

PARISH OF ST VIGEANS.

PRESBYTERY OF ABBROATH, SYNOD OF ANGUS AND MEARNES.

THE REV. JOHN MUIR, MINISTER.

I.—TOPOGRAPHY AND NATURAL HISTORY.

THE parish of St Vigeans is here considered as comprehending the ecclesiastical districts of St Vigeans proper; 2. Inverbrothock; 3. a third part of Ladyloan.

Anciently this parish extended over the whole barony of Aberbrothock.* It is in the abbey chartulary named indiscriminately Aberbrothock, Arbroith, or St Vigeans, the two first from the stream Brothock passing through the parish, and the last from the saint to which the church was dedicated. St Vigean was a monk and famed preacher in the end of the tenth century.† His origi-

* Aberbrothock was originally not the name of a town, but of a district, signifying the country upon the Brothock, which name means *the muddy stream*.

† Vigianus monachus, Christi dogmatis egregius concionator. Is sub id tempus claruit. (Boethii Scotorum Historia, Lib. xi. sub rege Kennetho III. anno circiter 990. Item Leslæus, Lib. v.)

nal chapel and hermitage were at Grange of Conan, where there are a small grove and foundations of a chapel, and also a most copious fountain, which preserves his name. Three or four acres of land contiguous to these are by tradition held as belonging to the chapel. Not far from this place, there was a baronial castle, named Gory or Gregory, which perhaps afforded protection to him; and a Druidical circle, on another eminence not very distant, laid a foundation for the rude population conveniently assembling and being converted to a new faith by former local associations.

Extent.—The greatest length of the parish from east to west is $8\frac{1}{2}$ miles, and its greatest breadth $4\frac{1}{4}$. There are two detached estates, Inverpeffer and Hospitalfield, the former lying to the south-west of Arbirlot, and the parish of Arbroath separating the latter. Including these two estates, the extent of the whole parish is 22 square miles.

The form of it is not very different from that of two right-angled triangles raised upon the Brothock as a common base, the western triangle being somewhat more northerly than the eastern. The stream of the Brothock flows through the parish for four miles in a direction straight south, passing through the middle of Arbroath, and entering the sea at its harbour.

Boundaries.—The parish is bounded on the north and on the east by Inverkeilor; on the south, by the German Ocean for five miles; and on the west, by Arbroath, Arbirlot, and Carmylie. Originally it included the parish of Arbroath, disjoined at the Reformation, and the estates of Guynd, Crofts, and Milton of Conan, now in the parish of Carmylie, disjoined in 1606. The ecclesiastical district of Inverbrothock was disjoined by the Presbytery in 1829; and part of that latter district was again disjoined and taken to constitute part of Ladyloan in 1837. Inverbrothock and Ladyloan* districts include the whole suburbs of Arbroath, with about 100 acres of land on the east side, and 110 on the west side of the town.†

Topographical Appearances.—The form of the surface of the parish may be understood, by conceiving three declivities in different aspects, with an intervening valley. The ridge, commencing at the Red-head, in the parish of Inverkeilor, at a height of

* Ladyloan consists of that part of St Vigens to the south of Kepty Street, and to the east of the Crossgates.

† An excellent map of Arbroath, by Wilson, shows the present parishes most distinctly.

