

GENERAL OBSERVATIONS.

GENERAL OBSERVATIONS ON THE COUNTY OF RENFREW.*

Geography, &c.—THIS county, with Strathclyde, Ayr, and Stirling, was, at the time of the Roman dominion, possessed by a Celtic race, termed by their conquerors the *Damnii*, their chief town here being *Vanduaria*, which some suppose to have been near the site of Paisley, while Camden in Ptolemy's *Randvara*, thinks he sees the *Renfrew* of modern times clearly indicated. The whole was within the Roman province of *Valentia*. The angular point of land at Renfield, formed by the junction of the rivers Clyde and Cart, seems, in the descriptive language of the Celts, to have given name to the town in its neighbourhood, and the town ultimately to the whole county. The word *rin* or *ren* signifies a neck-land, as O'Brien in his "Word-Book" has so clearly shown. Our *rinn*s of Galloway is an example in point. The *freu* or *frau* signifies a flux or flow of tide. The *Rinn* of Renfrew, now Renfield, has a double flux, one up the Cart and another up the Clyde, and in good modern English may be termed the "tidal cape or peninsula." In a charter of David I., preserved in the chartulary of Kelso, No. 1, the spelling is *Renfru*. In the *Rotuli Scotorum*, a printed copy of which is in the Paisley Library, the name occurs for the first time in 1311, and is rendered *Reynfreu*—in other charters connected with the early history of the Stewarts, the spelling is *Renfreu*, *Reinfreu*, and *Ranfreu*. Should *Rhon* be interpreted a division or portion, as it sometimes is, *Ronfreu* will signify the portion connected with the flow of the tide—still pointing to the land near the junction of the Clyde and Cart. Some render the name *Rein Froach*, or the north-easterly division. That district bounded on the east by the Black Cart, and comprehending the country lying westward to the Clyde, was formerly termed *Stragryfe*, being watered by the *Gryfe*; and Chalmers seems to think the *Levernani* of Hailes's *Annals*, i. 78, who fought at the battle of the *Standard*, were the men of *Levernside*, the sons of the *noisy stream*,

* Drawn up by Rev. William Patrick, Hamilton.

(for such is the meaning of Lavern,) who mustered round the Pad. Renfrewshire, by way of pre-eminence, is often termed the Barony of Renfrew, because, being the ancient inheritance of the family of Stuart, it gives the title of *Baron* to the heir apparent of the Crown. The greatest length of the county from Drumduff in Eaglesham to the Cloch, is about $31\frac{1}{2}$ miles. The extreme breadth, from a bridge near Kilbirnie Loch to Erskine House, is $13\frac{1}{2}$ miles. Lanarkshire bounds it on the east and north-east; Ayrshire on the south; and the Frith of Clyde, separates it from Dumbarton, on the north, and from Argyleshire on the west. This important district lies between $55^{\circ} 40' 40''$, and $55^{\circ} 58' 10''$ north latitude, and between $4^{\circ} 15'$ and $4^{\circ} 52' 30''$ longitude west of Greenwich. The county town is 50 miles west of Edinburgh. The area of this shire is 241 square miles, or 154,240 English acres. It is entirely situated on the southern side of the river Clyde, with the exception of the King's Inch near the town of Renfrew, amounting to about 1294 acres, which lies on the northern side of the river. It appears, from the late Dr Burns's account of the parish of Renfrew, that, in the course of last century, the Clyde left its usual bed, nearly opposite to Scotstoun, took a semicircular direction, leaving the King's Inch upon the north side, and running along by the bottom of the garden belonging to the manse, came into its present direction, near to the place where the ferry now is. A much more inconvenient *addenda* to the county of Renfrew consisted in the ancient attachment of the *lands* in the parish of Bathgate in West Lothian, to the jurisdiction of the sheriffdom of this county. This jurisdiction continued till about 1530; and so completely was Bathgate, after that disjunction, isolated from other counties in Scotland, that it continued a separate sheriffdom till the abolition of heritable jurisdictions in 1748, when it was united to Linlithgow. This county was probably very early divided into wards or districts, like Lanarkshire. In 1616, William Cunningham of Craigans was served heir to the office of *coroner* and *mayor* of fee, in the west ward of Stragryffe, and in the upper ward of Renfrew, as appears from the *Inquisitio Specialis* now in Paisley Library, 38. In 1815, when a Sheriffs'-Court was first appointed to be held at Greenock, the judicial district assigned to him, consisting of Greenock, Port-Glasgow, and Innerkip, was termed the Lower Ward of Renfrewshire; and that which is under the jurisdiction of the sheriff at Paisley was termed the Upper Ward. The Sheriff Court has been held at Paisley since the reign of James VI.

The general declination of the surface of Renfrewshire, taken on the great scale, is towards the Frith of the Clyde, and the trough or outlet of nearly all its waters centres in a point at Inchinnan. There are only one or two remarkable exceptions, which, like some other exceptions, serve to confirm the general rule. When the Frith of the Clyde takes its noble sweep southwards by Govrock and Innerkip, presenting an easterly flow of wave towards the shore, the little water of Kipp, (hence Inver-Kipp,) and Houston Burn, with the usual devotion of the smaller to the greater streams, run directly west to add to the Clyde the tribute of their diminutive waters, these being almost the only streams of the smallest note in Renfrewshire, with an exception to be afterwards noted, which do not find their way directly or indirectly to Inchinnan Bridge. The most elevated lands are in the south-west and south-east. There is nothing in the whole shire approaching the mountainous. The chief range of hills is at the west—stretching along the coast at various angles, from Greenock to Ardrossan. The greatest elevation of this ridge, which seems as if set down near to the shore, as the great barrier between sea and land, are at Misty Law and the Hill of Staik, in the parish of Lochwinnoch, or upon its borders. The Misty Law is generally supposed to be about 1250 feet high, and the Hill of Staik is probably still more elevated. But these points of dispute here and elsewhere will be speedily set at rest by the publication of the Trigonometrical Survey of Scotland, now going on by the appointment of Government. The other considerable elevations are on the south-east of the county, in the parish of Eaglesham, such as Belageich, Dunwan, Mires, &c. Towards the centre, the general features are striking and picturesque, in many places being well-wooded, and varied by fine undulations, knolls, and rising-grounds. Some of these knolls, although of no great elevation, command extensive views. The whole of the less elevated district is, in short, a sort of table-land, full of irregularities, but all cultivated or capable of cultivation. There is, besides the above, a considerably elevated tract of land passing from Paisley along by the eastern parts of Lochwinnoch, and running on towards the western coast. The vallies in this county are extensive and beautiful, and lying as they do in the centre of a manufacturing district, they are still more valuable than seemly. The great vale of Renfrewshire is unquestionably Strathgryffe. Connected with this is another vale which runs through Kilbarchan, Lochwinnoch, and along by Kilbirnie and Dalry

There are, besides, many other small but delightful vales amidst the hills, and by the courses of the smaller streams. The side vale going by Kilbarchan and Lochwinnoch, is the site of the principal inland lakes in the county, viz. Barr and Castle-Semple, lochs including Kilbirnie. At one period, this valley seems to have been very extensively covered with water.

Meteorology.—The county of Renfrew may be regarded as the counter-part of Lanarkshire, the one lying on the north, and the other on both sides of the upper Clyde. Renfrewshire being nearer to, and more under the influence of the Western Ocean and Frith of Clyde, is certainly more moist than Clydesdale. In several of the New Statistical Accounts of the parishes of Renfrewshire, figures and tables are employed by their authors to show that the climate is not so rainy as is generally supposed. This is certainly a meteorological fact worth ascertaining, even independent of the apparent desire to screen themselves, at the expense of their neighbours, by attempting to prove that there are moister skies not far off than that which hangs over the shire of Renfrew. Certainly in a meteorological point of view, the atmosphere and climate of this part of Scotland are shrouded in as little mystery as any other district in the whole island. On either side of the county we have the very accurate, comprehensive, and scientific tables kept at Glasgow, both during the late and present centuries, besides those of Sir Thomas Brisbane at Largs, both places, to use a vulgar but expressive phrase, but a “cock-stride” from the north-eastern and south-western extremities of the shire—exactly corresponding, in this respect, with the grand geological directions, by which the more active phenomena of nature in former times were exercised, in giving shape and form to the present structure and surface of the globe. A very careful and important meteorological journal seems to have been kept for many years past at Castle Semple, in the parish of Lochwinnoch, giving the results of the barometrical and thermometrical movements, and differences in that quarter, for a definite portion of time, together with the conflicting results of two rain-gauges, kept in the gardens at the same place. In the account of the parish of Greenock, and also in the account of Paisley, some extracts and calculations are given from registers of the state of the weather, kept by Mr Mackinlay, the apothecary and clerk of the Infirmary at Greenock, and Dr Rodman of Paisley. In the Greenock account, and in the account of the parish of Lochwinnoch, all the statistical facts respecting the climate

of this district, worth depending upon, may be obtained. The difference between the Greenock and Lochwinnoch pluviometers is very remarkable. The years of observation are unfortunately not the same; but we repeat them as follows, for the sake of a few observations to be engrafted upon them.

Greenock.		Lochwinnoch.	
1836,	- 41.89	1828,	- 54.94
1837,	- 32.39	1829,	- 39.85
1838,	- 31.75	1830,	- 55.51

The pluviometers of Lochwinnoch are said to yield between themselves very different results; and at Greenock, Mr James Leitch, merchant, is stated to have remarked that a pluviometer placed on the roof of the Infirmary, and one in the garden, behind it, showed in 1836 the one 41.89, and the other 62.10, and in 1837, the one 32.39, and the other 49.15. When afterwards placed on the roof beside each other, they nearly corresponded. In reference to the above statements, it is only necessary to remark, that it has been long known as an established fact in meteorology, that if a rain-gauge be placed on the ground, and another at some height perpendicularly above it, more rain will be collected into the lower than into the upper; a proof that the quantity of rain increases as it descends, owing, perhaps, to the drops attracting vapour during their passage through the lower strata of the atmosphere, where the greatest quantity resides. Although Dr M'Farlane very justly concludes, that the above discrepancies throw "a great degree of uncertainty over the conclusions drawn from a comparison of the quantities of rain alleged to have fallen in different districts of the country," it is proper, by way of caveat, to remark, that the results are not always such as above stated. Long ago, Mr Copland of Dumfries showed clearly that the quantity of rain collected in a higher and lower guage, was regulated by a law, and in particular, that when the quantity of rain collected in the lower guage was greatest, the rain commonly continued for some time; and that the greatest quantity was collected in the higher guage only, either at the end of great rains, or during rains which did not last long. These are important considerations. It is not said whether the greater quantity of rain was collected in the upper or under pluviometer at Greenock—it was probably the under, and that because of the continued moisture of the under strata of the atmosphere. To make observations aright, two pluviometers ought to be kept, at least, the one much higher than the other; the average struck between both will

come near the truth. The average annual fall of rain at Greenock is said to be 35.34, and here a comparison is made between Westmorland, Cumberland, and Manchester. As the tables referred to in England are now some of them very old, and as the mode of conducting these things formerly was different from that adopted at present, less reliance can be placed upon them.

