. A picture of the creek and its associated marshy areas, as these existed in the later 18th century, can be reconstructed from a plan of the town by J. Gillone, junior, dated 1776, of which a tracing is preserved in the Stewartry Museum. At that date water, presumably normal high tides, evidently extended well inland past the E. end of the Mote Brae, to form, with the marshes that bordered it, a south-going fingerlike inlet between the fairly gentle slope now carrying the Castle Street back-gardens and the steeper one rising to the parish church of St. Cuthbert. At the same time, waterlogging affected what is now the E. part of St. Cuthbert Street, as far as the point where this rises to its junction with Millburn Street, and likewise much of the present Castle Park and St. Mary Street. This conclusion is not at variance with the existence of the Creik Gait, a road which crossed part of the marshy ground on a somewhat sinuous line approximating to but lying slightly north of the modern St. Cuthbert Street, though this route's utility must have been greatly impaired by high tides and flooding, and a local tradition exists that stepping-stones were necessary. The **Town Council Records** mention the Creik Gait at least as early as 1588[12], and Robison quotes another minute, of 1739, as alluding to the common highway 'by ye creek to ye Millburn'[13]. Marshy conditions must also have extended south-westwards into the ground lying in the angle between the W. and S. sections of the High Street, as a minute of 1579 records the opening, by a public-spirited burgess, of 'the auld conductis of the Wattergait . . . quhair it was stoppit', somewhere in the neighbourhood of the then parish church — St. Andrew's now vanished — which stood behind the present Sheriff Court[14].

Material remains of the creek and swamps are rare and hard to identify, not least because the harbour-basin, which replaced the core of the creek in the early 19th century, has now itself been filled up, while the marsh-lands have been either built over or re-organized as the Church Park. But a great deal of light is thrown on their former extent and conditions by the evidence of drainage conduits, as these no doubt point to the areas that chiefly required attention, and also perhaps to natural lines for drainage; and here I have had the benefit of advice from Mr A. L. D. Bowick, who kindly gave me the results of his experience gained as Burgh Surveyor. By his account, the principal feature of the system was a brick-built gathering-pit underlying St. Cuthbert Street immediately in front of Nos. 18-22; water was brought to the pit by a number of built conduits and was passed from it to the harbour-basin, the inner end of which lay close by on the north. The difference in level between the inlet and the outlet of the pit — about 9 feet — indicated that the original level of the creek had been at least that much lower than the modern street, and on this showing the creek would have been some 21 feet lower than the High Street at Corby Slap. From the perished condition of the brickwork. Mr Bowick estimated that the pit might date from the early 18th century. The conduits, which are built of slabs, are square in section and measure about 2 ft. a side, he believes may be considerably older, particularly in view of the Town Council minute of 1579, quoted above; but an exception is one which runs along the southernmost block of Castle Street, as this is brick-built, with a vaulted roof, and is up to some 4 ft. 6 in. in height, while its alignment with this part of the street, which was not formed until the turn of the 18th and 19th centuries, seems to place it in a category later than and perhaps different from its slab-built counterparts.

No map of these conduits is known, but Mr Bowick described their principal lines as follows (i) From near the hospital at the top of St. Mary's Place, and thence under the tennis-courts and the Town Hall. Slight cracks in the masonry of the Hall near its SW. corner may

11. A hypothetical figure, for a mound thought of as being 20 ft. in height and 30 ft. in diameter at the top, as having a slope of 40°.
12. *KTCR.* 1576-1604, 229.
13. Op. cit., 174.
14. *KTCR* 1576-1604, 102.

indicate some resulting subsidence, as may also the slight outward lean of the gable-wall of the last house on the S. side of St. Cuthbert Street. (ii) From a point somewhere behind No. 107 High Street, northwards down the hollow that formed Gillone's finger-like extension of water and marsh (supra). (iii) From near the Tolbooth, again down the same hollow. Clear signs of subsidence can be seen at the foot of this hollow, in the houses already mentioned at 18-22 St. Cuthbert Street, in the sagging of the roof-line, the distortion of a fanlight and a string-course, and the displacement of a window-lintel.

Finally, in a more general way, the plan of the town itself implies the existence of the creek. This it does through the anomalous arangement of the High Street, as this consists of two sections, each about 250 yards in length, set at right angles to one another, the W. section running south-westwards from the putative position of the motte (supra) to the Tolbooth and the S. one eastwards thence and out through the Meikle Yett. The W. section, as has been said, thus occupies the normal position of a burgh's axial street, but to provide egress towards the outer world on the east the S. section was evidently made to branch off as soon as the terrain permitted, turning the head of the marshy hollow that drained northwards to the creek.

The Fosse. In 1843 the **New Statistical Account** recorded that the town was formerly encompassed by a wall and fosse. Nothing of the wall was then visible, but the 'fosse or ditch' was still open in several places. There was a gate 'at the river', and another 'on the side next the Barhill, called the Meikle Yett[15]. This account agrees with that of Sir Thomas Carleton, who led an unsuccessful attack on the place in 1547, and who stated that it was 'diked' on both sides, with a 'gate to the waterward and a gate at the overend to the fellward', and that the townspeople 'barred their gates and kept their dikes' against his force[16]. The fosse is likewise vouched for by a sketch attributable to the years 1563-5[17], which shows it as embracing the landward sectors of the burgh on east, south and west, and as being crossed by an approach-road on the line of the S. section of the High Street — this interpretation of the drawing seems preferable, at any rate, to one which would make the enclosing lines an inland extension of the creek. In full agreement with these earlier records is the 6-inch O.S. map of 1850, with notes on structural remains of which some traces can still be identified.