about 200 feet above the level of the sea, continues gradually rising in a southerly direction, for four miles, to Dickmountlaw Cairn, where it is about 250 above the sea level, and from that eminence slopes equably south-west to Arbroath, about a mile and a-half distant. The eastern and western declivities of this ridge form the eastern triangle of the parish. Again, at the very western angle of the parish, Cairn Conan rises 550 feet above the sea level, at a distance of five and a-half miles from it; and from that eminence, from which there is a beautiful prospect in every direction, there is an equable south-eastern declivity to the Brothock and to the sea. Between the declivities of these two eminences of Dickmountlaw and Cairn Conan, lies the valley of the Brothock, running from Arbroath towards Brechin, and forming one of the transverse valleys to those of Strathmore and the Lunan. The declivity towards the sea, in the eastern part of the parish, terminates in a mural precipice at the shore. This precipice, with the exception of two small bays, where the shore retires a little, continues from the Red-head to within a mile of Arbroath, at Whiting Ness, where Mr Lyell, in his *Elements of Geology*, commences his engraved section of the strata in this part of Forfarshire. Although, in general, on this part of the coast, the sea washes the foot of the abrupt precipice, a person of activity, during low water at spring-tides, may pass along between the sea and the rock for a distance of upwards of four miles, from a peninsular rock, called Lud Castle, to St Murdoch's Chapel, in the parish of Inverkeilor. In the face of the precipices, between Whiting Ness and Auchmithie, there are a number of caves and arches, perforated by the action of the waves in the softer parts, and in the veins and crevices of the red sandstone. In calm weather, some of these may be passed through in boats, and others on foot. They are visited by strangers, on account of their picturesque aspects; but their former inhabitants, the seals, have now abandoned them. There is one particularly accessible, where the masonic arcana were formerly gone through; sombre enough, no doubt, while closed from the day, and lighted only by the flambeau below the lurid sides and roof of the sandstone. This cave extends 200 feet, with a strong calcareous spring at the farther end. It is evident, when this was excavated, as well as many of the others, that the relative levels of land and sea were different; for the highest tide now flows only on the rock at its mouth, but

never enters it. There are also arches and excavations high up the precipices, far above the reach of the present tides.

There is one remarkable perforation, about a mile south from Auchmithie, called the *Geary Pot*, (probably named from the gyration of the sea at the bottom of the hollow), which terminates the natural arch, extending from the sea for 200 yards. This has evidently been excavated, through successive ages, by the wasting away, originally, of several veins of sulphate of baryta. The depth of this ravine is about 120 feet, and the descent to the bottom of it is practicable, though not easy. Besides the three miles of rocky shore, there is one mile, to the east of Arbroath, of a sandy shore, where the bank retires about 100 yards; and on the Inverpeffer estate, to the west of Arbroath, there is another mile and a-half of sandy shore, with a large space of links and sand hillocks, through which the Dundee and Arbroath Railway passes.

The temperature of the atmosphere of this parish is lower on an average than what its height above the sea level would indicate. The cross valley in which it lies, affording an easy passage to currents of air between the ocean and the Grampians, partakes somewhat of the moisture of the one, and of the cold winds from the other. There is a marked difference between this climate and similar situations on the coast of the Frith of Forth; for instance, about Musselburgh. From simultaneous observations made at both places, it was found that, in clear nights, the thermometer falls much lower in the latter place than it does here; while, on days of much sun, the temperature at Musselburgh rises much higher. Here the maximum temperature of the day occurs at about half-past twelve; after that, in sunny days, it rapidly sinks; the sea breeze setting in with chilly damp, causing the afternoons to be far less agreeable, than in more inland situations, even of Forfarshire. Our fruits and harvest are at least a fortnight later than in the fields and gardens towards Dundee. A haze seen at the mouth of the Tay, or a particular brilliancy of the Bell Rock lights, are both accounted signs of approaching rain.

A register has been kept daily, with general regularity and accuracy, for the last four years, of the temperature of the atmosphere. The thermometer was hung at complete freedom, four feet from the ground, on a post in the open garden, in a northern aspect, shaded by boards from the sun, on the other three sides, but fully exposed to the air, and the following table exhibits the

results. The temperature was taken also at eight o'clock A. M., and it differed only from the medium of maximum and minimum, on one year's average, about one-tenth of a degree, and, on another, three-tenths; so that this district differs much in its daily curve of temperature from Leith Fort, as ascertained by Sir David Brewster.