Very accurate tables were published in the Manchester Transactions, Vol. iv. including observations made at Chatsworth, 27.865; Liverpool, 34.40; Lancaster, 40.3; Kendal, 61.223; Dumfries, 36.127; Manchester itself being 43.1. As the rains of the west are so much celebrated, it has been thought worth while to dwell somewhat at length on the subject. The other meteorological phenomena will be found in the accounts of the several parishes. Dr Fleming of Neilston's "poplar-leaf" is not a bad thermometer, or rather index to the weather.

Hydrography.—First in importance under this head is the frith or arm of the sea which bounds so considerable a portion of Renfrew. The Clyde, in its upper course, is not a large river, and only sends its tide up to Rutherglen, a short way above Glasgow. Although, on its first approach to the shores of Renfrew, it is not picturesque in itself, yet it soon becomes so as soon as it begins to swell into a frith. At first the shores are flat and somewhat marshy, but are beautifully studded, both near and at a distance, with thriving villages, villas, and gentlemen's seats. At length the hills of Dumbarton and Argyleshire appear, rendered more interesting in their blue and misty distance, as yet but imperfectly defined to the eye. As the breadth of the frith expands, a curious isolated rock with a mitred summit springs up like the presiding genius of the Leven and the Clyde. Here they both cease to be rivers. This curiously formed and obtrusive rock bursting upon the sight all at once with an effect so *piquant* to the imagination, is the rock of Dumbarton; Port-Glasgow and Greenock soon appear upon the Renfrew shore; and at length the frith, now a small sea, breaks into numerous arms or lochs, the main branch turning southward along the western shore of this county, on its way to the Ayrshire and Irish coasts, the North Channel, and the Atlantic Ocean. Renfrewshire runs with a sort of elbow into the Clyde at Greenock and Gourock. This noble frith, like all the seas either surrounding or intersecting this island, seems to have been subject (and still is so,) to great and progressing changes. Mr Montgomery, in his very excellent account of the geology of

Renfrewshire, when treating of this subject, remarks, that "it is almost impossible for the most heedless observer to travel along that part of the coast (composed of old red sandstone) without being forcibly struck by the marks which it affords of the former higher level of the sea." Mr Montgomery does not pretend to say whether the water has receded, or the land has been elevated, but supposes the water had once extended to cliffs thirty or forty feet above the present level of the sea. There are abundance of rounded boulders of primitive and transition rocks at the foot of these cliffs, and the level land which intervenes between them and the frith is "full of shells exactly similar to those which are still plentiful on the adjacent shores;" or, as is very graphically stated in the account of Greenock parish, where no theory was in view, when speaking of the soil, it is affirmed that, "on the shore, it consists chiefly of clay, mingled with sea shells and gravel." Numerous holes, formerly occupied by the *pholas*, are also seen in the rocks far above the present level of that animal's habitations. Mr Stevenson, in a paper read before the Wernerian Society in 1816, takes a somewhat different view of this subject, and is at great pains to illustrate, in that and a subsequent paper, the "wasting of the land by the *encroachment* of the sea," instead of its recession. He remarks that "all along the coast of Galloway, and shores of the shires of Ayr, Renfrew, and Bute, the wasting effects of the sea are equally remarkable." At the town of Stranraer, the houses along the shore had formerly gardens between them at high-water-mark, but, of late years, the inhabitants have been under the necessity of erecting bulwarks to secure the walls and approaches to their houses. At the village of Kirkholm, a neck of land called Scar-Ridge, extended into the loch about half-a-mile, on which cattle used formerly to be grazed, is now nearly washed away, and in high tides is laid wholly under water. Observations of a similar nature occur on various parts of the Frith of Clyde, which do not exactly agree with the theory of a former high level, or the present recession of the waters of the ocean from our coasts. Mr Stevenson attributes the process of waste and decay going on along the shores of our friths and seas to the impulse and action of the sea, and this, he supposes, is, in a great measure, owing to the immense quantity of debris accumulated, and accumulating, at least, to a certain depth, in the bottom of the sea. This theory is in some measure confirmed, by the fact of a submarine island having been formed in the neck of the Frith, after losing the charac-

ter of a river or running stream, at Port-Glasgow and Greenock. This bank, divided into two by a "through-let," is supposed still to be increasing, and so anxious are the merchants and magistrates of Greenock on this point, on account of the commerce of the Clyde, that they have instituted means for ascertaining whether or not this detrital bank be on the increase, and if so, we may soon expect to hear farther accounts of "wars with the sea." Probably both theories are partly correct. Mr Montgomery, following in the walk of many eminent geologists, endeavours to trace out marks of the "former higher level of the sea." As to time, no person can say how long it may have been since this subsidence took place; the data of geology are only relative. Mr Stevenson, as a civil-engineer, had occasion to observe causes and their present effects, and had to employ means for meeting or remedying them—so both parties are partly in the right. But of this more in another place. Perhaps there is no Frith in the world so completely land-locked, and so fully sheltered from the full swell of the ocean tide, as the Frith of Clyde. The consequence is, that the tides are so languid, as to rise only from nine to eleven feet perpendicular, while the corresponding tides on the eastern coast of Great Britain, rise from fourteen to sixteen feet. The channel of the frith, with its extensive and wide spread arms, its angular evolutions, and its great natural breakwaters Arran, Bute, and the Cumbrae isles, is quite the reverse of funnel-shaped; a form most favourable to the flow of tides, and remarkable for that peculiar phenomenon the *bore*. The Clyde at Port-Glasgow is about two miles broad, and at Greenock it varies from three to five miles. Afterwards it expands greatly. In the account of the parish of Renfrew, there are some interesting remarks on the deepening of the river, and the appearance which it exhibited in the middle of the seventeenth century, as deduced from the details of a map published at Amsterdam in 1654. In the west or sea-coast of Renfrewshire, sea and land seem to run much into that peculiar form termed bays. The principal towns, Port-Glasgow, Greenock, and Gourock, are all situated on the shores of bays. Port-Glasgow is separated from Greenock by the Garvald Point, and Greenock from Gourock by Kempoch Point. Fairley road or rade, extending beyond the limits of the county, still preserves the character of the coast. It could contain any number of ships, likely to seek for shelter in it, free from every storm, and having firm anchoring ground. The united bay of Greenock and Crawforddyke was formerly termed the bay of St Lawrence. Greenock harbour was first built in 1707, by a tax on

malt. A peep at the frith from Corlie, the highest ground in the parish of Greenock, as given by the Rev. Mr Reid, once one of the ministers of Greenock, and afterwards of Mauchline, is at once piquant, graphic, and striking. "From this height, those who are fond of the varying scenery of nature," says he, "will sometimes observe the smooth surface of the frith beginning to be ruffled with the wind, which here and there seems to pour down upon it, moving the water in all directions. At other times they will mark the shadow of thick stationary clouds, which appear as so many islands; and at times a light fleecy vapour, frequently mentioned in Gaelic poetry, suspended over, or by a gentle breeze slowly moving in the direction of the Clyde." This smooth and placid surface, it must be recollected, seems to be at the feet of the spectator, its arms stretching in different directions far into the Highlands, and besides the county of Renfrew, includes Bute, Arran, and Argyle, with the striking and majestic accompaniments of the western part of the Scottish Alps, the Grampian mountains of Perth, Stirling, Clydesdale, and Ayr. Sometimes, also during a severe frost, a very thick fog overhangs the trough of the Clyde from above Glasgow far beyond Greenock. This fog seldom rises more than 400 or 500 feet above the level of the sea, and to a person perched on the summit of Corlie, which is much higher, the scene is peculiar, and to those who crawl through life in the lower regions of the atmosphere, is not a little instructive. The mist keeping a certain well defined level, covers all the hollows on both sides of the frith. While people in the low grounds, all bespattered with hoar frost, pass a dark and disagreeable day, a serene sky may be enjoyed on the neighbouring heights, without the least speck of a cloud. The surface of the vast mass of vapour on which you look down, is so exactly defined, and seems so compact and firm, that one might think they could, from the brow of the hill, step upon it, and safely walk over to the hills on the opposite side of the river. These waves of vapour exhibit the swellings of the waves of the sea without their motion; and, according to their situation, form, and density, are variously tinged with the rays of the sun; while a breath of wind now and then detaching the top of a wave, spreads it on the azure sky, to assume whatever shapes the fancy of the beholder leads him to suppose.

It has already been stated, that the waters of Renfrewshire, with trifling exceptions, have nearly their entire outlet by the Cart below Inchinnan Bridge. The whole shire, indeed, seems to have

been set off at first not so much by artificial and well-defined boundaries, as by the water-courses, all the burns, rivulets, streams, and the drainage of the fields finding their way by some route or other to Inchinnan Bridge. The only exceptions worth mentioning are the Kipp, already alluded to, and Lugton Water, which last, ungratefully forsaking the bosom of Loch Libo, the gem of lochs in the west of Scotland, leaves the county which gives it birth, and falls into the Garnock a little below Kilwinning. It has been justly remarked, that rivers are the channels which mountain streams would maintain, and these in time sensibly extend the land by their deposits, and raise the level of the sea on all other coasts. The Greenock-bank, or submarine isle, at the mouth of Clyde, is equivalent to the deltas formed by the mud at the *debouches* of mightier and more formidable rivers. The corses or valleys of Renfrewshire, great and small, are evidently the tribute of its waters, as the cultivated soil is all evidently either transported or deposited; and unless a person were specially directing his attention to the subject, it is impossible to conceive how much the "soil grows" in a few years. The lakes in the valley of Lochwinnoch and Kilbirnie, now three in number, are said formerly to have been one. This is not merely a fact, but it is likely to be so. The mastery of the land over the water, now so apparent, may arise from two causes, drainage, and the accumulation of detrital matter, which ultimately becomes soil, and in time, how long it is impossible to say, the soil may supplant the water altogether. The principal streams of Renfrewshire have their sources in its lakes or its hilly ridges. The parish of Eaglesham stretches far to the south, between Ayrshire and Lanarkshire, yet if included in the water-runs of the district, is a faithful and integral part of Renfrewshire. It is here that the White Cart first springs into existence. At Millhouse in Lanarkshire, Tor-burn and Thriepland-burn meet, amid formidable rocks of great height and thickness. These are all of Osmond-stone. The Thriepland-burn comes from the west. It is the junction of these two burns that forms the White Cart. After receiving the Reoch-burn, the Earn, and a host of smaller tributaries, the Cart hastens with all convenient speed to the lower country, where it is greeted on its way by the Levern, and several other streams of importance, and is ultimately hurried on towards Inchinnan Bridge, deepened and fitted for the navigation of small craft, at an expense which has almost ruined the town of Paisley. The Gryfe, a stream of very