These structural remains are best represented by a stretch of heavily wasted earthen bank, which runs north for some 60 yards from Tanpits Lane along the lower edge of the Castle Street back-gardens. The remains are those of a ditch-and-bank earthwork, no doubt originally topped by a palisade. The map titles this work 'Fortification, remains of', and indicates that it continued northwards to the back of the houses in St. Cuthbert Street, its line being perpetuated here by a boundary between two properties. Its N. end, on this showing would have reached the street a few doors W. of the subsidence described above. No doubt it ultimately rested on the creek, though the suggestion that high tides ever flowed into the fosse and surrounded the town with water[18] seems to be ruled out by the rise in the level of the ground[19]. The 'Creik Gait' presumably passed through the fosse at or near its N. end, though not through Carleton's 'waterward' gate, which is better identified with the **NSA**'s gate 'at the river'; and this in turn can be placed, as suggested by Macleod[20], somewhere near the NE. end of the High Street, as a gate so situated — say, near Motewell House (supra) — would have opened on the part of the riverbank where ships were beached or tied up as, for example, in Drury's plan of 1604[21].

Between Tanpits Lane and the High Street the fosse must have traversed ground which is now covered with asphalt, but the point where it reached the High Street is fixed by the

15. *NSA*. iv (K), 20.
16. His report is reproduced by McDowell, W., *History of the Burgh of Dumfries*, 226.
17. Armstrong, R. B., *History of Liddesdale, etc.*, i, App. lxx, p. cvi. It is reproduced by Robison, J., op. cit., 137.
18. *NSA*, iv (K), 20.
19. Bench-mark 30.10 at the W. end of Tanfield Lane, and 31.0 at Corby Slap.
20. *Old Kirkcudbright*, 23.
21. Reproduced ibid., Pl. 5.

known site of the vanished Meikle Yett. This point is in close alignment with the remains of the work as just described north of Tanpits Lane. Beyond the Meikle Yett site, the alley called Corby Slap opens southwards from the High Street, and this alley, with the footpath that prolongs it, preserves the same north-south line for some 53 yards between the adjacent back-gardens. The path then turns to the west in a rounded corner, and continues more or less parallel with the High Street along the outermost ends of the gardens, the lane lying noticeably higher than the garden ground for some 30 yards north and 40 yards west of the corner, and it seems clearly to perpetuate a pathway formed along the top of a demolished earthen bank. No further traces now survive along this line towards the west, but the O.S. map marks a stretch of 'fortification', about 130 yards in length, along the bottoms of these gardens, and additional evidence for this S. section of the fosse is supplied by a deed of 1581 quoted by Robison[23] and referring to the neighbourhood of Fisher's Close. A corresponding 'fortification' is likewise marked along the outer (western) limit of the garden ground behind the W. section of the High Street, running for some 240 yards from the blunt corner of the burghal enclosure north-east of the Academy building and reaching a point very close to high-water mark some 70 yards west of the opening of Castledykes Lane. No remains of structure can be seen along this stretch, as the outer ends of the gardens are largely obscured by hedges and modern walls; but it is noticeable that at several points (e.g. No. 24) the level of the garden is up to four or five feet higher than the ground outside, and a disturbance of the fence foundations of No. 48 shows large stones displaced. How this W. section of the fosse joined up with the S. section, just described, lying east of St. Mary's Wynd, remains uncertain.

Landward defences organised in the manner described may not seem particularly impressive, but it is worth while to recall the situation that existed at Edinburgh in 1450. The construction of a town wall was making unduly slow progress, and the king accordingly ordered all concerned to strengthen and fortify 'hede roumys', that is to say, to strengthen the terminal walls of the outermost burghal plots of land, to serve the purpose of a continuous fortification[22].

The RCAM, too, in discussing the same subject[24] points to the value of town walls for peace-time domestic purposes, such as the exaction of customs on goods coming to market and for checking the entry or evasion of criminals, lepers and the plague-stricken'.

In conclusion, I wish to thank all those who have helped me in the course of my enquiries, in particular Miss J. Gordon and Messrs A. L. D. Bowick, T. R. Collin, J. Kenneth, I. G. Scott and A. E. Truckell.

22. Op. cit., 169.
23. *Charters and other documents relating to the City of Edinburgh* Scottish Burgh Records Society (1871), No. xlvii.
24. *Inventory of Edinburgh*, lxvi.

JAMES TAIT'S MAP OF LOCHMABEN, 1786

by John B. Wilson, M.D., Lochmaben.

The country side has existed in its present form so long that we can easily forget that only 200 years ago it must have looked very different. Its appearance before that time is difficult to determine and even Dr. T. C. Smout found descriptions of the countryside of that period hard to uncover. As he points out "The Agricultural Revolution of the generations after 1760 enclosed the Scottish fields, broke down the rigs, consolidated the strips, drained the stagnant mosses, took in the common, changed the crops and the rotations . . ."[1]

Little is known about the processes of enclosure in Dumfries and Galloway, though the Levellers Revolt in Wigtownshire of 1724 is well documented. However an extract from Benjamin Bell's account of his famous grandfather's life and writings quotes instructions

1. History of the Scottish People 1560-1830, T. C. Smout (1973), Collins/Fontana, p. 283.

to the tenant of Cushathill Farm near Kirtlebridge for enclosing the farm and provides some indication of how enclosure was achieved in 1772.