Average of the daily medium temperature between the maximum and minimum, by Six's register thermometer, two miles from the sea, height above its level, 60 feet, and above the surface, 4 feet :

	Years.				Average of four years.
	1838.	1839.	1840.	1841.	
January, . . .	32.	34.4	32.9	32.5	32.9
February, . . .	29.5	36.1	35.2	37.	34.4
March, . . .	38.	37.	41.2	43.	39.8
April, . . .	41.	43.9	51.2	43.2	44.7
May, . . .	46.2	45.9	46.5	51.	47.4
June, . . .	52.	52.8	54.8	52.4	52.9
July, . . .	57.	56.3	56.2	56.3	56.7
August, . . .	57.	54.6	56.6	57.3	56.4
September, . . .	52.	52.9	51.3	54.	52.5
October, . . .	45.	45.5	45.7	42.4	44.6
November, . . .	38.5	41.1	39.	38.7	39.3
December, . . .	37.	38.5	36.8	36.3	37.1
	<u>43.7</u>	<u>44.9</u>	<u>45.5</u>	<u>45.3</u>	<u>44.9</u>

It may be remarked, however, that these four years have been everywhere of lower temperature than usual.

In the parish, there are only two springs of very equable temperature, varying only about half a degree throughout the whole year. These give the average temperature, 47.4. One of these is at the inmost corner of the mason's cave, on the level of the sea, and about 90 feet below the surface of the ground, the other about 100 feet above the sea level, on the side of the road leading to Montrose, about a mile east from Arbroath, which latter throws up large quantities of carbonic acid gas, and atmospheric air. Another copious spring near the manse, which varies about 4°, according to the season, gives the average temperature for 1841, 47.2°. The Brothock stream, which originally appears to have been a chain of small lakes, is mostly fed by springs, and therefore not so speedily frozen as streams usually are of a similar size. It contains no fish, but some small pike and eels, the bleaching-works on its banks having completely banished the trout formerly found in it.

The key to the geognosy of this district appears to lie at and near the Red-head. For the section of the rock there con-

tains either the actual strata of the country to the westward, or at least their analogous representatives. The amygdaloidal trap and other pyrogenous rocks there form the foundation of the stratified metamorphic rocks, which are interposed between the former and the red sandstones, and the conglomerate or gravel rock; and the whole of them have their bearing to the south-west. Trap tuff, or altered conglomerate and slate-clay, lie next to the pyrogenous rock, and this is found to crop out now and then in this south-west direction, at Newton, Park Hill, and Mill of Letham, associated with its slate-clay passing into clay porphyry, as the later geologists affirm, by its proximity to the supposed formerly heated mass. The kinds of rock which prevail mostly throughout the parish are two, the old red sandstone, and a soft variegated sandstone. These are both particularly described by Professor Fleming of King's College, Aberdeen, in the second volume of the Transactions of the Wernerian Society. What may be the thickness of the first or old red sandstone, it is not easy to determine. The general dip of the strata is towards the south-east, the valley of the Vinney forming the anticlinal axis, for northward of that the dip is in an opposite direction. The dip is seldom below ten or above twenty-five degrees. Excellent quarries are now being wrought at the Whitingness to a great extent, for building the new harbour of Arbroath. This stone, of which the greater part of Arbroath is built, is not very pleasing to the eye, but it is easily wrought, and the lime takes a firm hold of it. On the south side of some dikes built of it near the sea, the stones are weathered or honey-combed in so regular a manner, that they might form models for the rustic in architecture. This rock is No. 2 of Lyell's section.

Accompanying this rock, and superior to it, there is a gravel stone or sandstone conglomerate, which, in some places, as at Whitingness, appears unconformable, covering the outcroppings of the other old sandstone, and more horizontal in its layers; yet, upon extensive examination, it may be found alternating with this latter, and, therefore, must be considered of contemporaneous deposition. This conglomerate consists of boulders of granite, gneiss, mica-slate, quartz, porphyry, jasper, and the various species of trap rocks, with their enclosed minerals. These boulders are imbedded in a most cohesive hard cement, and their rocky structure may be seen to great advantage on the mural precipice at the shore of Auchmithie. Pebbles of the toughest and hardest quartz

may be there observed, cleft by fractures in the strata, and the halves of the same pebble separated three or four feet, yet each half adhering firmly to its mass of cement.