considerable note and importance, has its sources in the moors and high lands situated between Kilmalcolm and the Largs. It receives the chief body of its waters by a combination of various streams at Duchal House. At first, its course is rapid, sprightly, and impetuous, rushing heedlessly over precipices, or hastening on in foaming rapids. In other places, it appears as a clear and picturesque stream, flowing between lofty banks and stately enclosures. It receives the Black Cart at Moss Walkinshaw, and as it winds through the rich and highly cultivated vale of Renfrewshire, it seems only anxious how to prolong its journey by its numerous and fantastic windings, and at length sweeping past the church of Inchinnan, it reaches what may be termed the "spout of Renfrewshire" at Inchinnan Bridge, and under the name of Cart quietly falls into the Clyde. The Calder rises on the borders of Ayrshire, and, pursuing a winding circuitous route in a south-eastern direction, falls into Castlesemple Loch, keeping up, it is asserted, "a constant current through it, and maintaining its salubrity." Its name, however, is lost in the lake, and when it again issues from it, the new stream becomes the Black Cart, dividing the shire nearly into two halves. It of course hastens on, (like most lake streams,) in a dark, level, slow-running current, to Inchinnan Bridge. The Dubbs is the slow meadow-stream flowing from Kilbirnie Loch to Lochwinnoch or Castlesemple Loch. The Auldhouse-burn and Brockburn are feeders of the White Cart. The latter flows from the Brother Loch in Mearns. The Levern is also a feeder of the White Cart. It has its source in the Long Loch, in Neilston parish. Its direction is first north, then north-east, and finally from Crofthead to the east. It enters the Abbey parish, after leaving Neilston, a little west of Hurlet, and finally falls, as before stated, into White Cart. The Levern is a rivulet of considerable breadth and flow, and in many parts of its course from the south-east, exhibits scenes of "sequestered and even romantic beauty." In the lower and mercantile districts, like all the principal waters in Renfrewshire, it becomes the *drudge* of machinery. Dovecothall, and a host of auxiliaries, which may all be termed *Levernani*, such as Gateside, Broadlie, Arthurlie, and Crofthead Mills are dependent on its waters. The Gryfe has its Gryfe Grove-Mill, Gryfe-Mill, and Crosslie-Mill, with several other works on the Houston-burn. Johnstone is identified with the Black Cart, and Paisley with the White Cart. Various streams, such as Espedair and Alt-Patrick, proceed from the braes south of Paisley, and lose themselves in the lar-

ger currents. The lakes are of two sorts, natural and artificial. Castlesemple Loch or Lochwinnoch is a fine sheet of water, beautifully situated and ornately embellished by the extensive and tasteful scenery, natural and artificial, connected with the gardens and pleasure-grounds of Castlesemple. The Bar Loch is now nearly drained, and in dry warm summers bears excellent crops of oats and hay. In moist wet seasons, and after heavy rains, it is, however, still apt to be flooded. Long Loch, in Neilston, besides giving birth to the celebrated Levern, is the feeder also of the reservoirs at Comare and Hairlaw. Cawpla Loch depends as much upon the accidental supplies it receives from the clouds, as from its native springs and other external resources—overflowing in winter and wet seasons, but shrinking in its dimensions in the droughts of summer. Loch Libo is a small sheet of water, of an oval form, encompassed with lofty hills, with ancient forests nodding to the water's edge. The lakes in Mearns are by no means picturesque. The artificial sheets of water in this county form a striking and peculiar feature. The most remarkable of these is the Shaws Water-works, so fully described in the account of the parish of Greenock. The source of this great reservoir is the Shaws Water, a small streamlet, eschewing Inchinnan Bridge, uniting with other streams used to fall into the sea between Ardgowan House and the town of Innerkip. For a complete account of this great and difficult undertaking, resulting in converting a tiny stream pursuing an idle and useless career into an enormous water-power, we again refer to the very full and satisfactory account furnished in this work by Dr Macfarlane. The following are some of the principal artificial reservoirs in Renfrewshire, with the number of acres covered by each :—

Shaws Water,	{	Great reservoir,	295 imperial acres.
		Compensation do.	40
		Hairlaw do.	72
Neilston,	{	Comare do.	16
		Kirkton, Walton, &c.	40
		Picketlaw and Kirkton,	26
Eaglesham,	{	Dunwan, Greenfield, &c.	64
		Dunwan, Blackwood, &c.	96
		Binend Loch,	50

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Besides the above, several large dams, leads, and smaller reservoirs, &c. cover about 200 acres more. The country almost everywhere abounds with excellent springs of water, except in some places towards the sea shore, where it is brackish. The "Aboon the Brae," in Neilston, is a remarkable spring, yielding

about 22,146,200 imperial gallons per annum. In the glebe at Eastwood, there is also a spring which discharges about 11 imperial pints per minute. There is a remarkably strong spring in a bank, a little west from Barr Castle, Lochwinnoch. When first hit upon, in some mining operations, it sprung like a vein when touched by a lancet, and rose several feet into the air. It is now subjected to the control of a water-pump. There is a saline spring at Candren, near Linwood village, on the right banks of the Cart, of a saline nature, which Dr Lyall endeavoured to write into repute. At present, however, it is held in small estimation. There is a spring strongly impregnated with the carbonate and sulphate of lime, on the banks of the Locher in Kilbarchan, which yields beautiful petrifications, or incrustations of vegetables with lime. The two mineral springs in Eaglesham, the one at Menzie Hill, the other at Boninton, have long been famous, but in the opinions of the best judges much overrated. There are numerous cascades among the hills, but none of them deserving particular notice. The fall of the White Cart, above Seedhill Bridge, is too urban to be picturesque.

Geology and Mineralogy.—This is a large subject in such a county as Renfrewshire, but it is one of great moment. Having lately drawn up the account of the geology of Lanarkshire for the Highland and Agricultural Society of Scotland, and having also paid some attention to the geology of Dumbartonshire and Stirlingshire, we may take the experience acquired in these analogous, and yet in some respects very different and diversified fields of research as a key to the geology of the county of Renfrew. That we may be enabled to throw as much light as possible on this very dark and intricate branch of inquiry, we will try it first on the large scale, and in connection with the geology of the neighbouring districts, and then we shall be prepared to master more effectually its details. The relative position of the county of Renfrew, in the geological map of Scotland, is the north-west corner of the great coal-field of Scotland, which runs from north-east to south-west from the Frith of Forth to the Frith of Clyde. The trap or whin connected with it runs through Lanarkshire, Ayrshire, and in a thin line along by Stirling to St Abb's Head. It is needless, therefore, to consider Renfrewshire as an isolated field. It is a part of a great whole, and is united to that whole by many links and connections, seen and unseen. Dr Fleming, in a paper on the "Mineralogy of the Redhead" in Angusshire, in the

Wernerian Transactions, read February 1815, has these remarks: "The fact of the red sandstone being the fundamental rock of the coal-field of the Forth was first pointed out to me by Mr Bald." From researches in Lanarkshire, Dumbartonshire, and Renfrewshire, it appears also to be a demonstrable fact, that the old redstone is the foundation of the coal-field both of Renfrewshire and Lanarkshire, and, moreover, these coal-fields, although in different counties, are one. Of this red sandstone or foundation rock there are two formations, one, the oldest, rests immediately on greywacke or granitic rocks, the other on mountain limestone. There is no mountain limestone in Clydesdale or Renfrewshire; but whether they might or might not have been there, are questions not so easily answered. The limestone above alluded to of both sorts may be absent, and then the two sandstone formations will come to rest on each other, or the newer or the older formations may be wanting, and from those and other circumstances it may be difficult to distinguish the one from the other. The red sandstone here is unquestionably of the older formation, or that which rests on the older rocks, chiefly greywacke. The great coal field between the two friths is flanked with it completely on the northern boundary, and in the south, although it only appears in continuous patches, yet we have sufficient proof that it is there, and that it is the foundation rock of our coalfields. But there is no need of trusting to general principles to establish particular facts. From ocular demonstration we can show, that the Lanarkshire and Renfrewshire coal-basins are one, and that this great field, which may be termed independent, rests in its lower members on the old red sandstone. This latter formation in this district begins at Largs in Ayrshire, runs directly north along that coast and the sea coast of Renfrew to Port Glasgow, where it is cut off by the presence of the whin or trap rocks. At Ardrossan, however, it comes immediately into contact with the south-western extremity of the great coalfield of Ayrshire, and here there is a junction of the two formations first noticed by Dr Fleming of Aberdeen in 1807. The old red sandstone strata here stretch nearly north and south, and dip to the east at an angle of about 30°. Over these strata of red sandstone are deposited beds of white coloured sandstone, slate-clay, limestone, slate, coal, clay-ironstone, and greenstone, or, in other words, the lower members of the independent coal formation. These are unconformable as they stretch from east to west and dip to the south. The Doctor observed, that "near the line of

junction, the newer strata are much inclined, but they approach nearer to the horizontal position as they recede from the red sandstone." This is a precious disclosure, and such as very seldom occurs to gratify the inquisitive researches of the geological inquirer. In connexion with this district, but completely at the opposite side of its coal measures, in the south-east, we find the independent coal formation lying often in the hollows of what the Wernerians term the transition rocks, as at Sanquhar and Chapel-hill near Moffat, and in various places besides. Adhering still in our inquiries to the foundation rocks in Lanarkshire, we may state that the old red sandstone is cut off from immediate apparent contact with the coal fields, by immense ridges of porphyry, which run from the Clyde at Carfin through Lesmahagow to Auchrobert. This porphyry and the old red sandstone often come into contact and even alternate. This renders it extremely difficult to observe the point of contact between the lower members of the coal measures and the old red sandstone. In Renfrewshire, there is an immense interval between the bottom of the coal measures and the old red sandstone, and this interval is entirely filled up by igneous rocks of various sorts. The porphyry here chiefly forms the highest hills, such as Misty Law, Hill of Staik, and Queenside Hill. The outskirts of the porphyry here is much intersected by dikes of greenstone, and is occasionally also intersected by veins of the sulphate of barytes, as in Lanarkshire. The porphyry and whin, as connected with and cutting off the coal measures from the old red sandstone here, have their counterparts very strikingly developed in the county of Lanark. These preliminaries being settled and set aside, we now come to the coal measures. With regard to the coalfield of Renfrewshire, there can be no doubt but that it forms the lowest member or members of the great coal field stretching between the old red sandstone at Lanark and Douglas, and the old red sandstone with its barrier of porphyry along the Frith of the Clyde in Renfrew. In this wide compass there are two distinct coal fields, the one lying on the top of the other. The higher coal field has for its basis the first band of limestone rock. The lower coal is that which alternates with numerous bands of limestone, till both limestone and coal are found lying on the transition or older rocks. The upper coal is confined entirely to Lanarkshire, or if it enters Renfrewshire at all, it is for a short distance about Cathcart and Langside, or with an apex near to Strabungo. The Lanarkshire coal-field to the south, and that

