## olo ayrshire



### LARBOURS

angus graham

**AANHS** 

£2.00

## olo ayrsbíre barbours

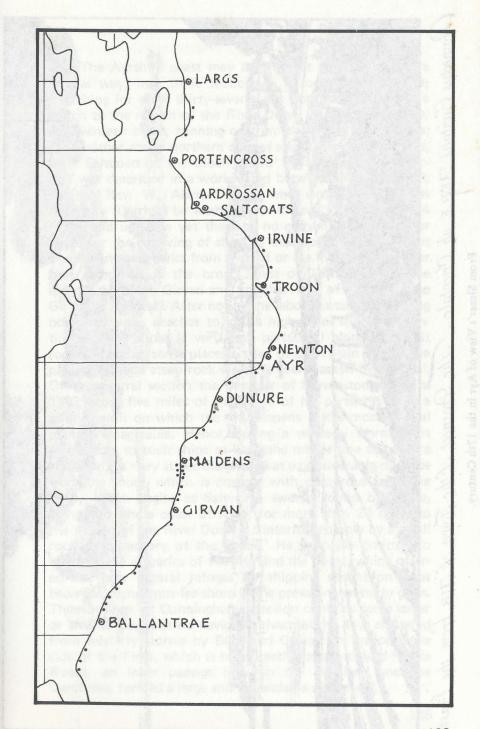
angus graham

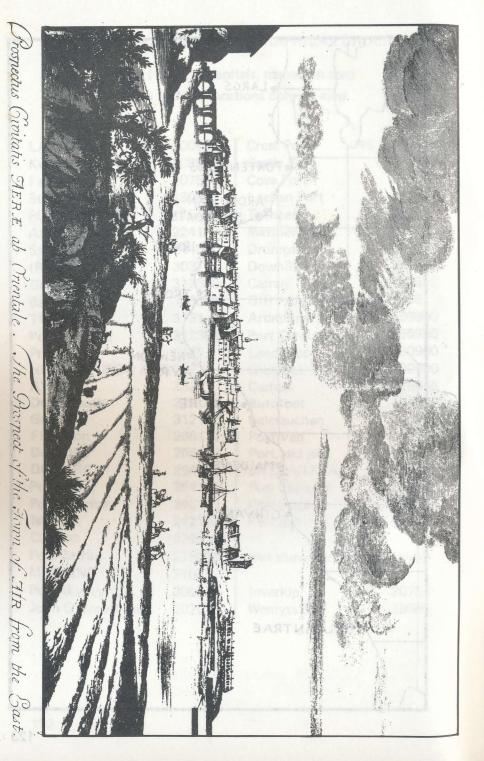
AYRSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY 1984

#### HARBOUR SITES IN TOPOGRAPHICAL ORDER

#### Class I Sites, in capitals, named on map Class II Sites, locations only on map

LARGS	NS	200594	Cross Port	NS	200076
Kelburn		208563	Castle Port		196073
Fairlie		207559	Cove Port		195070
Stoney Port		180516	Lochan Port		194070
PORTENCROSS		175491	Turnberry		1906
ARDROSSAN		2241	Matthews Port		199036
SALTCOATS		2440	Drumgarloch		199036
IRVINE		3037	Dowhill		198031
Gailes		317360	Carran		197017
Barassie		326339	GIRVAN	NX	1898
TROON		3131	Ardmillan		166950
Port Ronnald		312308	Port Cardloch		166950
Prestwick		3425	Lendalfoot		130900
NEWTON UPON	R 3322	Glenfoot		130900	
AYR		3322	Carlton		125895
Doonmouth		324195	Burnfoot		108882
Greenan		312193	Balcrauchan		090878
Fisherton		266177	Port Vad		091870
Dunduff		266177	Port, old pier		090855
DUNURE		254161	BALLANTRAE		0882
Port Rorie		254161	Port Curcarie		054780
Port Shuchan		246151	Portandea		046754
Isle Port		242129	Port Sally		051724
Culzean		229100			
Port Carrick		219098	Not shown, in Renfrewshire.		
MAIDENS		2108			
Port Murray		205080	Inverkip	NS	2072
John O'Groats P	ort	202078	Wemyss Bay		1968





The Ayrshire coast may be thought of as falling, in a general way, into three sections - a rocky southern one, stretching for some thirty-seven miles from the Wigtownshire march to the mouth of the River Doon; a sandy central one, of seventeen miles, running on from the Doon to Saltcoats; and another rocky northern one, of about twenty-four miles, from Saltcoats to the Cloch Point. The southernmost section was described in a work dated between 1683 and 1722, by the Rev. W. Abercromby, who wrote 'though this Countrey (Carrick) be washed with the sea for a space of 24 myles and upwards yet there be no convenient harbours or bayes for the receiving of ships so that none resort to it but small boats and barks from Ireland or the highlands and ther best receptacle is the broad sands of Turnberry and the mouths of Doon, Girvan and Stinchar: and of all these three Girvan is the best'. After noting the labour entailed in pulling boats up these beaches to above high-water mark, he continued, 'The shoar is very well parted all alongst betwixt rocks and sand, some places a tract of open plain sand, some places high and steep rock which is ever washen by the sea'. Of the central section the minister of Stevenston wrote in 1793<sup>3</sup> that five miles of the shore of his parish 'is quite a sandy beech on which the sea deepens in the most gradual manner imaginable. Hence, during a westerly storm, it is formidable to such ships as have the misfortune to be here embayed, as they strike the ground at a considerable distance from the shore, which is covered with dangerous surf. The sandy beach begins at Saltcoats, sweeps round by Irvine, along the whole coast of Kyle, for more than 20 miles to the mouth of the River Doon . . . interrupted only by a small rocky promontory at the Trune.' He strangely omitted to mention the estuaries of the Ayr and the Irvine, which offered the best natural refuges for shipping caught on what became a dangerous lee-shore in the prevailing westerly gales. The northern, or Cunninghame, section contains some larger or smaller bays but no navigable rivermouths. It is sheltered from westerly storms by Bute and Cowal, on the opposite side of the Firth, which is here greatly narrowed, and Fairlie Roads, an inner passage between the mainland and the Cumbraes, formed a large and dependable anchorage.

Major estuary sites are Ayr and Irvine, with Girvan of less importance, while Dunure and Portencross, though showing artificial improvement no doubt owe something to their position in rocky inlets. Wholly artificial major sites are Ardrossan, Saltcoats, Troon and Ballantrae, with Largs in a lower category. Estuarial conditions resulted, at both Irvine and Ayr, in alluvial silting or obstruction of the channel by banks of sand or gravel, and at Irvine in particular extensive and elaborate remedial work was done. Rather similar conditions, perhaps combined with changes in the line of the coast, may have led to the use by very small craft of the tidal lagoons and backwaters, as probably at Ballantrae or the mouth of the River Doon.

The harbours' development may be thought of as proceeding by phases, in accordance with the roles that they performed from period to period. It seems fair to put back their origins to prehistoric times, on the assumption that most of the harbours began as settlements of fishermen, and that fishing in one form or another has probably furnished a background, at all periods, to other sea-going activities. Passing references in the records to salmon-fisheries in the estuaries, and to boats working in the Firth and in the Sound of Kilbrennan, seem to exemplify a well-established pattern of ancient standing. At a less primitive stage came mediaeval overseas trade, and here Ayr and Irvine assumed special importance as serving Royal Burghs with overseas trading rights. In a later extension of this phase, there appeared three additional major harbours, namely Troon, Saltcoats and Ardrossan: devoted primarily to the shipping of coal from the neighbouring coal-fields, besides taking their share in general trade, particularly with the Irish and western British ports. This group of five major harbours provides an analogy with Galloway, for just as Port Logan and Portpatrick were designed to meet the demand for a North Channel crossing,4 and occupied the least unfavourable positions on a generally inhospitable coast, so the Ayrshire group, notwithstanding the drawbacks imposed on the sites by bars and silting and on the others by exposure and rocks, fulfilled an essential commercial need. With reference to the smaller harbours and customary landings in general, it may be well to observe here that the word 'creek', by which they are often described.

carries in official language the meaning of subordinate Customs-post, and does not necessarily imply the presence of a coastal inlet, nor, for that matter, a stream, as in current transatlantic usage.

Little can be learned about early structural work from the material at the Ayrshire sites. Works which existed before the turn of the 18th and 19th centuries were much altered by additions and improvements in the pioneer age of civil engineering, and the industrial developments of the 19th and 20th centuries carried the process further. It might have been hoped, for example, that the 'Old Quay' at Saltcoast, representing as it does a feature of the original plan, would exhibit some specimen of masonry plainly identifiable as dating from the 1680s, but no convincing traces have been found. In general the harbours exemplify the fashions and methods to be expected in work of the late 18th and early 19th centuries: and they no doubt reflect the ideas of the leading engineers of the time, whose advice was sought on one occasion or another, including Watt, Smeaton, Rennie, Jessop, Telford, Stevenson and Gibb. Ashlar or nearly squared and wellcoursed rubble are everywhere the rule, quay-faces being sometimes reinforced with stout vertical timbers. An interesting structural sample can be seen at Ayr, where a pier, broken through transversely, shows ashlar faces and a core of random rubble. The stonework being in general so largely homogeneous, it is hard or impossible to distinguish the stages of the works' advance, nor can changes in the styles of bollards from wharf to wharf be trusted as dependable indicators. Such details apart, however, several of the harbours are noteworthy for their massive breakwater-piers, thrown out as defences against violent westerly storms, and rising on their seaward sides from widely flared and carefully pitched bases. Of these the North pier at Troon is a most impressive example. The sea-wall at Ballantrae likewise shows excellent masonry, on a work of smaller scale.

Mention may be made in passing of the comparatively small size of the ships for whose use the harbours were designed, and the bearing that this must have had on breadths of entrance and depths of water allowed for at bars and in docks. The accommodation of the earliest steamers was also beginning to be thought of. Again, a question may be raised, in the case of harbours which have a castle in their close vicinity, as to whether or how far the one was dependent on the other. At Portencross, for example, the connection between harbour and tower-house is obviously close, though at Dunure it may well be less so.<sup>5</sup>

A final matter of considerable general interest is the harbours' association with smuggling References to the contraband trade are common in the Statistical Accounts, and although the clerical authors naturally condemn its bad moral effects the minister of Girvan (1794) classes it, along with a boom in the local herring-fishery, as a factor in the town's growth. There are records of large armed vessels discharging in the bay at Troon, and of armed men raiding the Customs house at Irvine in the early 18th century, and stealing the seized goods. Many writers in both Accounts express the belief that smuggling had practically ceased by the end of the 18th century, the minister of Dundonald attributing this to the purchase (1765) by Great Britain of the sovereignty of the Isle of Man, where a great deal of smuggling originated. But the idea of so early an ending of the trade is hard to reconcile with a body of contrary evidence. For example, Paterson writing in 1847 dates the affair at Troon to 'within living memory', his book having been published in that year; contraband Irish salt is mentioned from time to time and at Irvine in 1841 contraband Irish grain. Again, evidence of 19th century smuggling of Kintyre whisky appears in entries of 1813 and 1814 in the diary of Mrs. Robert Campbell of Skipness, 6 who writes for example, of the departure on a January night to Bute, of an open boat carrying thirteen people and eight casks of whisky. She elsewhere describes a sea-fight which she witnessed herself, between the Revenue cutter's boats and a Skipness smuggler, some of whose men received severe wounds. This story can be capped by a passage in the New Statistical Account,7 which states that 'the fierce and daring encounters of the Skipness men with officers of the excise was long proverbial'. For that matter the Royal Commission on the Ancient Monuments of Scotland has published a photograph dated to the mid-19th century which shows an illicit still in actual use.8

In conclusion, I wish to record my indebtedness to Mrs. G. Mackenzie, who typed the script; to Miss J. Gordon, for most effective collaboration at all stages of the enquiry; and to Miss J. M. Wilkes and the staff of the National Library Map Room, for advice on cartographical matters.

