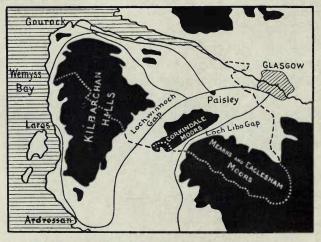
## 20. Communications—Past and Present.

The routes from one part of a country to another are determined by two conditions. First, if there is a demand for communication between two places, it is certain that some connecting route will be found. Secondly, the nature and details of this route will be determined by the physical features of the district. There is no county in Scotland that illustrates better than Renfrew how the directions of routes have been controlled by the relief of the land. In Renfrewshire the first condition for the establishment

of routes of traffic is realised by the demand for communication between Glasgow and its densely populated neighbourhood on the one hand, and on the other the fertile Ayrshire plain and the south of Scotland generally. Renfrewshire lies between the Clyde and the south-western plain of Scotland, and therefore the routes must pass



Sketch-map illustrating the control of routes by physical features

(Land over 500 feet above sea-level is shown black)

through the shire. The actual directions taken are not arbitrary but are rigidly controlled by natural conditions. In order to master nature man must obey her, a paradox that is well illustrated by the choice of routes across the county.

In a former chapter it was shown that the high ground of Renfrewshire is divided into three great blocks with intervening valleys. This is clearly brought out by the sketch-map on p. 140 where high ground is shown in solid black. It is plain that there are two gaps in the hills, that seem created to serve as channels of communication from north to south; and through these natural doorways, the broad Lochwinnoch Gap and the narrow Loch Libo Gap, there pours a ceaseless stream of traffic by road and rail. It is plain too that along the northern and the western borders of the county there will be an easy natural route following the river and the firth. Luckily, too, for human constructions, the last geological movement in this county laid dry an old sea-beach, thus forming a narrow, flat platform that fringes the county, and that forms an ideal natural route on which to build roads and railways. There are then three great natural routes in Renfrewshire, two cutting through the heart of the hills, and one skirting them round the coast.

The Loch Libo Gap is one of the most important channels of communication in Scotland, for through it runs the main Glasgow and South-Western Railway line that connects Glasgow with Kilmarnock, Dumfries, Carlisle, and London. The railway enters the valley at Barrhead and leaves it at Caldwell. Although on both sides the hills rise nearly to 1000 feet above the sea, the summit-level of the railway is only about 400 feet above the sea. Throughout its whole course through the valley the railway runs side by side with the main road to Irvine and Kilmarnock. A Caledonian line (the

Lanarkshire and Ayrshire) runs through the valley in a parallel direction but rather higher up the slope. This line terminates at Ardrossan. There is a slightly more direct route to Kilmarnock by a gap farther east, through which runs the high road by Newton Mearns and Fenwick. The reason why this route was not adopted by the railway engineers is obvious when it is seen that any line following this direction must rise more than 700 feet above sea-level.

The easiest route across the natural barrier formed by the Renfrewshire hills is the broad, flat valley that runs from Johnstone to Dalry. We have seen that formerly this valley was occupied by a long lake or a chain of lakes, the diminished representatives of which are Castle Semple Loch and Kilbirnie Loch. Nature has formed this route so well that at the watershed the valley floor is little more than 100 feet above sea-level. Down it runs the main Glasgow and South-Western line to Ayr and Stranraer, while at Kilwinning a branch passes west to Ardrossan and then north to Largs. The railway line to Largs is perhaps the clearest example in all Scotland of the control of a route by the physical features of the district. From Paisley to Largs the distance as the crow flies is 17 miles. The distance by rail is more than twice that figure, namely 36 miles. The Kilbarchan Hills interpose a natural barrier which it is much easier to circumvent than to surmount. The line therefore goes round the southern extremity of the hills, and then runs due north to Largs. For road traffic also this route is exceedingly important.

In exactly the same way the river and coast route is used both by road and rail. The Caledonian line turns north-west at Paisley and runs by Houston and Bishopton to the river at Langbank. Thence it goes along the old raised beach to Port Glasgow, Greenock, and Gourock. Before reaching Greenock the Wemyss Bay line leaves the shore, for between Greenock and Inverkip the hills are trenched through by a deep valley that forms a convenient short cut, and is therefore utilised by the railway. (See Fig. on p. 140.) The line ends at Wemyss Bay pier just on the county boundary.

The volcanic hills are deeply etched by the broad valley of the Gryfe, and this route is consequently used by the Glasgow and South-Western line to Greenock. The railway turns to the north-west at Elderslie, passes through Bridge of Weir, and goes up Strathgryfe to Kilmacolm. A break in the hills enables it to reach the river side above Port Glasgow, whence it runs to Princes Pier in Greenock.

In the lower parts of the county high roads cross and recross each other in every direction. Naturally hill roads are much less frequent, and the modern tendency is for the traffic to keep lower and lower down. Several of the old high roads of Renfrewshire rise over 700 feet above sea-level, but as traffic by road and rail becomes faster and faster it is found that the lowest road is ever the shortest. Although communication in Renfrewshire has been kept up for many centuries along the routes indicated, yet proper roads are of comparatively recent origin. In former times wheeled traffic was hardly possible, and most

of the trade was done by pack-horses. Before the Clyde was deepened so that boats could come to Glasgow, the goods were carried from Dumbarton or Port Glasgow by pack-horses. It was not until the middle of the eighteenth century that a stage coach ran between Edinburgh and Glasgow, and the condition of the roads may be judged from the fact that its average rate was less than four miles an hour. The passing of the Turnpike Roads Act in 1751 marked the beginning of a new era, and good roads gradually replaced the old horse tracks. A further improvement was heralded by the establishment of County Councils in 1889, and the transference to them of the care of the roads. In recent years the development of fast motor traffic has presented a new problem to road authorities; and it may be that we are but at the beginning of an altogether new phase of road construction rendered necessary by the modern craze for speed.

At the present time there is no canal in use in the county, but one can still find stretches of the old Glasgow and Paisley canal. A hundred years ago it was a busy waterway carrying often a thousand passengers a day. In 1805 an act was passed for constructing a canal between Glasgow and Ardrossan, but owing to financial difficulties the canal got no farther than Johnstone. Thirty years ago the Glasgow and South-Western Railway Company obtained powers to enable them to fill up the canal and construct a railway in its place. The "Canal" station at Paisley serves to remind the passengers who rush between Paisley and Glasgow in ten minutes, of the more leisurely methods of transit of our predecessors.

The palmy days of canal traffic both for passengers and goods have passed away. As railways were extended the importance of canals declined. The complete explanation of this is by no means easy. It has been attributed to their passing into the control of railway companies, but this explanation is not satisfactory. The smallness of the vessels in use and the consequent additional handling of goods undoubtedly militate against the greater use of canals in these days, when the whole tendency is to handle and carry goods in as large amounts as possible. With the adoption of improved methods of traction or propulsion, there seems no good reason why the importance of canal traffic should not to some extent be restored.