in Ayrshire at Muirkirk, in all respects resemble the Renfrewshire coal-field. No person who has paid attention to the coals in the bottom or among the lower members of the limestone formation at Ponfeich, Glespin, Auchenberg, and Brokley, can fail to identify them with the coal-fields at Hurlet, How-wood, and Bridge of Weir. It is true no limestone is found at Quarrelton, Garpel, Kerse, and some other places where coal is found in Renfrewshire. But this proves nothing. As well might we assert, that because the ten principal seams of coal in the upper coal-field are not found every where in the middle ward of Lanarkshire, that there the upper coals are not all to be found. Members which, taken as a whole, are necessary for completing the integrity of a particular formation, are not found in all places in that formation. The absence of limestone in some instances seems to have greatly staggered the opinions of Mr Montgomery, but unnecessarily; and certainly there is no ground for the remark, "Although that part of Scotland where coal is found is often called from that circumstance, the coal-field of Scotland, yet the name is in one sense ill applied; for it is apt to convey an erroneous impression of its being one continuous coal-field; whereas in reality it is composed of numerous coal-fields, lying within a certain tract or zone." This is partly true, and partly not. Almost every coal-field has some peculiarity, some member or members superfluous, and some deficient. But, notwithstanding, there is a connection between distant fields. To give the general theory here, we may remark, that, supposing we were to bore in the centre of the upper coal-field, we would, after piercing through the coal metals in the upper formation, come to the coals connected with the limestone; and were we to penetrate to the bottom of that lower formation, we would reach the field of which the Renfrewshire coals are a continuation on the one hand, and those of the upper ward of Lanarkshire, a regular and continuous extension on the other. It is where the whole of these coal metals are cropping out, that we come into contact with them at Ponfeich and Hurlet. Having established the relative positions of the coals of Renfrewshire, it may save much idle research and superfluous expense, to assure the landlords and proprietors of property in that county, that it is in vain to attempt to find the upper Lanarkshire seams of coal in Renfrewshire. They are all run out before reaching them. Wherever posts of limestone are found, we are quite in another field. The coal-field of Renfrewshire extends from near Bishopton, along the Clyde, till beyond Glasgow; a dis-

tance of about sixteen miles. It is cut off entirely from the Ayrshire field by the whin which extends from Beith to Stanley, but forms two very narrow stripes or necks at Castle Semple and How-wood, and the village of Neilston and Head of Side. From these two points the coal-field is about ten miles broad, and in the middle between Stanley and the Clyde only six or seven. To give a general idea of its extent and limits, it extends from near Bishopton till near the source of the Black Cart, and from thence in an undulating line till a point a little north of Mearns Kirk, and then keeps the boundaries of the shire northward to the Clyde. Beyond these limits, there is no coal in Renfrewshire. There is one peculiarity in the coal-fields of this extensive district, viz. in the trap-beds which in many instances overlie the coals, especially towards the south-western wing of the coal-field. This peculiarity is more apparent here than in most other districts, particularly in the Johnstone coal-field. This has not escaped the notice of MM. Defrenoy and Elie de Beaumont in the "*Voyage Metallurgique en Angleterre.*" Mr Bald, in the "*Memoirs of the Wernerian Natural History Society,*" Vol. iii. p. 137, says, "We can only remark here, that in the Johnstone coal-field the upper stratum of rock is compact greenstone, above 100 feet in thickness, not in conforming position with the coals, but over-lying; then a few fathoms of soft sandstone and slate-clay, alternating and uncommonly soft." Under this in one place there are no fewer than two beds of coal lying immediately the one above the other. There are also ten beds of coal at the bottom of the limestone series at Ponfeich in Clydesdale; a strong proof that these are the same coals edging out at the north and south sides of the same great coal-field. Mr Bald gives two sections of the Quarrelton coal in the work above quoted, to which we refer, and also two vertical sections of the same field. The occurrence of greenstone in the coal-measures was some forty years ago looked upon as an extraordinary circumstance, so much so that some geologists were inclined, from an appearance so unexpected, to include the whole series of strata that accompanied these beds under the floetz-trap formation of Werner. At the kirk of Shotts, coal is found below trap; it is plentifully mixed up with the coal measures in some parts of the New Monkland coal-field; and limestone is wrought below it near Kilmarnock. The descriptions of the various collieries in this county will be found under the accounts of the several parishes. We particularly refer to the article Paisley, for some very interesting and valuable information on this subject.

Rocks, &c.—The coal measures occupy all the north-eastern division of the county; the old red sandstone girdles it on the sea-shore from Kelly bridge to Port-Glasgow; all the rest are traps or igneous rocks of various descriptions. If a line be drawn from the Cloch Lighthouse to the extremity of Eaglesham, a distance of about thirty-one miles, the whole is of the whin formation. The thickest part of the old red sandstone is between Kelly bridge and the Cloch. Between the sea shore at Innerkip and the Shaws-water reservoirs it is about five miles broad; but from Kem-poch Point to Port-Glasgow, it is a mere stripe. Dunrod hill and the heights behind Gourrock, are of trap, but much surrounded by the old red sandstone. A very good description is given of this sandstone in the old account of Greenock, which, from its simplicity and truth, we cannot refrain from quoting: "Along the coast, freestone, mostly of a red colour, and sometimes beautifully variegated with regular spots of a light-gray colour, occasionally intermixed with a great variety of what is called sea-pebble, (conglomerate), of different shapes and hues, is most common. The strata of this stone on the shore, and a great way above it, as if the vaults of caverns below them had some time failed, are very irregular, scarcely ever horizontal, but dipping or inclining at different angles in every direction, and chiefly towards the south." Perhaps the whole formation which, in this treatise, we term old red sandstone, might as well be termed conglomerate, although the term is generally applied to that sort which Mr Reid, with no pretensions to science, describes very graphically as "occasionally intermixed with a great variety of what is called sea-pebble of different shapes and hues." The entire formation is in fact a conglomerate, either granular or rolled. The fine granular is composed of quartz, felspar, and mica minutely aggregated, in some varieties without a base, and in others with a cement of clay. The rolled conglomerate is a fragmentary rock, containing angular pieces and rolled masses of quartz, felspar, greywacke, clay-slate, jasper, flint-slate, &c. The rolled conglomerate is seen to great advantage in the parish of West Kilbride, in those remarkable eminences composed of porphyry flanked by conglomerate, termed the Three Sisters. The fine granular is the most common, but, if carefully examined, it will be found everywhere to contain large quartz balls, smooth and rounded like "sea-pebbles," showing it to be all one formation. Indeed, the old red sandstone and its adjuncts are eminently fragmentary. Even the limestone which is occasionally

found in its cliffs and flanks at Innerkip and Gourock, is not so much a calcareous tuffa as a limestone conglomerate. A deposit resembling that at Innerkip, occurs near the Rumbling Bridge, in the county of Perth. It was mentioned long ago by a competent authority, that in the steep banks of some of the numerous rivulets from the hills along the Renfrewshire coast, and in a thick bed of schistus, there appears a "thin seam of limestone, divided into pieces about the size of a man's head, and of excellent quality." These as they fall (for the expense of ground and labour would far exceed their value) are carefully collected, and used with good effect by the attentive farmer. The old red sandstone or conglomerate is penetrated almost everywhere by dikes, consisting of greenstone, often highly crystalline, amygdaloid, wacke, porphyry, and trap-tuff. A particular description of that sort of wacke termed osmond-stone will be found in the account of Eaglesham. From Clune Brae till near Bishopton, the shore of the Clyde is of trap rocks. The highest hills in the county are, however, of porphyry, such as Misty Law, Staik Hill, and Queenside Hill. In this last hill, there is a vein of the sulphate of barytes, as before stated, and, according to Mr Montgomery, a "well-defined dike of a peculiar kind of porphyry passes through the common porphyry." The porphyry is mostly flanked with greenstone. Generally speaking, the highest lands in the most hilly districts of Renfrewshire are composed of igneous rocks, including the parishes of Lochwinnoch, Innerkip, Greenock, Kilmalcolm, Houston, and Kilbarchan. Werner long ago observed that trap hills are well calculated, by reason of their naked surfaces and compact texture, to attract and condense vapour, and from their numerous perpendicular rents, and the bed of clay on which they usually rest, to conduct the condensed vapour to form springs. In many parts of this county, the whin lies on the transition and other rocks in the form of mountain caps. Workmen in Lanarkshire term this "floating whin." At Dunrod hill the old red sandstone is covered with trap; this is frequently the case about Greenock, and in some places dikes of greenstone spread over the same formation. Trap covers the coal formations in the north of New Monkland, and here it is observed that the rains penetrate the trap, and the springs all burst from the freestone rocks below. This is perhaps one of the causes why Renfrewshire is so well replenished everywhere with lakes, rivers, streams, and springs of water. Some time ago, a good deal of money was

spent about Greenock in a vain attempt to procure coal. There is certainly no coal nearer Greenock than Garpel in Lochwinnoch, which forms the north-west wing of the Ayrshire coal-field, and is entirely separated from the Renfrewshire field by the trap, and the nearest point of the carboniferous group in the county is the Bridge of Weir. All the country to the west of Bishopton, Bridge of Weir, the villages of Kilbarchan and How-wood, is trap, with the exception of Garpel, as above stated. There is certainly a mistake in treating the trap as a sedimentary or stratified rock, and in representing it lying as if stratified above and below the coal measures. It appears pretty obvious that the trap is newer than all the coal measures; that is to say, the great body of the common whin of the coal-fields in Ayr, Lanark, and Renfrew shires. If any person doubts this, he may have his scruples removed and his doubts dissipated at Dechmont-hill, near Cambuslang, where he will see that enormous mass of igneous rock tearing up the carboniferous strata of the newest sort on the north and south, the rocks on both of these sides of the hill dipping away from it, contrary to their natural dip at a high angle. The trap rocks at Ballageich and Dunwan in Eaglesham reach an elevation of 1000 feet; the porphyry at Misty Law 1200; but the greatest elevation of the coal measures at High Craig, near Johnstone, is scarcely 240 feet. The dip of the conglomerate is generally to the north, but often north-east, and occasionally south and south-east.

Ores, &c.—The green carbonate of copper or mountain-green of Schmeiser and Kirwan, has been found in the red sandstone near to Gourock, in small granular particles dispersed through the stone. It was wrought for some time, but without the least prospect of success, and after some money was expended, was abandoned. A carbonate of copper has also been noticed at Kaime in greenstone. Ironstone is chiefly found about Kilbarchan, Houston, and Johnstone, and along the White Cart and Lavern, and at Blackhall, near Paisley. It is, however, an entirely different formation from that which is found among the upper coals in the Lanarkshire fields. The Dalkeith coal-field, for example, is nearly destitute of iron, and so is that of Newcastle. The iron found here is that alternating with lime; and from the above authority, such is the position in which its principal beds are found.