The maps on the following pages are from the first edition of the Ordnance Survey, published 1857-60, on the scale of 6 inches to a mile.

# Crinan Rock . Pole ARDROSSAL Campbell Rock **ARDROSSAN**

#### CLASS I SITES

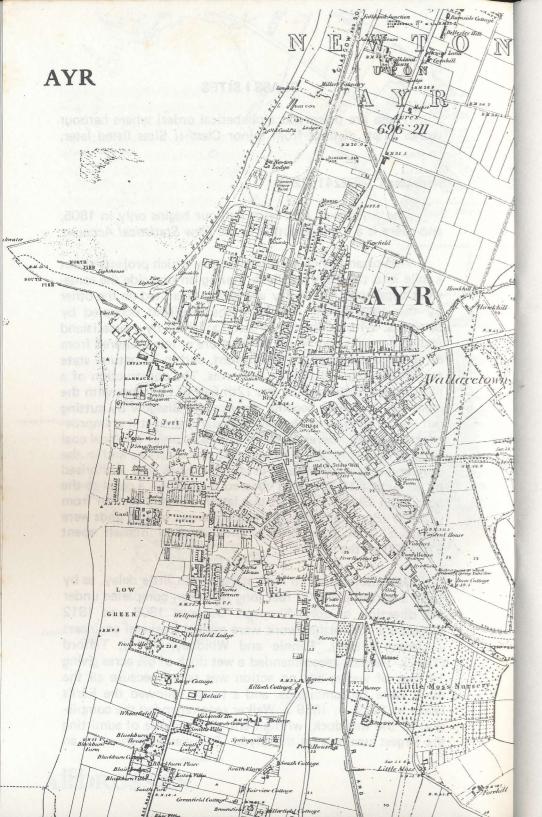
These are places (in alphabetical order) where harbour works exist; distinct from minor Class II Sites listed later.

Ardrossan. NS2241, 2242.

The history of Ardrossan harbour begins only in 1805, and there is a full description in the New Statistical Account.

Ardrossan stands on a promontory which projects about a mile into the Firth of Clyde, having on one side the somewhat bagshaped North Bay and being separated on the other by the open South Bay from the headland occupied by Saltcoats. With additional protection given by Horse Island and some rocks, the North Bay is more or less sheltered from all directions except the south west, and in its natural state served as a place of refuge in storms. The construction of a harbour was projected by the 12th Earl of Eglinton, with the idea that it should become the port of Glasgow by cutting out the navigation of the Clyde estuary, then still unimproved. He was also interested in the exploitation of the local coal and ironstone, in the improvement of his estates and in the development of Ardrossan town. The work was authorised by an Act of 1805, which covered in addition a canal to the port from Glasgow; but of this latter only the section from Glasgow (Port Eglinton) to Johnstone was built. Funds were obtained from shareholders, and the Earl himself spent £100,000 on the project.

Operations seem to have started with little delay, as by 1807 a curved pier 900 feet long had been completed under the direction of John Simpson. Between 1808 and 1812 suggestions for further work were made by several engineers— Jessop (1808), Rennie and Whidbey (1811), Telford (1812). The last recommended a wet dock of 6½ acres giving 19 feet of water; but no action was taken because all the plans were too ambitious, and a pause followed the Earl's death in 1819. In 1839 J. Walker recommended the completion of the wet dock, with an entrance capable of admitting the largest steamers on the Clyde. This was authorised by an



Act of 1841, and was completed by 1846. The resulting complex comprised two tidal basins, respectively 200 and 300 yards in length with quays which gave depths of from 10 to 21 feet at high springs; a dry dock of 3¾ acres, with 500 yards of quay giving a depth of 20 feet; a graving dock giving 14 feet; with a patent slip, sheds, cranes, facilities for shipbuilding, and two leading lights. An unlighted beacontower was also built on Horse Island. Steamers are recorded as running to Arran, Ayr, Glasgow and Stranraer in 1837, and to Belfast in 1840.

In spite of far-reaching changes resulting from the industrial developments of the 19th and 20th centuries, the main features of the earlier plans persist. The chief of these is the long pier that covers the whole of the W. and SW. sector of the site. On its inner side this appears as a massive sea-wall, with a parapet standing up to 6 feet above a parapet walk to which access is obtained by steps. Externally the foundations are seen to follow the dispositions of the underlying rock, with the outer wall-face sweeping up from a widely flared base. Within the pier there lies a large dock, presumably the 'wet' dock of 1846, which is now in process of being filled up with rubbish. Its entrance-passage and dock-gates have been overbuilt by the terminal works of the Arran and Belfast ferries, but the eastern jamb of the inner end of the passage is still free of the filling and the position of the western one can be inferred. North-east of this dock, and beyond the spur of railway leading to the ferry terminals, are two basins separated by a pier; the passage between them is spanned by a dock-gate. A difference in date between this pier and the dock now being filled up is suggested by a difference in the styles of their respective bollards.

Ayr. NS 3322, 3323.

The River Ayr falls into the sea within a few miles of the southern end of the predominantly sandy coast that begins at Saltcoats, and Ayr harbour occupies its lowermost reach, an estuary below the bridges. Its strategic potential was evidently appreciated by Cromwell, the impressive remains of whose Citadel stand on its south bank immediately downstream from the confines of the mediaeval burgh. His choice of the Ayr rather than of the Irvine estuary may well have been influenced by the serious navigational difficulties from which the Irvine was suffering at the time.

Ayr harbour is no doubt at least as old as the burgh, which received its charter in 1205. 10 The earliest explicit evidence of a seaport's existence appears in a confirmation of Alexander II, which forbade the use of timber cut in Alloway for purposes other than the building of Avr's own ships. 11 From a later date comes a favourable note by Bishop Leslie. who writes in 1578<sup>12</sup> of 'a prettie sey porte guhair strange natiouns oft arrives and their landes, the porte is sa commodious'. Camden, again, calls Ayr a 'small seaport and wellknown harbour'. 13 Other records, however, tell of decay and ruin. Thus in 1587 commissioners were appointed to inspect the 'decayit' harbour and bridge, and arrangements were made for their repair if this should be found possible. 14 In 1600 an impost was granted for harbour repairs, and in 1612 another was asked for but an answer was postponed. 15 A smilar application, made in 1622 for the repair of the 'herberie and bulwarkis', stated that the works had become ruinous and were likely to 'fall doun and perish', to the 'overthrow' of the town, which depended largely on maritime trade.16 Tucker made the same point in 1655,17 reporting that the town was deteriorating as a result of the harbour becoming clogged with sand 'beaten up' into it by the 'Westerne Sea' and by winds from the islands. In 1695, an application, which was granted, described the harbour as ruined and lying 'in rubbish'.18 Outright monetary grants made for harbour repairs were of 4,000 marks between 1631 and 1649, and of £40 stg. in 1724; 19 at the latter date the word 'ruinous' was again used.

The picture that emerges from records of the late 18th and early 19th centuries <sup>20</sup> is one of a tidal reach at the river's mouth with harbour-works on either bank. The channel was liable to silt up with sand brought down by the current, and this, with a bar formed outside by the same cause, obstructed navigation considerably. For that matter longitudinal banks

of shingle still appear at low tide in the centre of the channel well up the improved harbour. There was room for eighty vessels inside the bar.<sup>21</sup> In 1771 Watt advised that the piers that flanked the waterway should be extended seawards. parallel with one another and of equal length. In 1772 Smeaton recommended that the north pier should be slightly curved and made 30 yards longer than the south one, and that both should be raised above the level of high water. This recommendation seems to have been carried out, for the south bank was, in 1837, over 300 yards long, 20 to 25 feet high, 8 to 9 feet thick at the top and three times as much at the botton.<sup>22</sup> In 1805 Rennie agreed with Smeaton's opinions, but favoured a further extension of the piers and the formation of a wet dock. In the event, the north pier was extended in 1800 and the south pier was rebuilt and extended in 1825, after which it projected 100 yards beyond the north one. In 1830 Stevenson advised that the north pier should be pushed out further beyond the south one and given a southerly cant, and that rocks and other obstructions should be cleared out of the channel. He disapproved of the idea of a breakwater, but one was built none the less, in 1836, on the advice of Gibb. It was 133 yards long and was placed 100 yards in advance of the north pier-head, but it was incomplete when the Parliamentary Report was prepared. being only at high-water level. Points made in the evidence produced to the Commissioners<sup>23</sup> included insufficient quayage; risks resulting from freshets in the river; exposure to swell in south-westerly gales, which made a tidal basin necessary; and the necessity of heightening the breakwater, of removing boulders from the harbour, of repairing piers and quays, and of restricting the dumping of sand and rubbish into the river above the bridge. It was also remarked that backwater was prevented from forming by a mill-dam. In 1846, the mouth of the harbour, which opened north-west by north, was 320 feet wide between the piers and was protected by a detached breakwater of rubble masonry. The bar gave a depth of 15 feet at high springs, but this harbour, like those of Irvine and Saltcoats, could not be entered by ships of over 220 tons. Both sides of the harbour were provided with guays from the bridge downwards, the total length of wharfage being 1200 yards. Fifty yards of the north guay were rebuilt in 1845. Equipment existed for shipbuilding and

repairs, including two iron foundries; a steam dredge was in use, which deepened the river by three feet and improved the bar. The system of lighting was regarded as satisfactory.

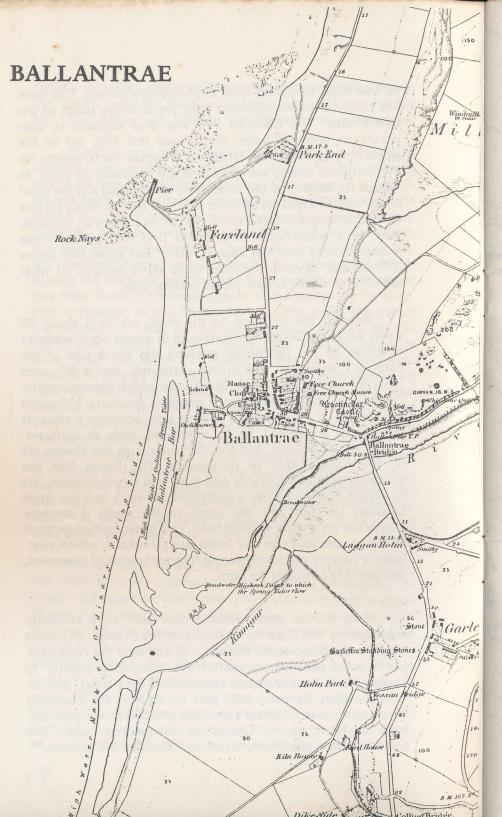
These records seem positive enough, but it is hard to establish correspondence between them and the existing works on any but the broadest lines. Discrepancies appear in respect both of dimensions and compass-directions, and little would be gained by elaborate attempts to resolve them. Generally speaking, however, both banks of the river, from the New Bridge downstream, have been improved as guays, the masonry of which seems fairly homogeneous throughout, though the bollards vary in style from section to section. At low tide, banks of shingle appear in the centre of the river, and in recesses in the built wharfage. The main features of the harbour of today can be summarised as follows. On the right bank. North Harbour Street runs, with wharfage its outer side, for some 770 yards to end on the entrancechannel of a large wet dock, part of its face being slightly set back for 100 yards to face a shallow recess. The entrancechannel of the dock narrows gradually from a width of some 77 yards at its opening and contains a pair of lateral projections adaptable for holding dockgates though no gates in fact exist. The frontage of this area is named the North Quay, and is revetted in masonry. From its west corner there projects the ruin of a wooden jetty, known locally as the Monkey Pier; this may or may not have been the structure recorded in 1827<sup>24</sup> as existing at Newton upon Ayr, the whole of this right bank being then outwith the Royal Burgh.