> "the whole of the march or ring dykes are already finished, and such as are not yet done I will finish upon the tenant leading the stone. I expect the whole farm to be sub-divided into enclosures of eight or ten acres each, as you shall plan out, and to be sufficiently secured with such fences and quick set hedges. The thorns I shall furnish. Round every inclosure the tenant to plant and take care of a row of trees, as also of all the wood growing or that may be planted: and to have proper posts and gates into every inclosure and that the Water of Mean be kept sufficient banked so as to make no encroachments on the farm."[2]

In 1970 a Map of Lochmaben and its Burghal Territories was rediscovered in Lochmaben Town Hall. The existence of this map had been known to the writer of "Lochmaben 500 Years Ago" and to Provost Robert Fraser[3] but so carefully had it been stored away in its long case above a window that it only came to the light of day when Provost Campbell remembered its location. The map is a large one, 10 feet by 7 feet and was commissioned by Lochmaben Town Council at a meeting on 1st June 1786 to assist in the presentation of their case, put forward by ex-Provost John Dickson, to the Court of Session, for the reduction and setting aside of the feus agreed in 1784 when the town's lands were alienated by provost Robert Maxwell and his friends.[4]

> "This day the Magistrates and Council considering that it is proper for giving a clear view to the Court of Session of the Rights and Interests of the Heritors of Lochmaben who are now parties in the Cause of Reduction and Declaration of the last feus of the moor Grounds of Lochmaben that the Court may be enabled to judge of that matter of Cause from a plan of the dominant or other tenements they are proposed of, and a plan of what part of the moor grounds they have formerly and on the last feus got from these said tenements thereof therefore resolve and agree to make such a plan and to employ James Tait Land Surveyor at Lockerby to make a survey and measurement of the said Subjects and also a plan thereof to be laid before the Court."

The Rev. William Graham in "Lochmaben 500 Years Ago" describes how the plan shows "every separate house, boundary line, or enclosure then existing: feued and unfeued property within the burghal territory: with the names of the various provosts, bailies, dukes, lords, barons etc. amongst whom the lands had been from time to time divided." Mr Graham goes on to comment "It is most curious and useful at the present day (i.e. 1865) and will be a subject of historical interest so long as it shall be preserved"![5]

Strangely enough the processes of enclosure in Dumfriesshire coincided with the careers of James Tait and his father John, Land Surveyors in Lockerbie, 1753-1784[6]. Many of the maps drawn by the Taits were used to help in the implementation of the new agricultural techniques of the late eighteenth century in which the open field landscape gave way to enclosures[7].

One of the main features of James Tait's map of Lochmaben is the extent of the commonties, unusually large for that period. In the older run rigg system of agriculture the town land had been divided into three parts, the infield, outfield and commonty, each with its different function. The infield, divided into riggs, was cultivated and manured extensively while the outfield, though cultivated and used for pasture, was not manured: its life was therefore limited. The commonty, besides providing grazing facilities, produced peat for burning, heather for thatching, mud and stones for building purposes and even berries and fruit for food: it was divided from the outfield by the town's head dyke.

2. "The Life, Character and Writings of Benjamin Bell", Benjamin Bell, (1868), Edmonston and Douglas, Edinburgh, p. 29.
3. Sidelights on Lochmaben History, Robert Fraser (1934), Transactions, p. 31.
4. "Lochmaben 500 Years Ago", William Graham (1865), William P. Nimmo, Edinburgh, p. 122-3.
5. Legal Geography of Scotland's Common Lands, I. H. Adams (1973), Revue de L'Institut de Sociologie, Brussels, p. 263.
6. The Land Surveyor and the Scottish Rural Landscape, I. H. Adams (1968), Scottish Geographical Magazine, Vol. 84, No. 3, December, p. 249.
7. The Mapping of a Scottish Estate, I. H. Adams (1971), University of Edinburgh, p. 29.

Tait's map does not, however, provide a complete picture of Lochmaben and its surroundings in the year 1786 for large areas of the map are blank. These areas represent farms, either those whose names are recorded in the Town Council Minute Book of 1686—Broadchapel, Broomall, Priesthead and Priestdykes, or those which were established during the next hundred years — Belzies, Smallrigg, Castlehill and Innerfield. The larger estates of the Johnstones of Elsieshiels and the Kennedyes of Halleaths are, of course, not included in the map.

The roads too are poorly drawn, though roads of a sort there must have been, for was not William Walls carried off by post chaise to Leatherhead in 1790[8], while the Duke of Queensberry's coach was stoned by the Lochmaben mob in 1789[9].

Like so many discoveries of antiquarian interest, James Tait's Map of Lochmaben poses as many questions as it answers. It provides, however, a fascinating picture of the appearance of a small burgh and its surroundings at that time. Two large rectangular areas, with the names of the feuars and coloured in different shades, cover those parts known as Lochmaben Moor and the Crofts, behind Princes Street, the main areas under dispute at that time. The original map has been restored for preservation in the Map Room at West Register House in Edinburgh, but a black and white photographic copy can be seen in Lochmaben Town Hall.

8. Three Eighteenth Century Letters, J. B. Wilson. These Transactions forthcoming.
9. Lochmaben and the Second Marquis of Annandale, J. B. Wilson. These Transactions supra.