The geological position of Renfrewshire is so far favourable; but

where are her blast furnaces? Perhaps the new iron-works of Dalry will test both the extent and quality of iron that are to be found in the neighbouring fields. Notwithstanding occasional boastings about the extent of the Renfrewshire supply of iron, it seems probable that this country will never be notable for its manufactures in iron; and even its coal is not of the very best quality, although in many respects excellent.

Simple Minerals found in Rocks.—In the parishes of Paisley, Neilston, and Lochwinnoch, there is an amygdaloidal porphyry, forming a sort of table-land, eight or nine square miles in extent, very rich in zeolites. The same sort of rock occurs in the upper ward of Lanarkshire, about Edmiston and other places, chiefly to the west. The simple minerals found in Renfrewshire are most abundant about Hartfield, near Paisley. These are mostly “calcareous spar, aragonite, stilbite, chabasite, &c. and occasionally large cavities occur lined with prehnite in reniform and botryoidal forms, of a green or straw colour, sometimes smooth, and in other instances crystallized on the surface. Prehnite, too, is frequently found imbedded in, or constituting an integral part of the rock.” Some remarks on the prehnite of Hartfield moss will be found in the account of Neilston. The very able writer of that account, however, makes one remark which must be corrected, where he says, “prehnite is not found in any other parish in the west of Scotland known to us.” For the accuracy of this work, it is but right to say that it occurs plentifully on the Kilpatrick hills. A white prehnite is found in Lochwinnoch; it also occurs in Abbey parish, Paisley. We refer to the table of minerals found in Lochwinnoch parish as at once curious and valuable. The red foliated stilbite at Clovenstone in that parish, and several others, are very interesting. The parish of Kilmalcolm is famous for its chabasite and yellow stilbite. Needlestone, analcime, and other similar minerals, also extend to the parish of Erskine. In the light-blue-coloured porphyry forming Kepoch point, there is found brown-spar, fluor-spar, the oxide of manganese, and small rock crystals. Near the village of Kilbarchan, specimens of white carnelian were found in claystone, connected with a remarkable rock consisting of pieces of chalcedony united by an argillaceous cement.

Zoology.—The following is a list of the principal whales and fishes found in the Clyde, and its frith or estuary.

<p>CEPHALOPODA. <i>Balaenoptera musculus</i> <i>Delphinus orca</i> <i>..... melas</i> <i>Phocoena</i> <i>Physeter microps</i></p> <p>CARTILAGINOUS FISHES. <i>Petromyzon marinus</i> <i>..... fluviatilis</i> <i>Squalus maximus</i> <i>Mustelus lævis</i> <i>Spinax acanthias</i> <i>Raia clavata</i> <i>..... batis</i> <i>Acipenser sturio</i></p> <p>OSSEOUS FISHES. <i>Syngnathus acus</i> <i>..... typhle</i></p> <p>MALACOPTERYGIOUS FISHES. <i>Salmo salar</i></p>	<p><i>Salmo fario</i> <i>Osmerus eperlanus</i> <i>Coregonus lavaretus</i> <i>Clupea harengus</i> <i>..... alosa ?</i> <i>Esox lucius</i> <i>Leuciscus rutilus</i> <i>..... phoxinus</i> <i>Gobitis barbatula</i> <i>Liparis vulgaris</i> <i>Cyclopterus lumpus</i> <i>Morhua vulgaris</i> <i>..... æglefinus</i> <i>Molva vulgaris</i> <i>Gadus tricirratus</i> <i>Merlangus vulgaris</i> <i>..... pollachius</i> <i>..... carbonarius</i> <i>Pleuronectes maximus</i> <i>..... rhombus</i> <i>Platessa vulgaris</i> <i>..... flesus</i></p>	<p><i>Platessa microcephalus</i> <i>Hippoglossus vulgaris</i> <i>Anguilla vulgaris</i> <i>..... conger</i> <i>Ammodytes tobianus</i></p> <p>ACANTHOPTERYGIOUS FISHES. <i>Pholis lævis</i> <i>Gunnelus vulgaris</i> <i>..... viviparus</i> <i>Callionymus lyra</i> <i>Crenilabrus tinca</i> <i>Pagrus vulgaris</i> <i>Perca fluviatilis</i> <i>Cataphractus Schoneveldii</i> <i>Cottus scorpinus</i> <i>Mugil cephalus</i> <i>Atherina hepsetus</i> <i>Scomber vulgaris</i> <i>..... thynnus</i> <i>Gasterosteus pungitius</i></p>
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The molluscous or shell-fish animals are too numerous to be repeated. The principal fisheries are the *Gadusidae*, including cod, ling, and haddock; *Salmonidae*, including chiefly salmon and sea-trout; *Clupeadæ*, the most prolific of all, including chiefly herring; *Scomberoidæ*, including mackerel, only in particular places; *Raiadæ*, including rays and skates, only occasional or accidental; *Anguilladæ*—the eel and conger—scarcely made use of in this district of country. Mr Wallace of Kelly has done much for the salmon-fisheries of the Clyde.

Botany.—Under this head, it will only be necessary to mention a few of the rarer plants, with their *habitats*.

<p><i>Hippuris vulgaris</i>, Lochwinnoch Loch <i>Sherardia arvensis</i>, Cathcart Castle <i>Radiola millegrana</i>, Barr Loch <i>Convolvulus arvensis</i>, Cathcart <i>Campanula hederacea</i>, Greenock <i>Verbascum Thapsus</i>, Clyde below Renfrew <i>Hyoscyamus niger</i>, Cathcart <i>Atropa Belladonna</i>, On White Cart <i>Samolus valerandi</i>, Renfrewshire Coast <i>Sison verticillatum</i>, about Greenock <i>Oenanthe fistulosa</i>, shores of the Frith</p>	<p><i>Oenanthe pimpinelloides</i>, shores of the Frith <i>Polygonum Bistorta</i>, below Greenock <i>Paris quadrifolia</i>, Cathcart Mill <i>Andromeda polifolia</i>, Paisley Moss <i>Cotyledon umbilicus</i>, Renfrewshire Coast <i>Rubus suberectus</i>, between Govan and Renfrew <i>Rubus saxatilis</i>, about Greenock <i>Nymphaea alba</i>, fresh-water lochs <i>Bartsia viscosa</i>, Greenock Battery <i>Lathræa Squamaria</i>, Cathcart Castle.</p>
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Civil History.—This shire was separated from Lanark by Robert III. who died 1406. The early authentic history of Renfrewshire is intimately connected in all its principal features and leading events, with the history of the descendants of the first of the Stewarts, Walter, the son of Allan, who fled from Shropshire in England, into Scotland, in the troublous times of Maud and Stephen. Chalmers, with his usual industry and accuracy, has traced the

early history of that high and fortunate family, and has established it, as in the case of the Douglasses, on the "evidence of charters." Much information will also be collected on this subject in Crawford's History of Renfrewshire, and in Andrew Stewart's General History of the Stewarts. It appears that, up to the era of David I. in the twelfth century, this district was chiefly inhabited by Celts, from whom, according to the chartulary of Glasgow, the King obtained an annual *kane* of swine, and other animals; a Celtic tax, payable to the sovereign or the superior, by the occupiers of land. Next to the arrival and planting of the sons of Allan in the district of Renfrew and Stragryffe, was the settlement by Walter, in 1164, of a colony of Cluniac monks from Wenlock in Shropshire, who became the founders of the Abbey of Paisley; and carried with them from the south into these regions of Celtic rudeness and barbarity, the light of knowledge, and the influences of religion and morality. One of the earliest monuments of these times was a mount or tumulus, between Renfrew and Paisley, surrounded by a fosse at the base, and having an upright stone on its summit, said to be the spot where Somerled fell, a ruthless sea-king, who arrived in the Clyde in the same year as the monks, and landing at Renfrew, fought, and fell by the hands of the heroes of Stragryffe. It is probable that the people of this district had a task to perform, not less formidable, and equally hazardous, when in 1263, under the banners of Alexander, the Steward of Scotland, they marched against the Norwegians under their leader, Haco, at the Largs, and gallantly drove the haughty invaders back into the sea. In 1296, when Edward I. of England attempted, partly by intrigue, and partly by force of arms, to deprive Scotland of her regal independence, a great many individuals in the barony of Renfrew swore fealty to him; but the noble and distinguished family of Stewart always adhered to the Bruce. From the parliamentary records, it appears that property was so much depreciated by the troublous and unsettled state of the country, that Renfrew "*per verum valorem*" was then only estimated at L.535, 9s. 8d. Among those who swore fealty to Edward were "John Hunter of the forest of Paisley; Hugh the Hunter of Stragryffe; Richard the Hunter of Stragryffe; Thomas the Brewster of the forest of Paisley; Thomas the Wright of the Blackhall; John Petit of Mearns; and William Knightesson of Eglisbam." The lords of the barony of Renfrew in 1371 gave a king to Scotland in the person of Robert II. His successor, Robert III. erected

the barony into a principality in 1405, which, with some other lands, was granted in free regality during the life of his son. The tenures of land in this county were only changed from *ward* to *blench* after the 25th of March 1748. The battle of Langside in 1568 was another trying period for the people of Renfrewshire, who naturally felt an interest in the cause of the Stewarts, of whom Defoe in his *Caledonia* thus sings,

Stewart, ancient as the hills from which they sprung;
The mountains still do to the name belong;
From hence they branch to every high degree,
And foreign courts embrace the progeny.

The Castle of Crookstone in this county is intimately connected with the history and fate of Mary Queen of Scots. Wilson in his *Clyde* thus happily groups some of the most striking circumstances connected with that royal lady's first and last abode in her ancestral domains in the west. The passage is so beautiful and striking, and the poem being somewhat scarce, we the more readily submit it to the perusal of the reader.

“ By Crookstone Castle waves the still green yew,
The first that met the Royal Mary's view,
Where, bright in charms, the youthful Princess led
The graceful Darnley to her throne and bed:
Embossed in silver, now, its branches green
Transcend the myrtle of the Paphian queen.
But dark Langside, from Crookstone viewed afar,
Still seems to range in pomp the rebel war.
Here, when the moon rides dimly through the sky,
The peasant sees broad dancing standards fly,
And one bright female form, with sword and crown,
Still grieves to view her banners beaten down.”