The left bank of the river, which carries the South Pier, has been similarly improved with wharfage throughout its length. Its upper section some 750 yards long, begins at the 'Ratton-key' mentioned in Burns' poem, 'The Brigs of Ayr'; and ends at the remains of the Compass Pier. This is now ruined but possesses some interest for the evidence regarding building methods that is given by its surviving terminal fragment. This shows the structure to have been a stout masonry jetty, with an ashlar skin on both faces and a core of large rubble. The north face, fronting on the harbour, is supported by pairs of heavy, vertical timbers. The south face gave on to an inlet about 60 yards wide, from which opened a long,

narrow dock furnished with shipbuilding slipways. This dock lies close to an in alignment with the seashore south of the river-mouth. The Compass Pier was thus exposed to tidal action on both its faces, and it was this that led to the weakening of the whole structure. Its upper parts, except for the terminal block, were accordingly removed in order to reduce its weight, at the same time the existing slip for small boats was arranged on its inner side.<sup>25</sup> It is interesting further to find among the pier's ruins two of its plain iron bollards, sunk to a great depth to obtain a firm foundation. These measured only two feet above ground, but seven feet below it.<sup>26</sup> In and beyond the inlet there stand remains of what seem to have been timber jetties or wharfage.

Beyond the entrance to the dock, which is about 60 yards wide, the South Pier continues in a west-north-westerly direction to the lighthouse marking the south side of the harbour's entrance. This opens westwards, and is 90 yards from the end of the North Breakwater which carries another lighthouse. That breakwater, a masonry structure 110 yards long which is nearly awash at high tide, occupies a ridge of tidal rocks connected, at its other end, with an eastwardgoing belt of shingle, and this last completes the closing-off of the harbour-area to northwards. The South Pier has evidently seen considerable additions and reconstruction. Its landward portion carries a protective sea-wall, and the angle between its root and the shore to the south is strongly supported on a widely flared base. This latter feature extends as far to the south as the coast-guard lookout, which over looks a battery-platform bearing four rectangles of pavement, representing positions for guns.

Many of the improvements now seen were evidently made before 1837, partly no doubt on the strength of profits made in the Napoleonic Wars, but at that date the right-bank works were not yet complete. <sup>27</sup> An interesting pointer to bygone conditions seems to be provided by a short, angular lane, the Boat Vennel, which gave access from the mediaeval burgh to the river. <sup>28</sup> Slezer's drawing of 1693 shows the riverbank in front of the Citadel as unimproved beach. The Citadel had no specific function in respect of the harbour. <sup>29</sup>

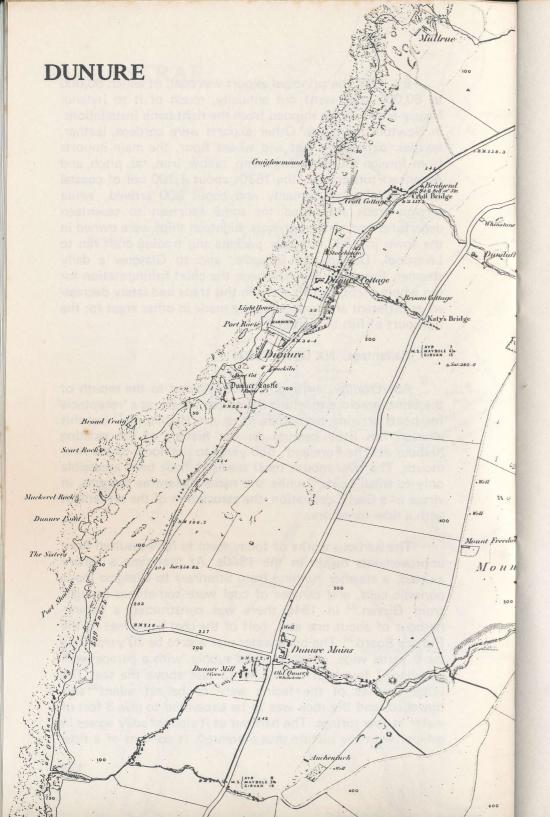


By 1837 the principal export was coal, of which 50,000 to 60,000 tons went out annually, much of it to Ireland. Nearly all of it was shipped from the right-bank installations in Newton upon Ayr. Other exports were cordage, leather, textiles, oatmeal, wheat and wheat flour, the main imports from foreign sources being hemp, tallow, iron, tar, pitch, and American tobacco. In the 1830s about 1,100 sail of coastal shipping left Ayr annually and about 300 arrived, while foreign trade accounted for some fourteen to seventeen departures and sixteen arrivals. Eighteen ships were owned in the town in 1837. Regular packets and trading craft ran to Liverpool, Dublin and Glasgow, and to Glasgow a daily steamer. Formerly Ayr had been the chief fishing-station for the whole Firth, but its share in this trade had lately decreased as different arrangements were made in other areas for the transport of fish to market.30

#### Ballantrae. NX 0882, 0883.

Abercromby, writing in 1683, alluded to the mouth of the Stinchar, close to which Ballantrae stands, as a 'receptacle' for boats arriving from Ireland or the Highlands; <sup>31</sup> but this allusion has little bearing on the history of the existing harbour at 'The Foreland', 650 yards to the north of the river mouth. The river mouth itself seems to have been accessible only to small boats, <sup>32</sup> while the name Ballantrae suggests, in virtue of a Gaelic derivation, the association of the settlement with a tidal foreshore.

The harbour-works of today seem to have resulted from improvements begun in the 1840s. At that time a fishery existed, a steamer running from Stranraer to Glasgow made periodic calls, and cargoes of coal were sometimes brought from Girvan. In 1846 there was constructed a fishing-harbour of about one acre, half of the cost being met by the Fishery Board. The breakwater pier was to be 70 yards long by 6 yards wide, of ashlar-faced rubble, with a parapet-wall standing 7 feet high and rising 13 feet above the sea. The outer courses of the facing were to be set aslant and dowelled, and the rock was to be excavated to give 3 feet of water at low springs. The harbour as it stands today agrees in general with the picture thus presented. It consists of a tidal



basin of sand and shingle flanked on the west and south-west by an angled pier of two sections, the outer one measuring some 70 by 20 yards and the inner one 53 by 13 yards. The whole work, which is mainly of red sandstone, carries an extremely solid protective sea-wall with widely splayed foundations and a parapet 4½ feet thick at its top. The masonry is of excellent quality, the blocks lining the inner angle at the junction of the two parts of the wall being worked to a gentle curve. The top of the parapet can be reached by a flight of steps at the landward end of the wall, and at its outer end a wide and much-weathered chase has evidently held a ladder. The parapet-walk ends some 15 feet short of the end of the wall. That the work as a whole was intended to withstand extremely violent seas is suggested by the iron straps that strengthen the wall and even bind together the surface of the quay at a number of points; while the danger of storms striking in from the north-west, through the harbour's entrance, is attested by the flared and battered profile of the inner corner of the basin, where the pier joins the land. No blocks were found set aslant in the pier's facing, as mentioned in the Parliamentary Report, but if masonry of this type existed in the original work it might well have been masked by later protective additions. The guay has steps leading down to the basin near its outer end, and iron handholds at the tops of wooden ladders in places along its length. It carries three massive cylindrical stone bollards.

#### Dunure. NS 254161.

Dunure was one of the sites at which Tucker reported a 'creek' in 1655 <sup>36</sup> presumably using this word in the sense of a subordinate customs-post. Improvement seems to have begun about 1811, when a small secure basin was contrived with an entrance channel 50 feet wide cut through rock. By 1837, however, dilapidation had set in, and Groome remarked in 1886 that the harbour proved of small value and had been allowed to go into decay. <sup>38</sup>

This somewhat slight account of the harbour's development can, however, be considerably expanded by observation on the spot and by reference to the O.S. maps of 1856 and 1968. The existing major features of the site, as presented to

the view of an observer on the high rocky lump that overlooks them from the south-west, comprise a rectangular basin measuring 230 by 160 feet and bordered on the south and east (more exactly south-south-west and east-south-east) by wharfage, on the west by a breakwater, and on the north by a pier and a structure bearing a light-tower. The harbour's entrance, 120 feet wide, opens between this structure and the end of the north pier. This entrance, in turn, opens from an east-going inlet, itself bordered on the north by a rocky projection; at its narrowest part, the inlet today measures 60 feet in width between the high-tide contours, a figure which corresponds significantly with the 50 foot rock-cut entrance of 1811. It is true that no signs of rock-cutting could be detected here, but they may well have been erased by the friction of the waves or been covered by invading sand; and no evidence of any kind was found to support Aiton's statement<sup>39</sup>that the whole inlet, some 760 feet long, was an artificial cutting in the rock. The expanded end of the west breakwater, which carries the light-tower, is ruinous; its seaward portion has been patched, but on the east it retains a rounded shape and faces across the entrance to the similarly rounded end of the north pier. All these works are of good limestone rubble, squared and well coursed, but the tower, in particular, is very heavily weathered. Both the tower and the north pier carry ornamental string-courses of a style which would agree very well with a date in the early years of the 19th century. The entrance to the tower is closed by an iron door, carefully curved to accord with the curved outline of building. A local guide-book states that the tower was never lighted.