A HITHERTO-UNRECORDED LEAD MINE AT GARPLE BRIDGE, NEAR BALMACLELLAN, KIRKCUDBRIGHTSHIRE

by Mary Tucker and D. G. Tucker

We recently discovered an old map, dating from 1848-9, showing two levels and a shaft by the River Garple. A copy of this map, as nearly exact as we can make it, is shown in Fig. 5. The original is far too faded for reproduction. The locality concerned was identified from the reference to Carsphairn on Spalding's Lode, and from the name Holme Mill, as being between Balmaclellan and St. John's Town of Dalry in Kirkcudbrightshire. The O.S. grid reference of the road bridge over the Garple ("Garple Bridge") is NX 646 809. As far as we can discover, there has been no published reference to any mine at this place; we have searched the Old and New Statistical Accounts of Scotland[1,2] and all references given by Donnachie[3] to metal mining in Galloway, and also all the relevant O.S. and Geological Survey maps. Moreover, we could find no documents or plans in the Scottish Record Office relating to the estates concerned. The nearest relevant items are a mention in the Old Statistical Account that lead ore occurred near Kenmore in the parish of Kells (just south of New Galloway) and a statement by Wilson and Flett, that "a lead mine is said to have been worked at a point about two miles further to the north" of Kenmore. As Garple Bridge is about 3 miles N.N.E. of Kenmore, it is possible that the reference is to the Garple Bridge mine, in which case it may have been worked before about 1790, although Wilson and Flett's reference may have been to the operation indicated by our map. In any case, the statement in the Old Statistical Account gives some support for the existence of the lode shown as Spalding's Lode on our map.

The map, together with one or two related letters, was found in a vast uncatalogued

1. Sir John Sinclair (ed.), "The Statistical Account of Scotland", Edinburgh; Parish of Kells, vol. 4, 1792, p. 263; Parish of Balmaclellan, vol. 7, 1793, P. 223; Parish of Dalry, vol. 13, 1794, p. 45.
2. "The New Statistical Account of Scotland", vol. 4, Kirkcudbrightshire, c1843.
3. I. Donnachie, "Industrial Archaeology of Galloway", David & Charles, Newton Abbot, 1971.
4. G. V. Wilson and J. S. Flett, "The Lead, Zinc, Copper and Nickel Ores of Scotland", Mem. Geol. Survey Scot., H.M.S.O., 1921, p. 56.

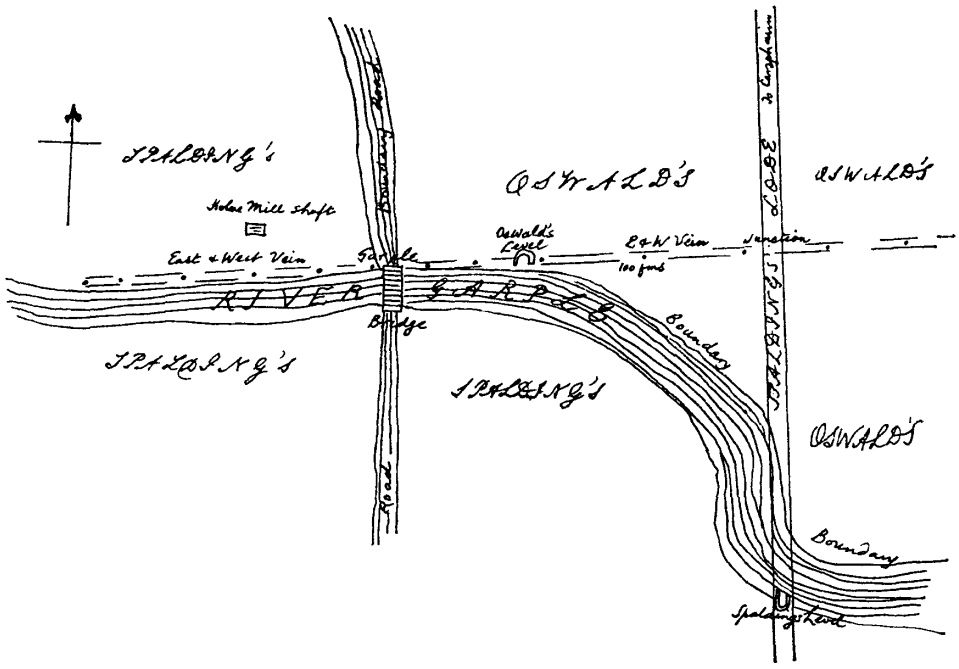


Fig. 5. Sketch map of Garple Bridge Mine made by Henry Francis (junior) in 1848-9. It is a rough map only, the river being in reality very much narrower than indicated. The scale can be judged from the distance of 100 fms (200 yards) shown between Oswald's Level and Spalding's Lode.

collection of papers[5], all relating to the business and family affairs of the Francis family[6], who operated as mining engineers and agents (and later as speculators) chiefly in Cornwall and Wales. They did have one or two excursions to Scotland, however.

On 27 May 1847, James Bullock of London wrote to Henry Francis (senior) to confirm arrangements for a visit they were to make together to Mr J. E. Spalding at the Holme (a house less than a mile from Garple Bridge) with the purpose of inspecting and reporting on the works of a small mining company which Bullock had formed. Apart from travel instructions, Bullock also appended an instruction as follows:—

> "Our Capt. at the mine is H. T. Gripe the son of Capt. James Gripe who was in Spain.
>
> We want an opinion on the part of the Company without affection to the Lessees or fear of the Landlord as to what has been done and ought to be done for the future if the property is worth exploring and working. There is a good deal of Iron ore on the Estate — but we want your opinion as to the other minerals — lead and copper — I have told my friends that Henry Francis, Mr Hawkins' agent and an experienced miner, will give them an honest and straightforward opinion. I want to do justice to my clients and to get the best for them."

Apparently the inspection was satisfactory, for Bullock wrote again to Francis on 17 June 1847:—

5. The Druid Inn papers, National Library of Wales, Aberystwyth.
6. For some details of the Francis family see D. E. Bick, "The Metal Mines of Mid-Wales, Part 1", The Pound House, Newent, Glos., 1974, pp. 48-9. For greater detail of Henry Francis (senior) see D. G. and M. Tucker, "The story of Wheal Guskus in the parish of Saint Hilary", J. Trevithick Soc., vol. 1, 1973, pp. 49-62.