During the reign of Mary's son, the inhabitants of the barony, in common with many, or perhaps all of the western counties, partook of the insecurity and inconveniences connected with these turbulent and unsettled times. In the printed Acts of Parliament, we find that, on the 29th June 1598, the inhabitants of Renfrew, Bute, Dumbarton, and Carrick, were summoned by proclamation to meet at the town of Dumbarton, concerning “the disobedience of the inhabitants of Kyntyre and uthris partis of Iles and Heelandis of this realme, committing vyle and beestlie murthur, slaughteris, reiff, thift, open herschippis, oppressionis and depredationis, upon the hail inhabitantis of countries next adjacent.” And, as if their personal services and bodily presence at Dumbarton had not been enough, all having an yearly rent of 300 merks in heritage, or annual rent, if residing within the above districts, are ordered to furnish the King with “feir of weir, with schippis, cre-

avis, boittis, and all utheris veschellis and provisioun requisite for transporting them to saidis Heelandis." In 1617, the lairds of Pollock Maxwell, and Castlemilk were commissioners to Parliament for the barony, and William Somerville for the burgh of Renfrew. In 1633, in the reign of Charles I., domestic troubles, and popular complaints, seem to form the predominating features of the times. In a curious paper, where the inhabitants of Dundee complain of the great extortion used in "exacting a ladell full of all kynd of victuall, grund and ungrund, presented to the mercat, Dundie, having no *definite measure or quantitie*, whilk is ane heavie oppressioun," and where Maister David Wedderbourne, "Maister of the Grammar Skole Aberdeine," desires that his "short and facile grammar may be ordained to be taught through Scotland," a band of genuine corn-law repealers from Renfrewshire came into the field of action with as much confidence, and nearly the same sort of arguments used by their genuine descendants in the same localities at the present day. The repealers of 1633 came to Parliament with a petition and complaint, in which they suggest that "All actes and impositiones maid and imposit for restraining and inbringing of victual may be dischaiged, it being without example in any part of the world, and soe much the more that the haille scheriffdomes of Dumbartoune, Renfreu, &c. are not able to enterteine thamselless in the most plenteful zeirs that ever fell out without supplie from foraine parts. And seeing victual is become the greatest comoditie now in Europe, that it may be declaired lawful to merchands to import the samyne frielie within this kingdom at all times without any imposition." About the same period, the fisheries of Renfrew seem to have been important, as we find them mentioned and designated among the "loches, frithes, and bayes," reserved to the natives for fishing. So early as 1641, the people of the burgh of Renfrew began to look with a jealous eye on the rival pretensions of the town of Greenock. In the above year, the provost, bailies, council, and community of Renfrew, understanding that John Shaw of Greenock is to obtain in this Parliament a ratification of his infestment for erecting Greenock into a burgh of barony, "doe protest that any ratificatione be grantit." The protestation was taken by John Spruill, commissioner to Parliament for Renfrew. Renfrewshire suffered considerably during the covenanting times. In 1662, Mr John Norry, and Alexander Dunlop, minister of Paisley, were banished. A few years after, the clergy began to inveigh publicly against

the king in their sermons and prayers, and the people often met at conventicles. About the end of the year 1676, a memorable event befell Renfrewshire in common with the other western districts of Scotland, when the Highland Host was let loose among them to live at free quarter. Cleland in his poems forcibly describes the all-devouring rapacity of this famous Celtic Host, so well represented by the Pandours and Cossacks of more modern times. He says,

They durk our tenants, shame our wives,
 And we're in hazard of our lives ;
 They plunder horse, and them they loaden
 With coverings, blankets, sheets, and plaiden,
 With hooden gray, and worsted stuff ;
 They sell our tongs for locks of snuff :
 They take our cultors and our soaks,
 And from our doors they pull the locks :
 They leave us neither shools nor spades,
 And takes away our iron in laids ;
 They break our ploughs even when they're working ;
 We dare not hinder them for durking.
 My lords ! they so harass and wrong us
 There's scarce a pair of shoes among us ;
 And for blue bonnets they leave non
 That they can get their clauts upon.
 If any dare refuse to give them,
 They durk them, strips them, and so leaves them.
 They ripe for arms, but all they find,
 Is arms with them, leaves nought behind.

The Presbyterians, on the other hand, had their poetical foes, who inveighed with abundant virulence against what they termed the " Souterkin of Reformation." In the *Bellum Bothwellianum* it is asserted that during the engagement

*Fama refert, stolidâ captum vertigine cœtum
 Sublimem cruxisse crucem, de sorte futurâ
 Non dubium, quæ hostes posset suspendere captos.*

Mr Andrew Guild, Colvile, and Meston, were the most prominent of the poets who were hostile to the cause of the Covenant. Mr Leyden somewhere remarks, that " it must have been a great satisfaction to a Presbyterian of the old school, to see so much virulence expressed in such bad language." In 1682, Mr Andrew Aitchison was appointed Sheriff of this county, for the express purpose of suppressing the Covenanters ; and in the following year several inhabitants and proprietors of some consequence were prosecuted, fined, and brought into great trouble. About the end of the seventeenth century, this county was agitated and disgraced by the celebrated " Impostor of Bargarran," the notorious Christian Shaw, daughter of John Shaw of Bargarran, who was the di-

rect cause or accessory to the legal murder of three men and four women, who were tried, convicted, and executed, for the crime of witchcraft. The people of Renfrewshire cordially fell in with the Revolution of 1688; but were hostile to the Union, the greatest blessing ever conferred on Scotland. Since that period, Renfrewshire has been chiefly remarkable for the rapid strides she has made in arts and manufactures, in her foreign and domestic trade, her turnpikes, railways, her harbours and shipping. Under these and other favourable combinations of causes and circumstances, the descendants of the ancient Celts, who, on the arrival of Walter, the son of Allan, among them had neither churches, castles, or charters for their lands, have now scarcely their equals any where for industry, skill, and the application of capital to trading and mercantile pursuits. At the present moment, however, a sad blight has come over Paisley and some of her most busy and enterprising neighbours, such as Barrhead and Kilbarchan. In these three places alone the number of the unemployed amounts to not less than 14,138. The individuals who feel the distress most are those connected with the shawl trade, and weavers of all descriptions. In Paisley 12,703 are entirely without employment; in Kilbarchan 976; and in Barrhead, 456. Many of the most respectable and influential houses in the manufacturing line in Paisley have stopped payment. Munificent donations from all parts of the country are pouring in for the relief of the present distress; the latest is L. 1000, the product of a lady's bazar in Glasgow. To add to the distress, two bubble banks, termed savings banks, planned and puffed into repute by the present magistrates of Paisley, are now at a stand, by which the poor and industrious of the town and neighbourhood are in danger of losing about L. 19,000. The corporation of Paisley itself has become bankrupt. The debt at last balance was L. 43,086, 14s. 9d.; and as matters now stand, the expenditure exceeds the income of the burgh by about L. 500 per annum. This does not include the last defalcations. In Paisley, out of twenty-seven respectable firms twenty failed; and out of fifty-two houses, with but one head, thirty-six have failed, in all fifty-six failures.

Population.—As few of the parochial accounts contain the population of the several parishes and principal towns, as taken up at the periodic census of 1841, the following tables will prove interesting:—

	1791.	1801.	1811.	1821.	1831.	1841.
Beith (part of,) -	-	-	-	67	65	45
Cathcart (part of,) -	697	1050	1449	1885	2092	2141
Dunlop (part of,) -	-	-	-	68	56	76
Eaglesham, -	1000	1176	1424	1927	2372	2428
Eastwood, - - -	2642	3375	4845	5676	6854	7965
Erskine, - - -	808	847	963	973	973	1144
Govan (part of,) -	-	-	-	550	710	1528
Greenock, - - -	15000	17458	19042	22088	27571	38846
Houston and Killellan,	1034	1891	2044	2317	2745	2817
Inchinnan, - - -	306	462	641	582	642	678
Innerkip, - - -	1280	1367	1632	2344	2088	3399
Kilbarchan, - - -	2506	3751	3563	4213	4806	5595
Kilmalcolm, - - -	951	1130	1474	1600	1613	1616
Lochwinnoch, - - -	2613	2955	3514	4130	4515	4706
Mearns, - - -	1430	1714	1941	2295	2814	3088
Neilston, - - -	2330	3796	4949	6549	8048	10577
Paisley, - - -	13800	17026	19937	26428	31460	32582
Paisley (Abbey,) -	10792	14146	16785	20575	26206	28381
Port-Glasgow, - - -	4036	3865	5116	5262	5192	7377
Renfrew, - - -	1628	2091	2305	2648	2833	3076
	62853	78056	92506	112175	133493	158075

The population in 1841, of portions of Renfrewshire, situated in the parish of Govan, not accurately ascertained, is given on the authority of a very respectable and able statist, John Wilson, Esq. of Thornly. The total population, according to the same authority, is as above 158,075. It is proper, however, to remark, that according to another statement, which seems to be upon authority, the general population of the county in 1841 stands as follows: males, 72,725; females, 82,030; total, 154,755. Thus, taking the population in 1831 at 133,443, there is an increase in ten years of 15.9 per cent. In Lanarkshire the increase during the same period was 34.8; in Dumbarton, 33.3; Clackmannan, 29.7; Forfar, 22; Wigton, 21.5; Selkirk, 16.9 per cent, so that Renfrewshire is only seventh rate. In Argyle, Dumfries, Haddington, Kinross, Peebles, Perth, and Sunderland, there has been a small decrease in the number of inhabitants. Out of the above population, there were committed, during the year 1840, to prison for trial or bailed, 653, of whom 440 were tried, 53 by the Circuit Court of Justiciary at Glasgow; 64 by sheriffs with a jury; 97 by sheriffs without a jury; 158 by burgh magistrates; 68 by Justices or other Courts; convicted, outlawed, or insane, 394. There was no person executed belonging to the county during the above period. The total committals in Lanarkshire during the year 1840, was only 529, and in Edinburghshire 604. Indeed, no other county in Scotland except the above rivals Renfrewshire in this painful sort of pre-eminence by many hundreds. The in-

habited houses in 1841 were 24,626, and the parliamentary constituency 2336.

The following will show the amount of population of four parliamentary burghs within the county of Renfrew, viz.

	<i>Houses.</i>			<i>Persons.</i>		
	<i>Inhabited.</i>	<i>Uninhab.</i>	<i>Building.</i>	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>
Paisley,	10183	671	9	22064	26061	48125
Greenock,	7052	226	67	17440	18481	35921
Port-Glasgow,	1384	51	3	3134	3804	6938
Renfrew,	445	20	1	945	1064	2013
	19014	968	80	43583	49410	62997

The above tables include the population only within each parliamentary boundary in 1841. Paisley and Greenock send each a representative to Parliament, and Port-Glasgow and Renfrew, with Kilmarnock, Rutherglen, and Dumbarton, send another.

The following tables will show the amount of the population in the most active and stirring districts of this county according to last census, irrespective of parliamentary limits.