So far so good, but some further features of the site remain for explanation, and it is also necessary to account for the place-name Port Rorie, which is marked on the map of 1856 at a point immediately beyond the south-west corner of the basin. The shoreline here, though gently indented, is rock-bound, and seems today to offer no natural shelter other than what may be afforded by a large off-shore rock. It thus seems possible that an old Port Rorie existed before 1811 in the form of a natural inlet, occupying part of the site of the existing basin and entered from the sea by a passage now blocked by the basin's west breakwater. In support of

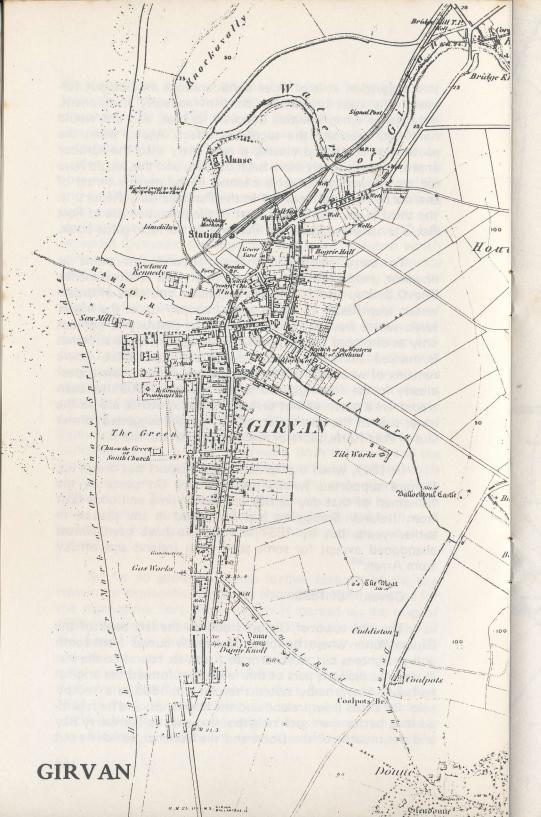
this suggestion at least three considerations may be put forward. The west breakwater contains an early component, only visible when low tide uncovers its base, and this would have had precisely the suggested effect. Again, when the south-west entry was closed, a new entry into the harbour area would obviously have been needed, and this would have led to the cutting-out of a channel in the narrow throat of the north inlet, as recorded in the Parliamentary Report. In the third place, a rock just west of the presumed site of Port Rorie is named suggestively 'Perrorie' in the local guide-book.

To carry structural analysis beyond this point is, however, made difficult by reason of later improvements. The O.S. map of 1968 marks additional stretches of breakwater, identifiable today as built masonry or, at the higher levels where wave action has been most destructive, perhaps only as displaced facing-blocks. The longest of these stretches is marked along the north side of the outer inlet, where remains of what is probably work of an earlier phase appear clearly in the footings, and where the date '1909' has been traced on a patch of wet cement. Other stretches are on the outer side of the north pier, and across the suggested former site of Port Rorie, more or less along highwater mark.

In 1847, when the Parliamentary Report was drawn up, Dunure supported twenty fishing-boats. On occasion, the fishermen of that day carried cargoes of lime and bone-dust from Ireland. Smuggling had flourished in the district in earlier years, but by 1837 was said to have been almost abandoned except for some soap from Ireland and whisky from Arran.<sup>40</sup>

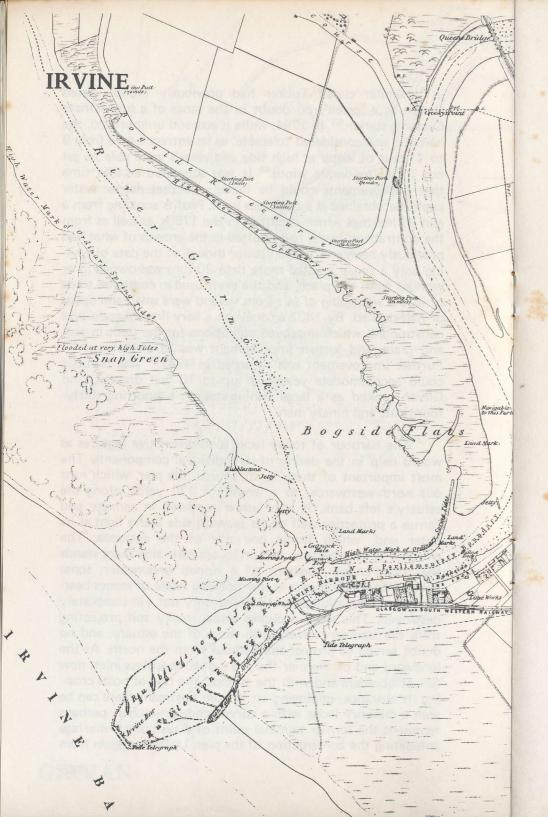
#### Girvan. NX 1898.

The old town of Girvan stood on the left bank of the Girvan Water where its lowermost reach curves from south and straightens out westwards to finish its course to the sea. It was the seaward part of this reach that formed the original harbour. Abercromby noted the place in 1683 as a 'receptacle' for boats from Ireland and the Highlands, and he regarded it as better than such neighbouring sites as Turnberry Bay and the mouths of the Doon and the Stinchar, which he put



in a similar class. 41 Tucker had previously (1655) noted Girvan as a 'creek', no doubt in the sense of a subordinate Customs station.<sup>42</sup> In 1794, while it was still unimproved, the harbour was considered tolerable, as its entrance gave from 9 to 11 feet of water at high tide and vessels were able to get out in all moderate winds.43 It was suggested at that time that improvements could be made, and that deeper water could be obtained if a guay was built. Profits accruing from a glut of herrings which occurred in the 1760s, as well as from the contraband trade, had resulted in the growth of what had previously been a very small town; though at the date of writing only a single boat of more than 20 tons was owned in or worked from the place, and the craft used in coastwise trade or in the smuggling of salt from Ireland were small and open, or half-decked. By 1837 a 'quay on a very limited scale' was constructed, which improved conditions for the trade in coal and grain, and further improvement was 'contemplated'.44 Further improvement was recorded in 1847.45 The harbour could accommodate vessels of up to 10 feet draught, and Girvan ranked as a large fishing-station, supporting thirtyfour boats and ninety men.

The harbour of today lacks such distinctive features as would help in the dating of its individual components. The most important of these is, of course, the pier, which runs out north-westwards, to a length of 170 yards, along the estuary's left bank. It is of ashlar rendered in cement, and carries a protective wall on its seaward side and a light at its outer end, which forms one side of the entrance. The entrance is very narrow, and on its opposite side there stands the round-ended fragment of a ruined breakwater, some remains of which appear at low tide as a rickle of stones bearing two or three lumps of built masonry not yet completely destroyed. This work occupies a low, rocky spit projecting from the boulder-strewn north shore of the estuary, and no doubt served to protect the harbour from the north. At the landward end of the pier there is a small shapeless inlet, now full of boulders and with the stumps of a row of posts crossing its entrance; impinging on it from upstream there can be seen a masonry ledge with a curved end, which may perhaps represent the former terminal point of a system of wharfage antedating the construction of the pier. Upstream again from



the inlet, the riverbank is faced with sections of wharfage in slightly differing alignments; in particular, the block of ground now devoted to a car-park helps to shelter the lower part of a pool used by fishing-boats and yachts. On its upstream side this pool is also partially enclosed by a timber jetty which runs out into the estuary on a diagonal but curving line; this post-dates the map of 1856 but is marked 'Screen' on that of 1963; no doubt it acts as a baffle in times of flood, and may concentrate the current and improve its scouring effect. The wharves and buildings now seen on the estuary's right bank are all later than 1856.

The Roman camp discovered in 1976 at Girvan Mains (NX 191991) is not, in the opinion of Professor J.K. St. Joseph, to be connected with a river-mouth port, but seems only to indicate the movement of an army on campaign.<sup>46</sup>

Irvine. NS 3037, 3038, 3138.

The development of Irvine harbour has been largely governed by the relationship of the burgh to the neighbouring waterways - the River Irvine in its lowermost reaches and the River Garnock, a major right-bank tributary. This latter stream enters the Irvine estuary a short distance above the sandy foreshore over which their conjoined waters discharge into the Firth. It has been stated 47 that the Garnock once had a mouth of its own, entering the sea some two miles further to the north. This view is based on Blaeu's map of Cunninghame (1654), which is totally at variance with present topography of the region. It is true that the area west of the lowermost reach of the Garnock is low-lying and sandy, and both Statistical Accounts quote evidence to show that it was once covered by the sea. 48 These observations could well be explained by a general recession of the sea, such as evidently took place at Stranraer.49 By contrast, Blaeu's map of Kyle, in the same collection, shows the Garnock joining the Irvine much as it does today.

It is the behaviour of the River Irvine, however, that mainly calls for discussion. Where it passes the old town, which stands on its right bank, it is running from south-east to north-west, but beyond the town it curves west then south,

forming a considerable oxbow, the neck of dry ground between the lateral reaches of which is only some 500 yards wide at narrowest. The position of the mediaeval harbour has been fixed by the presence of a street called the Seagate, together with the ruins of Seagate Castle. The Seagate no longer reaches the waterfront, as the tide has been controlled by a weir some distance further downstream. From this ancient site the new harbour is completely separate, as it lies on the left bank of the river below the oxbow, its frontage beginning where the course of the channel curves from south to west and the lowermost reach runs on to the bar at the rivermouth. On the way it receives the inflow, from the north, of the Garnock. From the upstream end of Harbour Street is some 900 yards direct to the Seagate site, but the distance measured round the oxbow would have been at least 2,700 yards.

Shallowing or blockage of this waterway by alluvial sand adversely affected the harbour's development from the 16th century at least. Thus in 1572 the burgh bought land 'for the lowsing and laiding of (its) ships, barks and boats on both banks of the river', with liberty to dam the river and to alter its course as the needs of the shipping required. 50 It is true that the harbour was commended by Bishop Leslie, when he wrote in 1578 of 'the toune of Irvine, quilke in peple, in riches, and commodiousness of the Sey porte is nochte mekle inferiour to Air'; 51 but nevertheless the river was constantly liable to silt. Camden recorded that the harbour was 'so choaked up and rendered shallow with sandbanks as to admit only small vessels'. 52 Pont, likewise, wrote in 1604-8, 'the porte and harbry being now much decayed from what it was anciently, being stopped with shelves of sand which hinders the neir approch of shipping':53 Tucker reported in 1655 that although Irvine had 'at some time beene a pretty small port'. in his day the harbour was 'clogged and almost choaked up with sand';54 and in 1688 the lack of a safe harbour, presumably caused by the silting, was blamed from the lack of trade. as a result of which the burgh was 'depauperat'. 55 The parish minister of 1841 summed up: 'subsequent to Pont's time the sea came up close to the town, and vessels were loaded and discharged at what was then, and is now, termed the Seagate. Within the memory of persons now alive the sea has receded considerably on this coast . . . for the Seagate is now nearly half a mile from the sea'.56

That the Romans had a port at Irvine was suggested many years ago by Professor J.K. St. Joseph. 57 Of the written records, all post-mediaeval, A.F. McJannet has produced a convenient summary. 58 His earliest reference. 59 which deals with the familiar choking-up of the port, goes back to 1563-6. just antedating Leslie's History, and from 1579 onwards there follows a succession of appeals to the Convention of Royal Burghs or the Privy Council for help in the repair of harbour-works. The Convention alludes, in 1605, to the 'say porte and herberie with the haill bulwarkis thairof', 60 and the term 'bulwarks' suggests more substantial works than mere timber jetties. An Act of 1587, which appointed a commission of enquiry, having brought no useful result, the burgh accordingly looked elsewhere for an alternative harbour-site. The first place chosen was on the island of Little Cumbrae. but arrangements for its purchase broke down, and instead a site was developed shortly before 1608 on the Troon peninsula. Ships of over 220 tons, too large to enter the harbours of Saltcoasts, Irvine or Ayr, could find anchorage in ten to fourteen fathoms in an area east of and covered by Lady Isle, an islet lying some two miles south-west of Troon, 61 and consequently an organised and well-sheltered harbour behind the Troon promontory itself was an attractive suggestion. One may further recall that the town of Glasgow was later (c. 1776) to set up a pair of beacons on Lady Isle to indicate the position of the anchorage, no doubt for the benefit of ships serving its merchants. 62 Operations at Troon seem to have been abandoned, however; and in 1613 another impost was needed for the repair of Irvine harbour.