> "I was very glad to meet you again and I hope our prosperity in the north will be such as to make another meeting at no distant day desirable and necessary . . . We are going to form our little lead mine company adjoining Mr Spalding's land — I shall put you down for 2/64 parts — H. Gripe takes 2/64 and I take 6/64."

It is doubtful if Henry Francis (senior) went to the site again, but his son Henry Francis (junior) spent much time during 1848-9 at Carwinning mines in Ayrshire, and at some time during this period sent his father the map we have already shown in Fig. 1. Although it is not signed and the accompanying letter cannot be found, there is no doubt that the writing on the map is Henry junior's, for we are familiar with it from other material. The map makes it clear that two landlords were involved; the shaft and one level were on Spalding's land, and one level was on Oswald's land. Presumably the introduction of Oswald into the concern came after operations had been begun.

We have no further documentation, and we can only guess that the mine quickly failed. There was never a report, as far as we can detect, in the **Mining Journal.**

We have visited the site to see what can be learned there. It is a beautiful place, with the little river running in a deep narrow valley, well-wooded on the northern bank to the east of the bridge. We found the entrance to Oswald's Level without difficulty, 100 yards east of the bridge. It is now blocked, but unmistakably a mine. However, there is no sign of spoil, and this confirms our guess that the mine did not work for long. We could not find Spalding's Level, but this, of course, does not mean that it did not exist at one time, or indeed, even now behind a fall of rock or under vegetation. On the north-west of the bridge, beyond where the little Trolane Burn flows into the Garple by a rocky waterfall, there is now a ploughed field. The 25-inch O.S. map of 1895[7] shows this as marshy where the mine shaft was supposed to be; but there is now no sign of marsh, and the only possible suggestion of where the shaft was is a squarish darker patch in the field.

We conclude that there was undoubtedly a mine here, that it was probably worked by Bullock's company for a very short while, but proved unsuccessful.

7. 25-inch O.S. map, Kirkcudbrightshire Sheet 18.11, resurveyed 1893, published 1895.

PROCEEDINGS 1975-76

1975

10th October

The Annual General Meeting was held in the Ewart Library. The President, Mr A. E. Truckell, was in the chair. The accounts were adopted. Mr Archibald said that the raising of the subscription would probably have to be considered soon. Mr Archibald was warmly thanked for his services as treasurer over the past five years. Miss Morag Donald was wel comed as his successor. Mr Alex Robertson gave a talk, at very short notice, on a tour of Greece he had made in the summer of 1974. He showed slides of a great many places, including both ancient and medieval remains.

24th October

Dr J. Stone of the Geography Department, Aberdeen University, a member of the Society, gave a talk on early Scottish maps and showed slides of many of them, starting with maps based on Ptolemy, which were still being copied till the 16th century. The President announced that the inaugural meeting of the Field Study Group would be held on 31st October.

7th November

The Members' Night was held in Troqueer School. The first speakers were Mr Michael Ansell and Mr Jonathan Condry, who gave an account, illustrated by slides, of their discovery and excavation of a Romano-British site at Clatteringshaws. Mrs Martin then spoke about her work in botanical recording in Dumfriesshire. Finally Mr Alex McCracken, gave an account, with slides, of the work he has done in gravestone recording. During the interval refreshments were served by a committee led by Miss Gerdes.

21st November

Miss Joanna Martin of the Nature Conservancy Council spoke about the Council's work in Dumfries and Galloway and showed slides of some of the reserves in the area.

5th December

The speaker was Dr. J. Wilson, a member of the Society. His talk was entitled "Three Scots in the service of the Czars". He spoke about three Scottish doctors, Dr. Mounsey, physician to the Empress Elizabeth, Dr. Rogerson, physician to Catherine the Great, and Sir James Wyllie, physician to Alexander I and one of the great military surgeons of his day.

1976

9th January

Mr L. Campbell of Dumfries Academy gave a very full and vivid account of the story of St Kilda from prehistoric times to the present day. He showed a large number of slides of the islands, the birds and the last native inhabitants.

23rd January

Mr J. Davies of the Forestry Commission gave a talk entitled "The landscape and wildlife of Galloway in the year 2000 A.D." He used slides and maps to show what the Forestry Commission is doing and plans to do up to the end of the century, particularly in the scenic area between Newton-Stewart and New Galloway. He spoke of the return to the area of the eagle and the buzzard and the likely return of the osprey, grey squirrel and wild cat.

6th February

Dr. David Breeze of the Department of the Environment gave an account of his recent excavation of the Roman fort at Bearsden, which he thought had probably been a cavalry base.

20th February

Mr Alistair Adamson gave a talk on the history of Scottish coins, illustrated by slides. He pointed out that Scottish values such as the merk continued to be used in legal documents until the late 19th century. He also discussed the early history of Scottish banking.

5th March

The last speaker of the session was Mr Chris Tabrahams of the Department of the Environment. He spoke about the excavations which he had carried out during the previous two summers on the island of Threave. Remains had been found of a stone hall believed to date from the 13th century and there was some evidence of an even earlier fortification. The later castle was built by Archibald Douglas around 1369, and the anti-artillery curtain wall added in the 1450s. The rock-cut harbour, built by the Douglases had also been excavated.