	<i>Families.</i>	<i>Males.</i>	<i>Females.</i>	<i>Totals.</i>	<i>Increase in 10 years.</i>
Paisley,	12359	28098	32865	60963	3497
Greenock,	7330	19502	19344	38846	11278
Port-Glasgow,	1383	3556	3821	7377	2185
Renfrew,	633	1501	1575	3076	243
Neilston,	1989	4784	5793	10577	2531
Eastwood or Pollockshaws, 1508		3737	4228	7965	1111

The following farther particulars may not prove uninteresting :

	<i>Average to a family.</i>	<i>Numbers in 1000 of both sexes.</i>		<i>Ratio per cent for ten years.</i>	<i>Inhabitants to the square mile.</i>
		<i>Males.</i>	<i>Females.</i>		
Paisley,	4.93	461	539	6 per cent	2415
Greenock,	5.16	502	498	41 do.	3904
Port-Glasgow,	5.33	482	518	20 do.	5588
Renfrew,	4.86	488	512	8.6 do.	521
Neilston,	5.31	452	548	31.4 do.	541
Eastwood or Pollockshaws, }	5.28	469	531	16 do.	935

Paisley has increased during the last fifty years, 36,351, or 147 per cent. : Greenock in the same period, 23,846, or 159 per cent. ; Port-Glasgow, 3341, or 82.7 per cent. ; Renfrew, 1448, or 89 per cent. ; Neilston, 8247, or 354 per cent. ; Eastwood or Pollockshaws, 8247, or 354 per cent. In these estimates, we must recollect that, previous to 1841, the population lists contained neither

soldiers in the army or militia, nor seamen either in the navy or merchant ships.

Agriculture, &c.—The county of Renfrew contains about 154,240 acres, of which about 100,000 are cultivated; 20,000 uncultivated; and 34,240 unprofitable. The valued rent in 1674 was L. 69,172 Scots; the annual value of real property as assessed in 1815 was L. 265,534 Sterling. It is well known that this shire at one period constituted a part of Lanarkshire. Indeed, from its position on the north bank of the Clyde, it may still be regarded as part of Clydesdale. In soil and climate they much resemble each other. Mr Wilson, in his account of this shire, divides it into the high, middle, and lower districts, thus describing them:

	<i>English Acres.</i>
The high district, lying chiefly on gravel or rock, contains	101,595
Middle do. mostly of thin earth, gravel, or stiff clay,	40,595
Lower do. mostly of a rich loam or clay,	12,067
	<hr/> 154,240

The high district above designated, is chiefly noted for its excellent pasture, and its extensive and well-managed dairy establishments. It bears no resemblance whatsoever to the upper ward of Lanarkshire, the soil of which lies upon greywacke, but the soil here lies chiefly on what the farmers term whin, or rotten whin. In some places, this upper region is chill and damp, but it also affords in several parishes excellent pasture. The middle district is not so famous for its pasture, but, owing to its vicinity to so many populous and busy marts of trade, the farmers here receive great encouragement to exert themselves in the culture of their land; and the abundance of manure yielded by the towns in return enables them to rear all sorts of crops with the best advantage. The same remarks apply to the low, flat, or carse lands, which are farmed with great skill and success. In deference to the very excellent work of Mr Wilson, entitled "A General View of the Agriculture of Renfrewshire," published in 1812, the usual division of soils is given as above, but this division is very artificial, and is scarcely correct. Perhaps we may distinguish them as follows: Diluvial, or mixed transported soil, abounds chiefly in valleys and by the sides of the rivers and streams. It is of various depth, from a few inches to many feet. It is composed of almost all sorts of rocks, with an admixture of vegetable matter. That connected with the river Clyde contains shells, and in inland places trees, and sometimes the horns of the stag, and various other animal remains.

The diluvium abounds in the coal district, which is included chiefly in the valleys of the Black Cart and Levern, with their expansions. It is a strong heterogeneous mass, termed by the farmers till, and is composed of particles of all the rocks found in the coalfields. Mr Bald, we believe, was the first to remark, that "these fragments of sandstone, slate, and coal, have sharp angles, and have not in any degree suffered from attrition, though comparatively very soft." It is also remarkable, that it contains no traces of animal or vegetable remains. The soil approaching the alluvial and carse clay in fertility, is that produced from the decomposition of trap-rocks. It abounds chiefly in the parishes of Eaglesham, Mearns, Lochwinnoch, Innerkip, Greenock, Kilmalcolm, Houston, and Kilbarchan. This sort of soil in favourable positions produces excellent pasture, but it is in general found in a mixed state with clay and other sorts of soil. The soil produced by the decomposition of porphyry is also favourable for yielding good grass. It has been cultivated with success about Hartfield near Paisley, and at Muirshields; in the parish of Lochwinnoch. But this sort of rock affects in general lofty situations, such as Misty Law, Queenside, and the Hill of Stake, where it is exposed to wasting rains and inclement skies, very unfavourable for the accumulation of soil and growth of vegetables, so essential for the practice of the agriculturist's art. The worst sort of soil is that situated on the conglomerate of the coast, including more particularly the tract of country between Innerkip and the Shaws Water reservoirs. As these rocks, however, contain lime conglomerate, calcareous tuff, and limestone, the task of reclaiming the soil reposing on them is anything but hopeless. These calcareous deposits form a peculiar feature in the character of these rocks, in which they differ widely from those in Clydesdale. The farms in Renfrewshire are generally let on leases of nineteen years. The average value of land is about L. 1, 15s. Some acres, however, of cultivated land, and of land in pasture, are not worth 10s. per annum, and others worth L. 10 and L. 11 Sterling. In the lower district of the county there are four great mosses, including about 1900 acres. Much of it lies on good carse clay, and might be profitably removed. There are also extensive mosses in the south-east and middle districts of the county. A good deal of information on agricultural subjects in general, very accurately given, will be found in the various parochial Accounts.

Trade and Means of Communication.—In the excellent account

of Paisley by Dr Burns, and in the accounts of the parishes of Greenock, Port-Glasgow, Renfrew, Kilbarchan, &c. there will be found very full, accurate, and interesting information, respecting the trade, merchandise, and commerce of this extensive and opulent county. About a century ago, the chief manufacture of the district was linen, which in 1828 amounted to 85,527 yards, of the value of L. 6352, 14s. 9d. Sterling. In 1784, it increased to 1,922,020, valued at L. 164,386 Sterling. When the cotton trade came to be more generally cultivated, the produce of the linen trade in 1821 had fallen to 50,162 yards. The cotton-mills now form a striking feature in the manufactures of Paisley. Mr Robert Frame, in his *Considerations on the Interest of the County of Larnark*, published in 1769, says, "when there was lately a proposal to allow the importation of French *lawn* and *cambrics*, what a cry did it not justly raise in the country. We all then foresaw the ruin of our infant manufactures established at Paisley. Will not Paisley in a few years be able to dispute the market with any people in Europe?" At the present moment, she still experiences a formidable rival in France. Mr Frame, in following up the above remarks, concludes: "Is not the case quite the same as to subsistence, at a time when our agriculture is in its infancy? Is not the raising of grain a manufacture to all intents and purposes, as well as weaving?" At the early stage of our manufactures, when our commercial and trading towns first began to feel their importance, there was a great outcry against the high prices of food, and the rise in wages. Stewart of Coltness, the political economist, who wrote about the same time, alludes to the unreasonable outcry of the selfish and conceited artisans, who were then just springing from "the dunghill and rising into prosperity!" "Nothing," says he, "is more hurtful to trade, than transient years of extraordinary plenty and low prices of subsistence. If manufacturers do then continue diligent, the high profits upon their industry engage them to a better way of living, and when high prices of subsistence returns again, they complain as much as if they were deprived of the necessaries of life." This is the key to much of the noise which we hear at the present day about high prices for food. Let these people look back to the condition of their forefathers, not a hundred years ago. A writer who knew these times well, thus alludes to them: "What a change must it be to the whole class of labourers, who used to live their year out, they did not well know how; to be receiving *four shillings* a-week for their

daily labour. Had you asked them formerly how they lived, they would have told you 'by the providence of God.' The answer was good and proper. Their industry was then so miscellaneous, the employment they found so precarious and uncertain, that they could not give it a name; now they know the fund they have to depend upon, and they know what they can afford to pay for their peck of meal." What will the labourers, workmen, and artisans, of various sorts now gaining three or four shillings a-day, say to this? Even our weavers with their 8s. or 10s. a-week, and our labourers with 10s. or 12s., are much better off than those who rejoiced in *four shillings*, and looked back to shudder at former times. The people were never so miserable as when the oatmeal was 8s. or 10s. per boll. Trade at all times has been subject to great fluctuations. Then, as now, it was a sort of cant phrase that the "manufacturers, not the country labourers, are the first made to feel the distress of high prices." That they are first *heard* to complain, is certain, but that they are those who first *suffer* is questionable. They are assembled in bodies, they reside in considerable towns, where every individual, whether he be in want or not, joins them in the cry for cheap provisions. The sorrows and complaints of the poor half-starving day-labourer cannot be heard, buried as he is in his miserable cottage, and surrounded by those who have an immediate interest in stopping his mouth. In a "Six weeks' Tour through part of England," published in 1768, the truth of this position is fully substantiated, where it is asserted, that "all riot and revolt on account of high prices has constantly broken out among the higher classes of the industrious, whose wages far exceed what is found necessary for the lower labouring and manufacturing classes. They do not cry for want, but because they wish to live at a cheaper rate than the farmers can afford to supply them." Considering the great privileges with which the people of this country have been blessed, the success with which their exertions have been crowned, and the superior luxuries and comforts which they in general enjoy, it is astonishing that we do not oftener hear the voice of thanksgiving, and less of popular murmuring and complaint. We are certainly at the present moment the most ungrateful people on record,—the greatest murmurers under Heaven. The Israelites murmured in the barren waste and howling wilderness; but we murmur in the land of Goshen. This vile temper will sooner or later work its own punishment or its own cure. The manufacturing classes, like the rest of their fellow men,

would they always be comfortable must "make hay when the sun shines!" and thus be prepared for the day of adversity, when it arrives, and submit like those—

— "qui Dei
Muneribus sapientur uti.
Duramque callet pauperiem pati."

Means of Conveyance, &c.—The first decided improvement of the roads in this county took place after the passing of two acts of Parliament in 1792, the one for converting the statute labour, the other for making certain new roads. According to Mr Wilson's estimate, upwards of L. 100,000 had been laid out in this county upon roads before 1812. The sum is much greater now. As far back as 1753, a turnpike act was passed to facilitate the communication with Glasgow. Afterwards Inchinnan Bridge, an important undertaking, was built, and the Kilmarnock and Greenock roads were formed. These remained in an indifferent state of repair till after the above period, 1792. The magistrates of Greenock laid out upwards of L. 12,000 in forming the road along the shore between that town and Kelly Bridge on the confines of Ayrshire. But her turnpike roads, once the boast of Renfrewshire, are about to be eclipsed by her railways. Of these, there are five within the county, or immediately connected with it, viz.