A fresh start was made at Irvine in 1665, with a decision to build a new harbour and to cut an artificial channel. Such a cut had also been envisaged in 1572 with the intention of making a canal through the neck south of the oxbow, in order to give direct access to the Seagate site. In fact the new harbour flanked the estuary on its left, or southern, bank, and was given a masonry quay; the burgesses were forced to work on its construction in person, and some of the stones that were used in it were pulled out of the river's bed. An anonymous visitor of 1723 is quoted by McJannet as describing Irvine as a 'tolerable seaport', and as noting 'upon the Key, a good face of business, especially the coal trade to

Dublin'. In 1793 the harbour was well established, with store-houses, coal-sheds, etc.; it was approached from the town by a road along the south bank of the river, beside which fishermen's houses had been built in the course of the preceding forty or fifty years.<sup>63</sup>

Some details about the harbour as it stood in the earlier 19th century are given by the Parliamentary Report of 1847.<sup>64</sup> This shows that, in 1840, the lowermost 600 yards of the river-channel were narrowed by a series of half-tide stone 'jetties', run out from either bank at an angle of forty-five degrees; they deepened the channel by some two to three feet, by increasing the scour of the current, and also broke up the run of waves which had crossed the bar, so minimising their potentially dangerous effects higher up the estuary. The entrance was 240 feet wide, and the outfall was directed by a 'rude stone pier or dyke' on the south bank, 500 yards in length. The bar, which was liable to shift, gave a depth of 13 feet at high springs. There was a stone quay about 200 yards long, a timber wharf added in 1846, and shipbuilding yards and slips.

Few traces of these arrangements can be seen today. It is true that Harbour Street, with houses on its landward side and an open frontage to the water, recalls a feature common in maritime burghs and often named 'The Shore'; but nothing in the outer appearance of the surviving houses suggests a flourishing water-front. Wharfage with bollards extends downstream all along the bank of the river, but such remains of industrial equipment as survive seem to be of no great age and are also clearly in decay, while activity seems to be centred in an anchorage for yachts. Opposite the Garnock's inflow, there is another stretch of wharfage, of similar appearance, which ends as does the road from the town, at the Pilot House. Further out again, the remains of the breakwater continue in the form of a walkway; its outermost end was hidden by a rising tide when the site was visited, but the O.S. map carries it out for some 500 feet towards the bar. The ruins of the 'jetties' of 1840, mentioned in the preceding paragraph, can be readily recognised in a series of rickles of stone which stretch out across the tidal flats on either bank. four of those on the south starting from the side of the

breakwater and fifth extending from its end to the south end of the bar. At the heads of some of these rickles there stand high posts, improbably marked as mooring-posts on the O.S. map. Along the north bank of the estuary, west of the mouth of the Garnock, there stretches an embankment some 350 yards long; the adjacent wide sands and saltings show remains of numerous mooring-posts, some of them as much as a quarter of a mile above the Garnock's mouth. The pier just above the mouth is a modern provision, belonging to the industrial establishments at Ardeer.

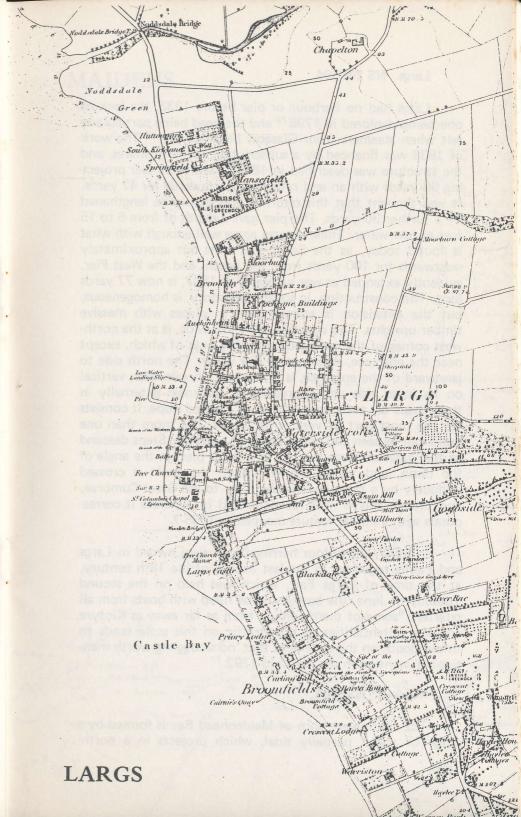
The silting-up of the harbour remained a problem. The Parliamentary Report of 1847 noted that the lower reaches of both the Irvine and the Garnock traversed flat, low-lying ground, with the result that good reserves of backwater built up at every tide; and it recommended that this tendency should be encouraged – for example by causing the rivers to converge at an acute downstream angle, instead of at right angles as in fact they still do. Much the same point had been made in 1839 by Gibb, 65 who held that the main object should be to obtain deeper water at the entrance; he considered that it was 'only from the effect of the reflux of the waters of Irvine and Garnock that the entrance to the harbour is maintained'. He suggested the construction of a system of openwork wooden 'beacons', to narrow the channel and provide moorings for ships, but there is nothing to show that this plan was ever adopted. As early as 1826 the use of a steam dredger had been recommended, to remove the bar and to keep the channel clear. 66

The commercial fortunes of Irvine were continually influenced by the harbour's physical vicissitudes, though the local fisheries no doubt served to maintain a permanent seafaring background. Tucker, for example, observed that the town was damaged by the silting-up of the river, 'soe as it wrestles for life to maintain a small trade to France, Norway and Ireland' with herrings and various commodities. Only three or four ships were owned in the town at this time, none of them exceeding sixteen tons.<sup>67</sup> There is also a record that the town's trade improved after the harbour was formed at the rivermouth.<sup>68</sup> From Tucker's report, too, there emerges the interesting point that, in his time, i.e. before the founda-

tion of Port Glasgow in 1668, Irvine served as an outlet for Glasgow's overseas trade, the goods being brought to the port overland on horse-back. Irvine is only twenty-six miles from Glasgow, and thus compares well with Greenock, at twenty-three miles; and it saved the navigational difficulties of the Clyde estuary, at that date still unimproved. The silting-up of the Irvine estuary may have influenced Glasgow's decision to found Port Glasgow, as was done in 1668.<sup>69</sup>

The export of coal from the neighbouring Ayrshire pits was developed from the late 17th century. By 1793 over 24,000 tons were being shipped annually and fifty-one vessels, of from 33 to 160 tons, were engaged in the trade. At an earlier period, it is recorded, the coals were carried coastways in birlings or small boats. When these arrived, they blew a large horn, which was fixed to a post at the quay by an iron chain; and, upon this signal, the country people loaded their poneys or small horses, and carried down what quantities were wanted. A great part of the total exported seems always to have gone to Ireland, and by 1839 the total annual figure had risen to 44,000 tons.

Imports included hemp, iron, Memel and Norway timber, ship-building timber from Wales, and hides and grain from Ireland. The importation of Irish grain was forbidden by law, but the Irvine merchants seem to have taken the view that, as burgesses, they were not subject to the general legal penalties imposed by the county justices, and accordingly resorted to smuggling - 'stealing (the grain) in by night at many secret creeks along the shore'.72 A law-suit arising from this argument is cited from as early as 1712. On smuggling in general at Irvine, the same passage states that, about 1720 'and for a good many years afterwards, smuggling appears to have been carried on very extensively and in a very daring manner . . . the Customhouse there was repeatedly broken into and robbed of large quantities of seized goods by bands of armed men . . . Latterly smuggling was chiefly confined to whisky from Arran', and by this time had 'almost entirely ceased'.



#### Largs. NS 200594.

Largs had no harbour or pier before 1833, the lack of one being deplored in 1796 73 and the need being particularly felt when steamers from Glasgow began to ply. 74 The work of 1833 was financed by a subscription for fifty shares, and the structure was described in 1847 75 as a small pier projecting 90 yards with an end returning northwards for 47 yards. It was thought that this returned end should be lengthened by a further 30 yards. The pier gave a depth of from 5 to 15 feet at low water. These figures agree well enough with what is found today, as the South Pier runs out approximately westwards for 100 yards from the beach, and the West Pier, evidently extended as was suggested in 1847, is now 77 yards long. The construction, in squared masonry, is homogeneous, but the extension is strengthened in places with massive timber uprights. The entrance, 60 yards wide, is at the northwest corner of the enclosed basin, the bulk of which, except near the entrance, dries out at low water. The north side to landward of the entrance, is formed by a breakwater, vertical on its inner side and decreasing in thickness externally in three steps or, at its seaward end, in a flared slope. It consists for the most part of very large blocks, but more than one build can be seen and many traces of patching. Steps descend to the water on both sides of the south pier, in the angle of the basin, and inside the west pier; the basin is crossed obliquely by a ramp serving the ferry to the Great Cumbrae, and though this is now reconstructed in concrete it corresponds with a similar feature mapped in 1855-7.

In 1847, thirty-four herring-boats were owned in Largs and Fairlie together. In the last decade of the 18th century, at the time of Largs Fair, which was held on the second Tuesday of June, the bay would be filled with boats from all quarters, <sup>76</sup> some of them coming from as far away as Kintyre, and the potentialities of boat-traffic on this scale tends to throw doubt on the statement that 'no smuggling worth mentioning' went on in the parish in 1792. <sup>77</sup>

#### Maidens. NS2108.

The south-west horn of Maidenhead Bay is formed by a ridge of rocks partially tidal, which projects in a north-

## **MAIDENS** Douglaston Pathhead 111

easterly direction and no doubt provided some natural shelter from the west. Tucker named it as a 'creek' in 1655;<sup>78</sup> but as no works are marked on the O.S. map of 1855-7, those which exist today are presumably later. They consist of a bulbended breakwater about 230 yards long, running along the outermost portion of the rock ridge; a pier about 180 yards long joining this breakwater to the land; and another, independent, breakwater some 360 yards long which parallels the ridge and its works some 200 yards to the east, thus closing off a largely tidal strip from the rest of Maidenhead Bay.

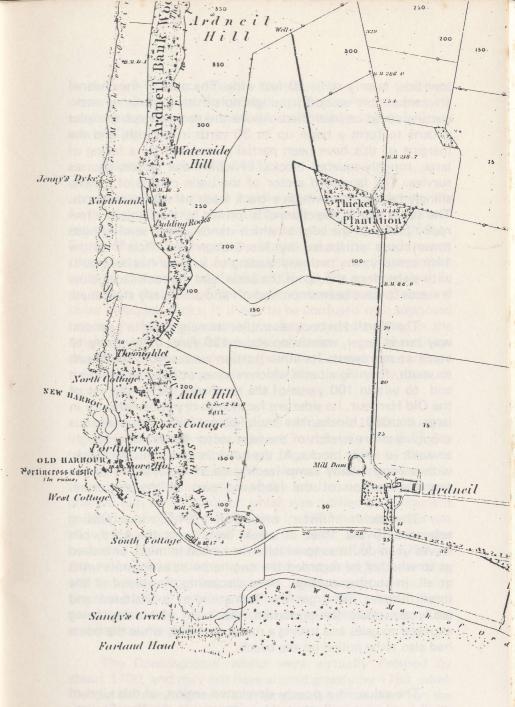
#### Newton Upon Ayr. NS 3322.