PROCEEDINGS 1976-77

1976

15th October

The Annual General Meeting was held in the Ewart Library. The President, Mr A. E. Truckell was in the chair. The treasurer's accounts were adopted. The council's nominations for office bearers were accepted. There was some discussion about the content of the Transactions, and it was agreed that a questionnaire should be issued with the next volume so that members could give their views. Mr Truckell gave a talk on "Agriculture — the centuries of change." He discussed some of the main changes which have taken place in farming in South West Scotland during the last four centuries.

29th October

Mr Nicholas Walton of the Dumfries and Galloway Mill Trust gave a talk about local water mills and horse mills, some of which are being restored to working. His talk was illustrated by some beautiful slides.

12th November

Mr William Hean spoke about the work of the National Trust all over Scotland, concentrating on the countryside properties. He also showed beautiful slides.

26th November

Mr Stanley Pilling of the Stranraer Museum gave a talk on his researches in the Wigtownshire archives. He recounted some interesting cases from the burgh court records.

10th December

Mr and Mrs W. Jackson showed slides, mainly of birds, taken around their home at Dildawn. They also played recordings they had made of birdsong, and showed a prize-winning film about owls which they had made.

1977

14th January

The Members' Night was held in Troqueer School. The first speaker was Mr Kingan who spoke about his experiences as a farmer and the changes he has seen in agriculture from the time of the First World War to the present day. Mrs Martin spoke about the herbarium specimens at the museum which she has been cleaning, and exhibited some of them. The last speaker was Mr Martin who showed slides he had made of all the smallest flowers in the locality. During the interval refreshments were again served by Miss Gerdes and her helpers.

28th January

Mr A. Curtis Wolffe gave a talk entitled "The Burghs of Galloway". He explained how the principal towns of the area had grown up and developed, and showed slides illustrating the styles of architecture in the older streets.

11th February

Dr Roger Mercer gave an account of his excavation at Longknowe near Eskdalemuir, where he had been able to assess the effect on a site of ploughing by the Forestry Commission. He went on to describe an area of Arran where he was proposing to excavate some sites before afforestation is begun.

25th February

Lt. Col. C. J. R. Duffin spoke about fish farming and particularly the setting up of his own trout farm at Newtonairds near Dumfries.

11th March

Dr. Graham Ritchie was our last speaker of the session and his subject was "Strathclyde in the second millenium B.C." He spoke about sites he had examined for the Department of the Environment, covering a wide area from Argyll to Lanarkshire.

CORRECTION TO VOLUME LI.

Excavations at Dinwoodiegreen, Annandale. (Hodgson/ Cormack).
Page 26/27. The Bronze Age Pottery. (M. Yates).

Certain of the measurements have been transposed and the dimensions should be recorded as follows:—

Urn Ai	Diameter of rim	32.0 cms.
	Diameter of neck	30.0 cms.
	Diameter at carination	32.0 cms
	No height.	
Urn Aii.	No corrections necessary.	
Urn B.	Diameter of rim	32.0 cms.
	Diameter of base	9.0 cms.
	No height.	
Urn C.	Diameter of rim	36.0 cms.
	Diameter at neck	36.3 cms
	Diameter at carination	40.5 cms.
	No height.	

RULES

As revised and adopted at a Special General Meeting held on 4th May, 1977.

NAME OF THE SOCIETY

1. The Society shall be called "The Dumfriesshire and Galloway Natural History and Antiquarian Society."

AIMS

2. The objects of the Society shall be to collect and publish the best information on the natural sciences and antiquities (including history, records, genealogy, customs and heraldry) of the three counties of Dumfries, Kirkcudbright and Wigtown; to procure the preservation of objects of natural science and antiquities relative to the district; to encourage local research and field activities in natural science and excavations by private individuals or public bodies and afford them suggestions and co-operation; to prevent as far as possible, any injury to ancient monuments and records, etc.; and to collect photographs, drawings and descriptions and transcripts of the same.

MEMBERSHIP

3. The Society shall consist of Life Members, Honorary Members, Ordinary Members, and Junior Members.

LIFE MEMBERS

4. Life Membership shall be gained by a composition fee of such sum as may be agreed on from time to time by the Annual General Meeting or a Special Meeting, which shall entitle the Life Member to all the privileges of the Society.

HONORARY MEMBERS

5. Honorary Members shall not exceed twenty in number. They shall be entitled to all the privileges of the Society, without subscriptions, but shall be elected or re-elected annually at the Annual General Meeting. Honorary Membership shall, as far as possible, be reserved (a) for those who have aided the Society locally, or (b) for those of recognised attainments in natural history, archaeology, or kindred subjects.

ORDINARY AND JUNIOR MEMBERS, ANNUAL SUBSCRIPTIONS, PRIVILEGES OF MEMBERS

6. Ordinary Members shall be proposed and elected at any Meeting of the Society by a vote of the majority present. They shall contribute annually on the 1st October or within three months thereafter such sum as may be agreed upon from time to time by the Annual General Meetinig, or a Special Meeting. All Ordinary Members shall be entitled to attend the Meetings of the Society and shall receive gratis a copy of the "Transactions" of the Society on issue.

When more than one person from the same family and residing in the same house joins the Society, all after the first may pay half the subscription rate or such sum as may be agreed upon from time to time by the Annual General Meeting or a Special Meeting, and shall enjoy the privileges of the Society except that they shall not receive gratis a copy of the "Transactions."

Junior members are those who have not attained the age of eighteen. They shall be proposed and elected in the same way as Ordinary Members, but shall pay an annual subscription of such sum as may be agreed upon from time to time. Junior Members shall be entitled to all the privileges of membership, except that they shall have no vote nor shall they receive gratis a copy of the "Transactions." Junior Members shall be liable for the Ordinary Membership subscription on the first day of October following their eighteenth birthday, or within three months thereafter.