1. The Pollock and Govan Railway was authorized by two acts passed in 1830 and 1831, with a capital of L. 26,000. Part of it extends to Rutherglen, and another terminus is at the quay at Glasgow. It was intended to connect the coal-fields in the south-east of Glasgow with that city.

2. The Paisley and Renfrew Railway was authorized by an Act passed in 1835, with a capital of L. 23,000. It forms a direct communication between Paisley and the River Clyde at Renfrew Ferry. It is only three miles and a quarter in length. It was opened in May 1837.

3. The Glasgow, Paisley, and Greenock Railway was authorized by an Act passed in 1837, with a capital of L. 533,333. It is twenty-two miles and a half in length, from the north end of Glasgow Bridge to the harbour at Greenock. It passes through Paisley and has a branch to Port-Glasgow. It was opened 31st March 1841. The joint railway between Glasgow and Paisley, common with the Glasgow and Ayr Railway, was opened on the 14th of July 1840. The capital has been raised to L. 666,666, for making new branches and other improvements, and erecting a pier opposite Dumbarton.

4. The Glasgow, Paisley, Kilmarnock, and Ayr Railway was authorized by an Act of Parliament passed in 1837, and has been executed at an expense of L. 812,137, 15s. 6d. It extends forty miles, and the branch to Kilmarnock eleven miles. Near Dalry the line parts into two branches, the one running to Kilmarnock as above, the other passing on to Kilwinning, where it joins the Ardrossan Railway. The whole line was opened on 12th August 1840. New branches are projected.

5. The Ardrossan and Johnstone Railway was authorized by an Act passed in 1840, which separated it from the management of the proprietors of the Glasgow, Paisley, and Johnstone Canal. The capital is L. 80,000. A junction has been effected with the Ayrshire Railway at Kilmarnock. Passengers go by this line to Ardrossan, and from thence by steam-boats to Ireland, Liverpool, and Fleetwood, on the direct railway line to London

Since the opening of the Glasgow and Greenock Railway, a reduction of more than fifty per cent. has taken place in the fares of steam-boats on the Clyde. According to the report of the directors of the above railway for the half-year ending 30th November 1841, the receipts for that period have been to the amount of L. 25,205, 10s. 6d. being at the rate of L. 969, 8s. 10d. per week. The disbursements on account of revenue within the half-year were L. 13,273, 9s. 2d. The cost of locomotive power has been 12.84d. per mile, being a reduction of eleven per cent. on the same item in the preceding half-year's accounts. The greatest number of passengers carried in one day has been 8510, and the average during the summer season, carried down to the watering-places on Saturday, and brought back on Monday, about 4000. The total number carried in the half-year was 402,241. The numbers travelling on the railway amount to forty-seven per cent. more than were computed in the Parliamentary tables. Should the railway from Dumbarton up the Leven valley be completed, it will add to the traffic of the railway. Already several saw-mills have been erected adjoining the line, and the large cotton-mill and other works on the Shaws Water, having now commenced operations, will much benefit the line. All the lines here have suffered much from the late failures and stagnation in trade. It is well known that an increase of thirty per cent. and upwards has taken place almost universally, on English railways between the first and second years of their opening, but, from the above cause, the whole numbers travelling by canal and on the joint railway, between Glasgow and Paisley, are now three per cent. less than

during the corresponding period of 1840. The passengers who travelled on the Ayr line during the year preceding 30th August 1841, were upwards of 900,000.

There are three canals connected with this county.

1. The Glasgow, Paisley, and Johnstone Canal, extending between Glasgow and Johnstone, about eleven miles. It was at first proposed to carry the cut as far as Ardrossan. It was opened in 1811. By the application of lightly constructed passage boats, dragged at a rapid rate by horses, the revenue of this canal has been greatly increased; the number of passengers conveyed during the year ending 30th September 1840, was no less than 396,248, besides 76,393 tons of various sorts of goods.

2. The Forth and Cart Junction Canal, was suggested by Dr Boog in the last Statistical Account of Paisley, Vol. vii. p. 78. It is one mile and a half in length, forming a branch from the Forth and Clyde Canal to the Clyde, terminating nearly opposite the mouth of the Cart. The company was incorporated by an Act passed in 1836, with a capital of L. 10,000. The canal is now completed, and is now chiefly used for the transport of coals, ironstone, and miscellaneous goods, from districts connected with the great canal to Paisley.

3. A canal, particularly mentioned in the former Statistical Account of Paisley, was cut to avoid the shallows of Inchinnan Bridge. It was finished at an expense of L. 4000. The tonnage in 1835 brought L. 260 per annum.

Improvements have of late years been carrying on to a considerable extent in the river Cart. In the account of Paisley, it is said, "these, when finished, will greatly increase the revenue arising from it, as well as improve the commercial interests of the place." Unfortunately, these generous anticipations have not been realised. The affairs of the river Cart are now a complete wreck, and, like the revenues of the corporation of Paisley, are verging to insolvency. In the last report of the income and expenditure of the river Cart Trust it appears that, while the expenditure in the year 1841 was L. 1667, 11s. 9d. the revenue was only L. 937, 6s. 8d. being an excess of expenditure over income, amounting to L. 730, 5s. 1d. One of the most melancholy features in the case is the item of debentures, L. 9296, due sundries, for savings banks. This, with an equal sum, at least, raised in the same way, upon the credit of the town's funds, comes entirely out of the pockets of the industrious and working-classes. We cannot believe the surmise that these bubble banks were set up in the spirit of extreme

reform, by which the majority of electors in Paisley have long signalized themselves, merely out of spite to the Government savingsbanks. If so,—if they have been accused of entertaining high opinions in politics,—they have paid a high price for them. The present magistrates of Paisley are, John Henderson, Provost; David Murray, Robert Paton, James Barr, John Smith, Bailies. But, notwithstanding their present depressing circumstances, let the community of Paisley take courage from the circumstances in which the people of Greenock were placed at the beginning of the eighteenth century. Their harbour was first erected, as formerly hinted at, by a tax of 1s. 4d. Sterling, upon every sack of malt brewed into ale; but the expense amounting to upwards of 100,000 merks, the magistrates became alarmed at the greatness of the debt incurred; and we are told that “on Sir John Shaw’s agreeing to take it upon him, they resigned to him the harbour and assessment above mentioned.” In 1740, there was a surplus of 27,000 merks, the foundation of the present town’s funds. Thus did the people of Greenock drink themselves into wealth and importance. We trust that prudence, and the avoiding of extreme measures, may yet bring a sister corporation out of all her present difficulties, not by a malt-tax, but by the force of honourable pursuits and honest industry.

A great deal of information will be found respecting this shire in Mr Wilson’s work, before alluded to; in Crawford’s *Renfrewshire*, with its continuation by Robertson; also in Hamilton of Wishaw’s MS.; and Principal Dunlop’s “*Description of Renfrewshire*.” In ancient Scottish story, it stands forth prominent as the ancient residence of the Stewarts, and the birth-place of Wallace.

Here Wallace shone, a race of matchless might,
Gentle in peace, but terrible in fight!
The fame of Wallace never can expire,
While Scottish breasts heroic deeds admire.
And friendship hither Roes from England drew
The royal Bruce’s fortune to pursue:
And hence the faithful race of Erskine springs,
Marr’s lords, the guardians of our youthful kings;
To whom an ancient nation dared intrust
Their future hopes, and ever found them just.

We have abstained from offering any remarks respecting the navigation of the river Clyde, referring to the statistics of Greenock, Port-Glasgow, Renfrew, and Glasgow. We may here only state that it has been ascertained from custom-house returns, and other sources, that upwards of 200,000 tons of coal and timber alone passed up and down the Clyde last year, and that about 100,000

tons of coal are consumed annually at Port-Glasgow and Greenock. The jurisdiction of the "River Trust" terminates at Toward-point. At Cloch-point, on the brow of the rock, stands the Cloch lighthouse, a circular tower 80 feet high, with a stationary stellate light. It bears N. E. four miles from the point of Wemyss, and six miles N. E. by E. from Toward-point.

TABLE I.—Showing the number of persons committed for trial or bailed in the county of Renfrew in the year 1840 :

Offences against persons,	-	116
property, with violence,	-	60
property without violence,	-	360
Malicious offences against property,	-	8
Forgery, and offences against the currency,	-	15
Other offences,	-	94
	Total,	<u>653</u>

TABLE II. shewing Ecclesiastical State, &c. of Parishes in the County of Renfrew.

Parishes.	Ecclesiastical State.					Per. Schools in Par.	Per. Schoolmasters' Emoluments.			Annual Amount of Contributions to the Poor.		
	Famts. be- longing to Evang. Ch.	Do. Individuals	Families or Disasters or Successors.	Do. Individuals	Amount of Parochial Ministers' stipend.		Salary.	Fees.	Total.	From as- essment or voluntary contrib. by Heritors.	From Church col- lections.	From Alms, Legacies, &c.	Total.
Renfrew,	See text.	...	...	...	16 chalders.	6	...	...	...	L.147 0 0	Int. of L.60.	...
Eastwood,	307	...	852	...	16 chalders.	5	L.34 4 4	L.36 0 0	L.70 4 4	L.535 0 0	24 0 0	1,359 0 0
Houston,	16 chalders.	5	34 4 4	28 0 0	62 4 4	20 0 0	58 0 0	99 19 0
Kilcoolum,	30 chalders.	9	34 4 4	...	...	...	18 0 0	...
Port-Glasgow,	...	5580	...	1845	L.250.	8	...	...	...	...	410 0 0	...
Lochwinnoch,	...	3730	...	789	16½ chald.	10	34 4 4	...	...	207 0 0	99 17 4	321 17 0
Inchinnan,	...	See text.	...	...	16 chalders.	...	34 4 4	31 0 0	65 0 0	...	30 0 0	...
Paisley,	...	8766	...	2409	L.200 each.	...	...	See text.	...	...	See text.	...
Nelson,	1296	...	504	...	16 chalders.	15	34 4 4	...	...	518 15 0	10 15 0	585 12 0
Kilbarcton,	18 chalders.	7	34 4 4	...	...	...	See text.	...
Eggleston,	...	1214	...	1214	17 chalders.	4	30 0 0	...	...	120 0 0	20 0 0	140 0 0
Grenock,	...	19493	...	...	18 ch. L.275 200. 200. 150. 60.	...	...	See text.	...	...	See text.	...
Cathart,	L.276.	...	31 0 0	...	...	...	45 0 0	...
Meura,	262.	3	34 4 4	L.83 0 0	97 4 4	...	...	...
Inverkip,
Evanton,	...	957	...	...	16½ chalders.	2	30 0 0	...	...	...	35 14 3	...