The part of the modern town of Ayr that lies north of the river was originally a separate community, Newton upon Ayr, and distinct from the Royal Burgh. It was described in 1792 as a 'seaport town' with an extensive herring-fishery.<sup>79</sup> Engaged in this, in 1837, there were descendants of some fishermen from Pitsligo, in Buchan, who had come to know about the fishery in the 1770s, when serving in these waters as pressed men in a naval vessel.<sup>80</sup> The harbour works are considered above as part of those of Ayr.

#### Portencross. NS 175491.

At Portencross there are two harbours and a pier. The pier is not marked on the O.S. map of 1855-7, and is stated locally to have been built about the turn of the 19th and 20th centuries. A 'small quay' is recorded as having been built in 1802, 81 but this cannot be located. An apparently suitable site for it, at the modern pier, was investigated under water by some members of a diving club but without result. This quay could take vessels of up to 50 tons, and it was used for the shipping of local produce to markets in the Clyde area.

Both the harbours, which are close together, take the form of small tidal inlets in the littoral rocks, at a point where the coast is partially protected from southerly and south-easterly winds by Farland Head. The Old Harbour, the more southerly of the two, pierces the rocks as a narrow V-shaped channel, the sandy bottom of which, exposed at



ARDNEII

**PORTENCROSS** 

low tide, is only some 20 feet wide. The sides of the channel are remarkably smooth, though no positive marks of rock cutting could be identified. Above the narrow neck the inlet widens to form a basin up to 30 yards in breadth, and the margins of this have been partially enclosed by a facing of large, roughly-squared blocks, of which one or two courses survive. The landward sector of the basin consits of a steep shingly beach, from which a track leads off south-eastwards. The south side of the channel is formed by the flank of a low, rocky bluff, on the edge of which stands a small semi-ruinous tower-house attributed by MacGibbon and Ross<sup>82</sup> to the 14th century; the pathway leading to its door has been built with slabs along the lip of the basin, and the rock-face below it seems to have been smoothed off and artificially steepened.

The North Harbour resembles its neighbour in a general way but is larger, measuring about 120 yards in length by 17 yards at narrowest. Its inner portion curves from south-east to south, forming a basin which reaches, at its inner southern end to within 100 yards of the north-east sector of that of the Old Harbour. Its sides are faced with drystone masonry in large coursed blocks, the build being fairly homogeneous though a short stretch of the west sector shows rather rougher work in larger blocks. At the head there is a shingly beach, with a rough sandy ramp leading up at right angles to the terminal section of the landward part of the enclosure.

The parish minister, writing in 1794,83 makes passing reference to the 'inlet or creek that forms the port', but leaves us in doubt as to which inlet he had in mind, or indeed as to whether he regarded the two harbours as separate units at all. In another passage, when discussing the revival of the local fisheries, he urges the formation of a sheltered and easily accessible fishing-station, the 'port' of his day being exposed to gales and having a rocky entrance, while the boats had also to be pulled up the beach.

The value, in a poorly developed region, of this kind of small local port is illustrated by a passage in the *New Statistical Account*, <sup>84</sup> which calls for better roads to improve communications in the countryside; while another of its functions

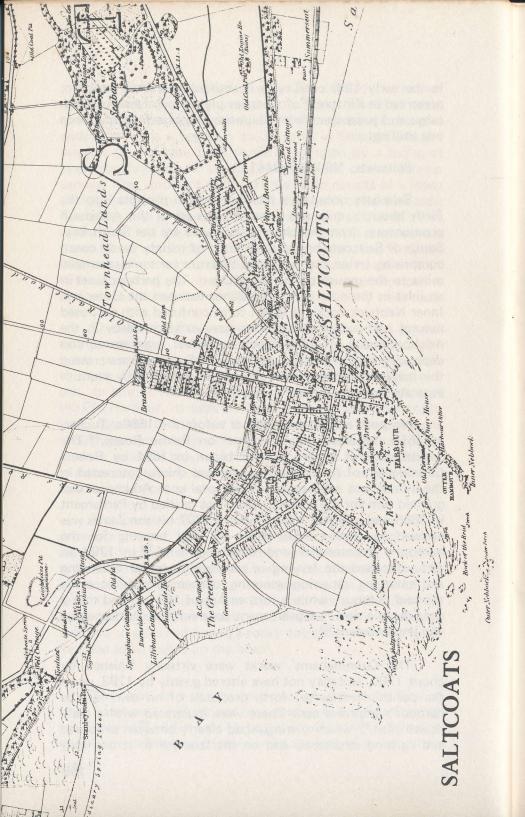
in the early 19th century is illustrated by a local tradition, preserved in Kintyre, <sup>85</sup>of wherries plying to Portencross with cargo and passengers from Skipness. The passenger's fare was one shilling.

#### Saltcoats. NS 2440, 2441.

Saltcoats occupies a headland which projects into the Firth about a mile and a half south-east of the Ardrossan promontory, from which it is separated by the South Bay. South of Saltcoats begins the stretch of mainly sandy coast, comprising Irvine and Ayr Bays, that runs for some seventeen miles to the mouth of the River Doon. The harbour is set in an inlet in the nose of the headland, between the Outer and Inner Nebbuck rocks; it is not to be confused with supposed natural harbourage assumed to have existed nearby in the neighbourhood of Auchenharvie or Ardeer — an assumption depending on the theory that the River Garnock once crossed this low-lying ground, and ran out into the Firth by a mouth separate from the estuary of the Irvine.

No port existed at Saltcoats before the 1680s. Tucker, in 1655, reported only a 'shore' on Fairlie Roads. Robert Cunningham of Auchenharvie, who was chiefly interested in the mining and exportation of the local coal. An impost was granted him for the project, which was ratified by Parliament in 1686 and again in 1693, and in 1707 his son James was allowed to raise a small duty on local brewing for the harbour's maintenance and 'encouragement'. Rotal In 1797 an Act authorised the levying of rates and dues, for 'extending and enlarging, repairing, scouring, deepening and improving the said harbour'; while a further Act of 1821 noted that a considerable sum had been spent on enlargement, deepening and improvement.

The Cunninghams' works were virtually finished by about 1700, and may not have altered greatly by 1793, when the parish minister set forth proposals of his own for the harbour's improvement. These were illustrated with a well-drawn plan, on which distinguished clearly between proposed and existing structures; and on the strength of it one may



conclude that the latter was an L-shaped work corresponding with the landward portion of the present pier plus the branch which returns northwards and ends at the Old Pier Head. These structures bear the legends respectively of 'Old Harbour Breast' and 'Old Quay'. Two rectangular enclosures ('Store House' and 'Coal Ree') are marked on a slightly expanded section of the pier, and the written account mentions hewn masonry facing and also a protective wall on the pier's outer side. The harbour area within the angle of the L gave 10 to 12 feet of water at high springs, but dried out partially at low water and was not accessible to craft of over 200 tons. It would hold twnety-four sail, but the lack of water made difficult the berthing of the larger vessels and delays in loading and discharging were apt to result.

The minister's proposals for improvement were not carried out, but one of them, the extension of the pier to the inner Nebbuck rock, was again recommended in 1837<sup>91</sup> and the work had evidently been done by 1847.<sup>92</sup> In the relative passage the Parliamentary Report describes the Old Quay as a 'jetty', and states that an entrance 90 yards wide had been left between its end and the rocks on the north side of the harbour. This entrance could be negotiated at all states of the tide, but a figure of 220 tons is given as the limit for the size of the craft. The quay was credited with a depth of 13 feet of water at high springs; there was a light at the Old Pier Head; and the Outer Nebbuck and some rocks were marked with upright 'perches'. A breakwater was considered desirable. The Report classes Saltcoats as a 'small district harbour'.

The general outline of these arrangements can be recognised easily enough in the existing harbour-works — the main pier, its extension to the inner Nebbuck rock, and the Old Quay, projecting from the pier at right angles to produce the L-shaped plan. The modern 25-inch O.S. map gives the length of the pier to the outer angle of the L as 490 feet, that of the extension a further 270 feet, and that of the Old Quay (externally) as 160 feet. The pier varies somewhat in breadth, as it conforms with the irregularities of the rocks on which it is founded; the quay broadens at its end, where there has been some reconstruction in fairly recent years. Both the pier and the quay bear crenellated sea-walls with parapet-walks;

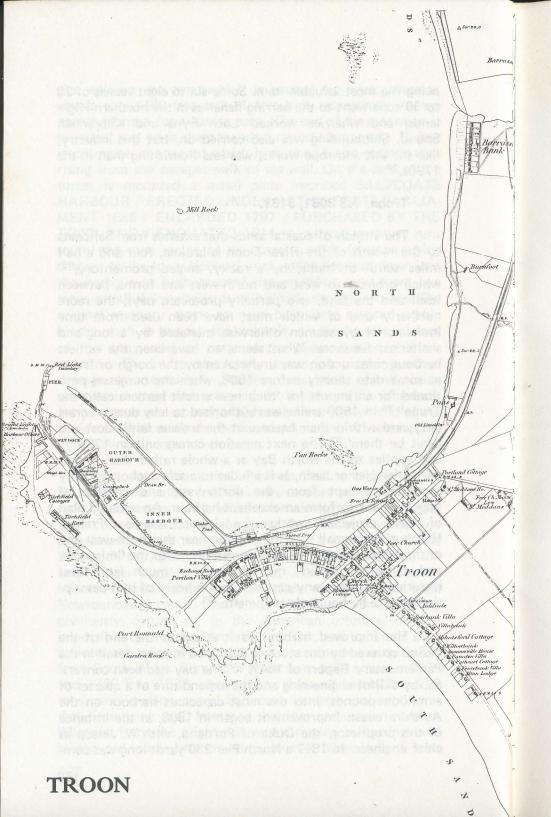
the wall on the pier, which is backed by brick pilasters, stands about 9½ feet and 11 feet high respectively at two points selected for measurement. The end of the extension is rounded, and on it there stands a round turret some 15 feet in diameter, the top of which is reached by an outside stair rising from the parapet-walk of sea-wall. On the face of the turret is mounted a metal plate inscribed SALTCOATS HARBOUR / ERECTED UNDER ACT OF SCOTS PARLIA-MENT 1686 / ENLARGED 1797 / PURCHASED BY THE TOWN AND RENOVATED 1914. A narrow walkway runs round the west sector of the turret, ending in steps which descent to the Inner Nebbuck rock; steps also lead down into the harbour at both ends of the extension, and there is a range of tallish iron bollards with simple mushroom tops. The original masonry seems to have been large squared rubble blocks, such as appear, for example, on the south-west face of the quay, and on parts of the pier-extension and the roundel. There are also many traces of patching where damage has occurred. Pleasing examples of Victorian commercial taste are provided by the decorative standards for gas-lamps of cast iron, which stand one at each end of the quay's sea-wall, with the broken connections of their supplypipes still surviving at their bases.