Subscriptions from newly elected Members are due immediately after election.

OVERDUE SUBSCRIPTIONS

7. Members whose subscriptions are in arrears shall not receive the "Transactions." If in arrears for fifteen months and having received due notice from the Treasurer, they shall cease *ipso facto* to be Members of the Society.

VISITORS

8. A Member may introduce a friend to any Ordinary Meeting of the Society.

OFFICE-BEARERS, COUNCIL ELECTION

9. The business of the Society shall be conducted by a Council composed of a President, Past Presidents, four Vice-presidents, Secretary, Treasurer, and twelve Ordinary Members, together with Librarians, Curators and Editors. They shall be elected at the Annual General Meeting and shall be eligible for re-election with the following provisos:

The President shall not occupy the Chair for more than three years consecutively and shall not be eligible for re-election until the expiry of one year.

Each year one Vice-president and three Ordinary Members shall retire and shall not be eligible for re-election until the expiry of one year. In deciding who shall be ineligible for re-election, the Council shall take into account length of service and attendance at the Council meetings, but if vacancies occur owing to voluntary retirement or death, these vacancies shall reduce the retiring quota.

The Council shall have power to fill casual vacancies occurring during the year. Any person thus appointed shall be subject to the same conditions as those applicable to the person whom he replaces.

QUORUM

Five Members shall form a quorum at a Council Meeting.

FELLOWS

10. On retiring, Presidents shall become Fellows of the Society. This honour may also be conferred upon Members of the Society who have done outstanding scientific work for the Society. Such individuals shall be proposed by the Council for election at an Annual General Meeting. A Fellow shall be eligible for any office for which he is qualified.

COMMITTEES

11. The Council may appoint Committees for any specific purpose, and with such powers as may seem warranted by the occasion; any such Committee to be composed of not less than three Members of the Society, exclusive of the President and the Secretary, who shall be *ex officio* members of all Committees. Every Committee shall have power to co-opt.

SECRETARY'S DUTIES

12. The Secretary shall keep a Minute Book of the Society's Proceedings, shall conduct the ordinary correspondence of the Society and shall submit a report on the previous year's activities at the Annual General Meeting. The Secretary shall call all Meetings.

EDITOR

13. The Council shall appoint one or more Members of the Society as Editors of the "Transactions," who shall be *ex officio* Members of the Council,

TREASURER'S DUTIES

14. The Treasurer shall collect the subscriptions, take charge of the funds, and make payments therefrom under the direction of the Council, to whom the Treasurer shall present an Annual Account made up to 31st March, to be audited for submission at the Annual Meeting.

The insurance against fire and theft of all the belongings of, or of articles in charge of, the Society shall be the responsibility of the Treasurer.

INVESTED FUNDS

15. The Invested Funds of the Society shall be in the name of the President, Secretary, and Treasurer, for the time being, conjointly. Life Membership fees are to be regarded as capital, and are to be invested at the discretion of the above-named three Office-Bearers in any Stocks known as Trustee Securities, or in a Bank Deposit.

MEETINGS

16. The Meetings of the Society shall be held, as arranged by the Council, and at such meetings papers may be read and discussed, objects of interest exhibited, and other business transacted.

FIELD MEETINGS

17. The Field Meetings shall be held as arranged by the Council, to visit and examine places of interest, and otherwise carry out the aims of the Society.

ANNUAL GENERAL MEETING

18. The Annual General Meeting, of which not less than fourteen days' notice shall be given, shall be held in October, and at this Meeting the Office-Bearers, Members of Council, and two Auditors shall be elected. Fifteen Members shall form a quorum.

Reports (general and financial) shall be submitted and any other competent business transacted. Office-Bearers and Members of Council shall be nominated by the outgoing Council, but it shall be competent for any two Members to make alternative or additional nominations, provided that they are in the hands of the Secretary, together with the consent in writing of the nominee(s), at least seven clear days before the meeeting. A ballot shall be held if necessary.

SPECIAL MEETINGS

19. The Secretary or the President shall at any time call a special meeting of the Society on receiving instructions of the Council, or a requisition signed by six Members. Every Member of the Society must be informed of any such Special Meeting, of which not less than seven days' notice must be given. Fifteen Members shall form a quorum.

TRANSACTIONAL RIGHT TO PUBLISH PAPERS

20. The Council shall have the right to publish in the "Transactions," or otherwise, the whole, or part, or a resume of, any paper read by any member or person at a meeting of the Society, and the Council shall decide what illustrations, plates, or diagrams shall be reproduced with any such papers.

SEPARATE COPIES OF PAPERS

21. Contributors of papers to the Society shall be entitled, if such papers be published in the "Transactions," to receive ten copies gratis of such papers as "separates" in pamphlet form.

LOANS

22. The Society is prepared to accept articles of interest for exhibition on loan, but they will not be responsible for their damage or loss by fire, theft, or any other cause. It is desirable that parties lending articles should state the value put upon them, that the Society (in their discretion) may insure the articles for a similar amount. The Council shall have the power to terminate or to refuse, the loan of such articles as they may from time to time see fit.

RULES

23. These Rules cancel all other Rules previously passed. They shall be printed in pamphlet form and a copy shall be supplied to every member and to every new member on his election. They shall take effect from the date of the Meeting at which they were adopted.

ALTERATION OF RULES

24. Alterations of these Rules or the addition of any new rule shall be made only with the consent of three-fourths of the Members present and voting at an Annual General Meeting, or at a Special Meeting, notice of such proposed alteration or addition having been given in writing to the Secretary not less than eight weeks previous to such Meeting. The Secretary shall intimate to all Members resident in the British Isles that a change in the Rules is proposed.