Some facts about the harbour's trade are given in the Statistical Accounts. In 1793, the export of coal was the most important activity, while salt-making, formerly a smallscale cottage industry as the name 'Salt Cotts' suggests, was prejudiced by the smuggling of Irish salt into ports in the Solway Firth. Apart from coal and salt, exports included silk and cotton textiles, oats, timber, iron and Baltic hemp; imports mentioned are grain and fish, the latter from both Newfoundland and the West Highlands. Shipbuilding, previously carried on in the American colonies, became impossible during the Revolutionary War, and Saltcoats shipbuilders accordingly started operations at home, using timber from South Wales. Sixty-four ships were built between 1775 and 1790.93 In 1837, about thirty ships, of from 20 to 250 tons, were trading out of Saltcoats, the principal exports at that time being coal, freestone, herrings and woolen textiles. Wherries from the Highlands were bringing in herrings and taking out coal. Imports came chiefly from Ireland, oats being the most valuable item. Some six to eight vessels of 20 to 30 tons went to the herring fisheries in the northern Highlands, and wherries worked Loch Fyne and Kilbrannan Sound. Shipbuilding was also carried on, but this industry, like the salt and rope works, was less flourishing than in the 1790s.<sup>94</sup>

Troon. NS 3031, 3131.

The stretch of coastal sands that extends from Saltcoats to the mouth of the River Doon is broken, four and a half miles south of Irvine, by a rocky, angled promontory, 95 which projects to west and north-west and forms, between itself and the land, two partially protected bays, the more northerly one of which must have been used from time immemorial by seamen otherwise menaced by a long and shelterless lee-shore. What seems to have been the earliest harbour-construction was undertaken by the burgh of Irvine at some date shortly before 1608, when the burgesses petitioned for an impost for 'their new erectit herbere callit the Trune'. 96 In 1609 Irvine was authorised to levy dues on craft 'arryvand within thair herbere at the trowne laitlie cost and begit be them'. 97 The next mention comes only in 1793.98 and applies to the North Bay as a whole rather than to any particular pier or basin, as it alludes to a safe anchorage, fully protected except from the north-west, and capable of improvement to form an excellent harbour. An undated plan of new projected works, by Jessop, 99 marks "Present Harbour" as a small tidal indentation near the south-west end of the North Sands. This may correspond with the "miserable and dangerous haven" mentioned by a much later local historian, 100 but in any case no more is heard of it in descriptions of the harbour's development. 101

The improved harbour as it stood at the end of the period covered by this study is described in some detail in the Parliamentary Report of 1847. The bay had been converted, by skilful engineering and the expenditure of a quarter of a million pounds, into the most capacious harbour on the Ayrshire coast. Improvement began in 1808, at the instance of the proprietor, the Duke of Portland, with W. Jessop as chief engineer. In 1817 a North Pier 230 yards long was com-



pleted, aligned slightly east of north and giving up to 19 feet of water; also an east wall of breakwater, again 230 yards long and aligned northwards in order to exclude sand coming from Irvine Bay. This latter work gave 11 feet of water at low tide, was 13 feet wide at the top and made a convenient quay for steamers. The harbour-entrance faced north-east, was 300 feet wide and had a depth of 19 feet at high springs; both sides of it were lighted. There were two tidal basins, each of 15 acres, the outer one giving from 6 to 11 feet of water and the inner one drying out; a wet dock of 1% acres, excavated from solid rock and finished in 1846, which gave 20 feet of water at low tide; two graving-docks and three shipbuilding slips. The total length of wharfage was 1500 yards. The piers were of rubble faced with granite ashlar, and the Report describes the north pier as 'colossal' in comparison with other Scottish harbour-works. It was 47 yards thick at the base, sloped at 1 in 3 to the surface at low-water level, where it was 30 yards thick, and then rose almost vertically for 21 feet to quay-level at 10 feet above high water. A description of the construction of its foundations under water, by means of caissons, is given by Aiton. 103 From the guay a wall rose a further 12 feet, making a total height of 48 feet from the base. An 'outer course of stone' 7 feet thick was added, up to quay-level, in 1846. The depth of water at the pier-head was only secured by the use of a steam dredge, as the accumulation of sand had reduced its original depth to 6 feet only.

Although industrial development has altered the harbour's internal arrangements materially, its main original features can still be clearly identified. The North Pier, in particular, dominates the outermost portion, and possesses a real magnificence, having its sea-wall faced internally with large smooth blocks of black ashlar, precisely squared and coursed, and crossed by a red-sandstone belt emphasising the line of the parapet-walk. The walk ends before reaching the south end of the wall, and from its end the belt is continued simply as a decorative feature. It is balanced by a red sandstone coping on the wall-head. In the southern part of the wall, beyond the end of the sandstone belt, the build changes from the large, smoothly-cut blocks to a neat pillow-ashlar. The wharf inside the North Pier, which carries plain, knobbed

iron bollards, showed little sign of active use when visited, and the pier-head lighthouse had evidently been superseded by a modern light mounted on a detached roundel. There were also some signs of reconstruction here, and the two outermost bollards are of a different type from the rest.

East of the great North Pier and of the promontory whose line it carries forward, there lie the two main basins, protected on their opposite north-east side by the long straight east breakwater, evidently once lighted and equipped as wharfage but now no longer in use. These basins are separated by a pier which projects from the south-west, leaving a passage between them at its north-east end. The map of 1858 marks a drawbridge crossing this passage, which is now open. On the south-west side of the outer basin, towards its southern end, entry is obtained to a large wet dock with bollards similar to those on the North Pier, and beyond this a small dry dock. The basin inside the cross-pier is now devoted to yachts, as the Troon Marina.

The seaward side of the promontory, south and southeast of the root of the great North Pier, is flanked by a belt of made ground, perhaps representing material dug out in the formation of the docks. This belt extends to and encroaches on a small bay marked on the maps as Port Ronnald, which now contains nothing but a long concrete slipway. South-east of this slip, however, there can be seen an interesting survival — the so-called Ballast Bank, a dump of ballast discharged from coal ships returning from Ireland. It takes the form of a long-grass-covered mound, flattened at the top and revetted as necessary at the base. The 'casting' of ballast inside harbours tended to block berths and fairways, and measures to control it in the Firth of Forth were taken by the Privy Council in the 1620s. The ballasting of fishing-boats also needed regulation. To such that the such that th

In 1841, fifteen vessels were owned in Troon, the trade consisting largely in the export of coal and the import of timber. Coal exports reached a high figure — 130,000 tons in 1846 — thanks to the railway from Kilmarnock which had been opened in 1811. 108

At least three authorities <sup>109</sup> remark on the large amount of smuggling that had formerly gone on at Troon, the last, indeed, dating the final phase of the trade to within living memory of 1847. He records that large armed vessels would discharge their cargoes in the bay, being met by accomplices who distributed the contraband goods as far as Glasgow and Edinburgh. The parish minister believed that smuggling was 'nearly annihilated' by the ending of the Isle of Man's sovereign status, although previously 'the Troone was found to be a very convenient station' for smuggling craft.

#### **CLASS II SITES**

There are places at which limited evidence of actual harbour-works has been obtained. Place-names containing the element 'Port' are also included.

Ardmillan. NX 166950. See Port Cardloch.

Balcrauchan Port. NX 090878.

Barassie. NS 326339. Open beach used by smugglers.

**Burnfoot. NX 108882.** A pier or breakwater is marked on the O.S. map of 1855-7 near the mouth of the Barsalloch Burn. This was not verified on the ground.

Carlton Port. NX 125895.

Carran. A 'creek' in 1655. Perhaps Currah, NS 197017, north of Girvan.

Castle Port. NS 196073.

Cove Port. NS 195070.

Cross Port. NS 200076.

Culzean. NS 229100. In 1847, a fishing-station with twelve boats.

Doon River. NS 324195. It has been suggested <sup>110</sup> that the mouth of the Doon River, which held a small fishing-station, may have been navigable for a short distance before it adopted the course that it held in 1837,<sup>111</sup> But no further evidence has been found of a landing-place here apart from Abercromby's note <sup>112</sup> that the mouth of the Doon, like those of the Girvan and Stinchar Waters, served as a 'receptacle' for small craft. It seems possible, however, that lagoons or tidal meanders may have existed in the Seafield area, where the land is low-lying and swampy.

Dowhill Port. NS 198031.

**Drumgarloch. NS 199036.** Tucker reported a 'creek' in 1655. This place is probably the same as Matthew's Port.

**Dunduff.** A 'creek' in 1655. 113 Somewhere between Dunure and Heads of Ayr, possibly near Fisherton.

Fairlie. NS 207559. Yachts were built here after 1770, but no evidence of a harbour (see Kelburn) till a railway steamer pier provided in 1882.

Fisherton. NS 266177. See Dunduff.

Gailes. NS 317360. Open beach used by smugglers.

**Glenfoot.** Unlocated, but perhaps to be identified with Lendalfoot (NX 130900). A 'creek' in 1655. 113

Greanan Castle. NS 312193. There are certian indeterminate remains on the sandy foreshore immediately below Greenan Castle, at the base of the steeply-rising bluff that forms the castle's site. All that can be seen today is a brokendown piece of walling 21 feet long and up to 5 feet high. built of very large squared blocks and backed against the base of the bluff; this latter in turn is faced by a stretch of roughly built masonry about 15 feet wide and showing some signs of reconstruction. The ground above this facing is a flattish grassy platform, from which a steep rocky bank rises to the castle; and a connection between the castle and the structure on the shore is suggested by occasional much-worn steps cut here in the rock. The remains at the base of the bluff extend into the sandy beach and end about 30 feet short of the marks left by ordinary high tides, but the size and solidity of the blocks that form the wall suggest that the structure was liable to be beaten by violent waves, if only perhaps under exceptional conditions of weather. The remains could thus be interpreted as one face of a jetty projecting from the face of the bluff, its other face and its core having been washed away. The distance of the site from the present high-tide line could well be due to an accumulation of invading sand.

**Inverkip.** NS 2072. This is actually beyond the county boundary, in Renfrewshire. The draft of an Act of 1700 is on

record<sup>114</sup> which approves an imposition for the building of harbours at Inverkip, Gourock and Greenock, but no evidence has been found for any construction at Inverkip before 1850. That the place may have possessed some value as a landing in the 13th century is suggested by Edward I's insistence on the capture and retention of the castle.<sup>115</sup> A ferry was running to Dunoon in 1798.<sup>116</sup> Nearby, a railway pier was constructed at Wemyss Bay (NS 1968) in 1865.

Isle Port. NS 242129.

John O'Groats Port. NS 202078.

Kelburn. NS 208563. No remains of any antiquity exist at Kelburn, but some historical references apply. Thus in 1683, David Boyll of Kelburn applied for a voluntary contribution for the repair of a demolished harbour, 117 describing Fairlie Roads, on which his property fronted, as a 'place most commodious for all ships and barks which did come from Ireland, ffrance or Ingland'. A similar opinion of the roadstead's quality was held by two writers in the Old Statistical Account, 118 who regarded it as one of the most convenient in the whole Firth, being spacious, well sheltered, suitable for vessels of any size, and providing good ground for anchoring. The language of Boyll's supplication implies that a harbour had existed at Kelburn before 1683, Hume Brown identifies 'Culburgh' with Kelburn. 119 Tucker, writing in 1655, noted 'a shoare only of the roade'. 120

Lochan Port. NS 194070.