Publications of the Society

Transactions and Journal of Proceedings: 1st Series—(a) 1862-3, (b) 1863-4*, (c) 1864-5* (d) 1865-6*, (e) 1867-8*. New or 2nd Series — (1) 1876-8*, (2) 1878-80*, (3) 1880-3*, (4) 1883-6, (5) 1886-7, (6) 1887-90*, (7) 1890-1, (8) 1891-2*, (9) 1892-3*, (10) 1893-4*, (11) 1894-5*, (12) 1895-6* (13) 1896-7*, (14) 1897-8* (15) 1898-9*, (16) 1899-1900* (17) 1900-5 (in 4 parts)*, (18) 1905-6*, (19) 1906-7, (20) 1907-8*, (21) 1908-9, (22) 1909-10, (23) 1910-11*, (24) 1911-12*. 3rd Series — (1) 1912-3*, (ii) 1913-4*, (iii) 1914-5*, (iv) 1915-6*, (v) 1916-8, (vi) 1918-9, (vii) 1919-20*, (viii) 1920-1, (ix) 1921-2, (x) 1922-3*, (xi) 1923-4, (xii) 1924-5, (xiii) 1925-6*, (xiv) 1926-8*, (xv) 1928-9, (xvi) 1929-30*, (xvii) 1930-1, (xviii) 1931-3, (xix) 1933-5*, (xx) 1935-6*, (xxi) 1936-8*, (xxii) 1938-40*, (xxiii) 1940-5*, (xxiv) 1945-6*, (xxv) 1946-7, (xxvi) 1947-8, (xxvii) 1948-9 (Whithorn Vol 1)*, (xxviii) 1949-50*, (xxix) 1950-1 (with Index of Vols. i to xxvi*), (xxx) 1951-2*, (xxxi) 1952-3* (Hoddam Vol.), (xxxii) 1953-4, (xxxiii) 1954-5, (xxxiv) 1955-6 (Whithorn Vol. 2)*, (xxxv) 1956-7, (xxxvi) 1957-8, (xxxvii) 1958-9, (xxxviii) 1959-60, (xxxix) 1960-61 (with Index of Vols. xxvii to xxxviii), (xl) 1961-62* (Centenary Vol.) (xli) 1962-3 (xlii) 1965 (new format), (xliii) 1966, (xliv) 1967, (xlv) 1968, (xlvi) 1969, (xlvii) 1970, (xlviii) 1971, (xlix) 1972, (l) 1973, (li) 1975 (lii) 1976-7

Prices: Single Volumes — £2 (plus postage)

Runs of Volumes — On application to Hon. Librarian.

A List of the Flowering Plants of Dumf. and Kirkcud. by James McAndrew, 1882*.

Birrens and its Antiquities, by Dr. J. Macdonald and James Barbour, 1897*.

Communion Tokens, with a Catalogue of those of Dumfriesshire, by Rev. H. A. Whitelaw, 1911*.

History of Dumfries Post Office, by J. M. Corrie, 1912*

History of the Society, by H. S. Gladstone, 1913*

The Ruthwell Cross, by W. G. Collingwood, 1917*.

Records of the Western Marches, vol. I, "Edgar's History of Dumfries, 1746," with illustrations and ten pedigree charts, edited by R. C. Reid, 1916*.

Records of the Western Marches, Vol. II, "The Bell Family in Dumfriesshire," by James Steuart, W.S., 1932*.

Records of the Western Marches, Vol. III, The Uper Nithsdale Coalworks from Pictish Times to 1925, by J. C. I. McConnell, 1962. 75p.

Notes on the Birds of Dumfriesshire, by Hugh S. Gladstone, 1923*.

A Bibliography of the Parish of Annan, by Frank Miller, F.S.A.Scot.*.

Index to Transactions, Series 1 and 2. £1 post free.

The Marine Fauna and Flora of the Solway Firth Area by Dr E. J. Perkins, 1972, 112pp. £1 post free.

Birrens (Blatobulgium) by Prof. A. S. Robertson(1975) 292 pp. 88 figs., 12 plls. £5.50 post free to members, £7.50 to non-members. Obtainable from Hunterian Museum, The University, Glasgow G12 8QQ.

*Indicates out of print, but see Editorial.

REPRINTS (Selection)

Bronze Age Metalwork in Dumfries and Galloway, by Dr. John M. Coles (1965), 38 pp. with 11 figs., 1 pl., and inventory of 233 finds. 20p post free.

Food Vessels in S.-W. Scotland, by D. D. A. Simpson (1965), 26pp., 76 vessels illustrated, described and fully discussed. 20p post free.

The Battle-Axes, Mace Heads and Axe-Hammers from S.-W. Scotland, by Fiona E. S. Roe (1967), 23 pp., 8 figs., 2 pls., 206 implements inventoried and fully discussed. 35p post free.

A Mesolithic Site at Low Clone, Wigtownshire, by W. F. Cormack and J. M. Coles (1968), 29 pp., 10 figs., 1 pl. 25p post free.

Excavation of Two Chambered Cairns (and two burial cairns) at Mid Gleniron Farm, Glenluce, Wigtownshire, by J. X. W. P. Corcoran, Ph.D., F.S.A. (1969), 71 pp., with 16 figs., 9 pl. 75p post free.

Early Settlements in Eastern Dumfriesshire by George Jobey, 1972, 26pp., 43 figs., 1 pl. 55p post free.

Beaker Pottery in South-West Scotland by J. N. Graham Ritchie, 1970. 45p post free.

Grieve the Printer Ltd., Minerva Works, Dumfries.