Matthew's Port. NS 199036. See Drumgarloch.

Portandea. NX 046754.

Port Cardloch. NX 166950. Presumably the 'creek' mentioned in 1655 under the name of Ardmillan (supra)!<sup>21</sup>

Port Carrick. NS 219098.

Port Curcarie. NX 054780.

Port Murray (Morrow). NS 205080.

'Port: Old Pier'. NX 090855.

Port Ronnald. NS 312308. See Troon.

Port Rorie. NS 254161. See Dunure.

Port Sally. NX 051724.

Port Shuchan. NS 246151.

Port Vad. NX 091870.

**Prestwick. NS 3425.** Except in so far as its long, sandy foreshore may have formed, as did the Turnberry Sands (below), a 'receptacle', in Abercromby's phrase, for small boats and barks, <sup>122</sup> Prestwick seems to possess no history as a landing-place. The '—wick' place-name suggests, however, that the bay was once familiar to seafaring speakers of Norse.

Stoney Port. NS 180516.

Turnberry Bay. NS 1906, 1905. In the 17th century, the extensive sands at Turnberry were evidently in use as a landing-place, as in 1655 Tucker recorded a 'creek'; and Abercomby described them as a 'receptacle' for boats coming from Ireland and the Highlands. 122

#### ABBREVIATIONS USED IN THE REFERENCES

APS. Acts of the Parliament of Scotland, Record Edition.

Cal. of Docts. Calendar of Documents relating to Scotland, Edinburgh, 1881-8.

Cast. and Dom. Arch. MacGibbon, D., and Ross, T., The Castellated and Domestic Architecture of Scotland, Edinburgh, 1887-92.

Celtic Place-names. Watson, W.J., The History of the Celtic Place-names of Scotland, 1926.

CRB. Records of the Convention of Royal Burghs, Edinburgh, 1866-1918.

Early Travellers. Brown, P. Hume, Early Travellers in Scotland, Edinburgh, 1891.

Gazetteer. Groome, F.H., Ordnance Gazetteer of Scotland, 1886.

Geogr. Coll. Macfarlane, W., Geographical Collections relating to Scotland, S.H.S., 1906-8.

Harbours. Parliamentary papers, Reports of Commissioners, Harbours, xxxii, 1847.

NSA. New Statistical Account of Scotland, 1845.

PSAS. Proceedings of the Society of Antiquaries of Scotland.

Stat. Acct. The Statistical Account of Scotland, 1791-9.

TGNHAS. Transactions of the Dumfriesshire and Galloway Natural History and Antiquarian Society.

#### where vigned and to small REFERENCES Wissens & monA W AS

- This study of 'Old Ayrshire Harbours' by the late Angus Graham continues his series already published in TDGNHAS., 3rd ser., lii; liv; PSAS., cviii.
- 2. Geogr. Coll., ii, 4 f.
- 3. Stat. Acct., vii, 3.
- 4. Discussed in TDGNHAS., 3rd ser., liv.
- 5. Castle Haven in Galloway: TDGNHAS., 3rd ser., Iil, 129.
- Unpublished: seen by courtesy of the late Hon. Mrs. Scott of Harden.
- 7. NSA., vii, 450.
- 8. Inventory of Kintyre, Pl. 88a.
- 9. NSA., v, 202 ff.; Harbours, liv.
- 10. NSA., v, 19; Ayrshire Collection, viii, 152.
- 11. Ibid.
- 12. Brown, P. Hume, Scotland before 1700, 119.
- 13. Camden, W., Britannia, ed. Gough, R., iv, 71.
- 14. APS., iii, 519.
- 15. CRB. ii, 96, 356.
- 16. CRB., iii, 134.
- 17. Early Travellers., 179.
- 18. APS., ix, 456 (b).
- 19. CRB., iv, 548; v, 349.
- 20. Harbours, Ivi.
- 21. NSA., v. 55.
- 22 Ihid
- 23. Harbours, 543.
- 24. NSA., v, 100.
- 25. Information from Captain N. Macdonald, the Harbour Master.
- 26. Alloa: PSAS., ci (1968-9), 213.
- 27. NSA., v, 100.
- 28. Pittenweem: PSAS., ci (1968-9), 264.
- 29. Tait, A.A., in Architectural History, viii (1965), 9 ff. and plate.
- 30. NSA., v, 52, 55 ff., 66; Shaw, J.E., Ayrshire, 212.
- 31. Geogr. Coll., ii, 5.
- 32. Stat. Acct., i, 109; NSA., v, 416.
- 33. NSA., v, 416, 421, 424.
- 34. Harbours, liv.
- 35. See on Port William, TDGNHAS, 3rd ser., liv.
- 36. Early Travellers, 180.

- 37. W. Aiton, General View of the Agriculture of the County of Ayr (1811), i, 54.
- 38. Harbours liv; Gazetteer, s.v.
- 39. Aiton, 54.
- 40. NSA., v, 373.
- 41. Geogr. Coll., ii, 5.
- 42. Early Travellers, 180.
- 43. Stat. Acct., xii, 340 ff.
- 44. NSA., v, 403.
- 45. Harbours, liv.
- 46. Britannia, ix (1978), 398 f.
- 47. McJannet, A.F., Royal Burgh of Irvine, 245.
- 48. Stat. Acct., vii, 5 f. and note; NSA., v, 427 f.
- 49. Geogr. Coll., ii, 93; TDGNHAS., liv.
- 50. McJannet, A.F., op. cit., 246.
- 51. Hume Brown, Scotland before 1700, 119.
- 52. Camden, W. Britannia, ed. Gough, R., iv, 73.
- 53. Dobie, J., Cunningham Topographized, by Timothy Pont, 17.
- 54. Early Travellers, 178.
- 55. CRB., iv, 79.
- 56. NSA., v, 620.
- 57. Miller, S.N. (ed.), The Roman Occupation of South-Western Scotland, 65, 204, 208n.
- 58. Op. cit., 245 ff.
- Archaeological and Historical Collections of Ayr and Wigton, iv, 23.
- 60. CRB. ii, 206.
- 61. Stat. Acct., vii, 3 f.
- 62. Ibid.
- 63. Stat. Acct., vii, 170.
- 64. Harbours, 1v.
- 65. Ibid., 537.
- 66. Ibid., 536.
- 67. Early Travellers, 178.
- 68. NSA., v, 620.
- 69. Shaw, J.E., Ayrshire, 214.
- 70. Stat. Acct., vii, 174 f.
- 71. NSA., v. 683.
- 72. NSA., v, 622.
- 73. Stat. Acct., xvii, 520.
- 74. NSA., v, 804 f.
- 75. Harbours, liv.
- 76. Stat. Acct., ii, 365.

- 77. Ibid., 363.
- 78. Early Travellers, 180.
- 79. Stat. Acct., ii, 266, 271 f.
- 80. NSA., v, 95.
- 81. Ibid., 264.
- 82. Cast. and Dom. Arch., iii, 151 ff.
- 83. Stat. Acct., xii, 416.
- 84. NSA., v, 267.
- Unpublished: Mrs. Higginson, 'Skipness Tales', School of Scottish Studies, University of Edinburgh.
- 86. Early Travellers, 178.
- 87. NSA., v, 440; APS., viii, 609, ix, 282 and App. 84.
- 88. APS., xi, 475, and App., 140 f.
- 89. Harbours, 533 f.
- 90. Stat. Acct., vii, frontispiece, 10, 39.
- 91. NSA., v, 461.
- 92. Harbours, liv.
- 93. Stat. Acct., vii, t, 19, 21, 23 f.
- 94. NSA., v, 461 f., 473.
- 95. Frequently written 'The Troon' in the earlier sources, no doubt in recognition of its character as a physical feature, a projecting 'nose'. W.J. Watson derives the word from the Welsh 'trywn', nose or cape. (Celtic Placenames, 191.)
- 96. CRB., ii, 259.
- 97. Ibid., 278.
- 98. Stat. Acct., vii, 623.
- 99. Aiton, W., General View of the Agriculture of the County of Ayr, i, opp. p. 50.
- 100. Paterson, J., History of the County of Ayr, i, 246.
- 101. Stat. Acct., vii, 3.
- 102. Harbours, 1v.
- 103. Aiton, W., op. cit., 51.
- 104. RPC., xiii, 263 f., 296.
- 105. CRB., i, 416; ii, 327.
- 106. NSA., v, 684.
- 107. Harbours, 1v.
- 108. Shaw, J.E., Ayrshire, 218.
- Stat. Acct., vii, 625. Aiton, W., op. cit., i, 50. Paterson, J., op. cit. i, 246.
- 110. NSA., v. 9.
- 111. Ibid, 373.
- 112. Geogr. Coll., ii, 4 f.
- 113. Early Travellers, 180.

114.	APS., x, 231.		
115.	Cal. of Docts., ii, now. 1560 ff.		
116.	Stat. Acct., ix, 101.		
117.	APS., vii, 502.		
118.	Vols. ii, 356; vii, 519 f.		
119.			
120.	Ibid.		
121.	Ibid., 180.		
122.	Perbolik 14denud		
		BY THINK BANK AM IN 29A	
	on the satisfactors of the distance of the dis	In recognition of its chara ProseCWLA Messophdedves or cape. (Ceitic Placenemes	
		Yelde 286, to enditoring. Stat. Acct., vii, 623.	
		Arron, W., General View Ayr, I, opp. p. 50.	
		RPC, xiii, 263 f., 298.	
		CRB, 1, 416; II, 327.	
		NSA., v, 684.	
		Shave, J.E., Ayrahire, 218.	
	W. op. cit., i, 50. Niberson 35 op		
		lbld, 373. Geogr. Coll., N. 4 f.	

### PUBLICATIONS OF AYRSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY SOCIETY

	Volume 11	
	So Fast to Ruin: the Ayr Bank Crash (Brady)	
	Volume 11 complete, containing above items also Battle of Mauchline Moor (Stevenson), On an Ayrshire Farm (Strawhorn), preface and index, in hard covers £3.50	
	Volume 12  Printing in Ayr and Kilmarnock (Gardner) . £1.00  Roderick Lawson of Maybole (Douglas) . 50p  McIlwraiths: An Ayrshire Family (Waterson) . 50p  Bronze Age in Ayrshire (Morrison) . 50p  Robert Bruce in Ayrshire (Barrow) . 65p  Rails to Ayr (Broad) . £1.25  Covenanters and Western Association (Stevenson) . £1.00	
	Volume 12 complete, containing the above seven items, preface and index, in hard covers, issued by Alloway Publishing Ltd., £18.50 plus £1 postage.	
***	Volume 13 Ayrshire Miners Rows, 1913 (McKerrell and Brown) £1.25	
	Volume 14 No. 1 Ayrshire Honestones (Tucker) £1.50	
	Volume 14 No. 2 A Fine Place for a Lasting Colliery, Mining Enterprise c.1600-1840 (Whatley) £1.50	
	Ayrshire: the Story of a County (Strawhorn) £5.00	
	Round Old Ayr (Brash and Leach)	
	Armstrong Map of Ayrshire 1775, facsimile in six sheets £6.00	
	Available from Mrs. S. Andrew, Reference Department, Carnegie Library, Ayr.	