The second kind, or variegated sandstone, although it has occasionally where lime enters into its composition, hard seams extending through its beds, is of a texture softer, and quite different from the former more red-coloured sandstone. This commences where the rocky shore ends, at Whitingness, near where St Ninian's chapel and burying-ground were, and, taking a bearing north-west for two miles to Tarry mill, in the interior of the country, then bends westward, and serves for a foundation along the coast side for all that plain which passes through the parishes of Arbirlot, Panbride, and Barry. It appears conspicuously in all the small streams of the district which have cut it deeply, exposing its mouldering surface to sun and frost, which reduce it speedily to sandy mould. But over all its extent there is a comparatively level surface, which forms a beautiful platform for an exhibition of the art of agriculture; and the opportunity has nowhere been better improved than here, for four or five handsome independent fortunes have been peacefully and honourably earned, by the labours and care of the farmer. It would appear as if the waters of the ocean, acting at a level of 90 or 100 feet above the present shore, had abraded this comparatively soft rock into a level surface, leaving finally on it the debris of its own sand and clay. Many nodules of sulphate of baryta and calcareous spar are dispersed through it, and there are grayish white spheres with a black centre, as if the spawn of gigantic *Batrachia* had been scattered throughout its substance, and afterwards petrified. This sandstone in its lower strata becomes compact and durable, and is quarried at Drumyellow and Brax, in this parish, and at Kelly den in Arbirlot. There are found in Drumyellow quarry, appearances of branches of large monocotyledonous plants, and in the upper strata frequent cavities.

The subsoil of this parish is of three distinct kinds. The higher grounds to the east of the Brothock have but a thin subsoil, formed of the debris of the sandstone rock on which it lies. And the western part has mostly a subsoil of great depth of till or diluvial marl, with boulders dispersed of all sizes, from that of a pea to those of six or eight tons weight, evidently all derived from northern rocks.

But there is in the middle plain towards the mouth of the

FORFAR.

K k

Brothock valley, on each side of the stream, a series of remarkably formed gravel ridges, several of them a mile in length, running from north to south, with a slight curve to the east in their southern terminations. Springfield House is situated on the conspicuous end of one of them on the east bank, and Kepty hill is the most prominent termination of another on the west bank of the stream. This latter is about 40 feet high. These ridges consist of boulders, gravel, sand, and clay strata. What might have been the original agent in their formation, cannot be inferred with certainty; but they all exhibit such an appearance, as if a great debacle from the north sea, in rushing past the high land to the northward, had, in turning up the valley of the Brothock, deposited in the eddies of its more shallow parts, its burden of stones and gravel swept from other surfaces; and there are three appearances which greatly countenance such a supposition; for, *1st*, the strata or layers of which they consist, dip in a direction contrary to the descent of the present stream; and, *2dly*, at the extreme northern talus of each ridge, a large mass of small sand is found deposited. Bridgeton is situated on one of the points of these tali, North Tarry on another, and the Wardmill hill forms a third; and on the western side of the stream, the manse stands on one, and the farm of Cairney furnishes three or four more instances of these similar formed tali. The rock of the churchyard seemed to have furnished an obstacle, behind which was deposited in the former lake, a similar ridge, though of lower elevation. About two miles farther up the valley, a similar series of ridges on both sides the stream are apparent, though not so elevated, yet their forms and substances are the same, abutting on eminences of land to the south, and declining into sandy points at their northern termination. The mansion of Letham Grange is situated on one of these; in digging the foundation for which pure gravel like that on the sea shore was cast up.

It is remarkable that the alluvial or more *recent diluvial* strata at the mouths of the three streams, the Southesk, the Lunan, and the Brothock, are all similar in their formation. On the surface, first, a stratum of gravel, then a thick one of small sand, under which lies a stratum of brick-clay, then several feet of sand, and beneath all a thick stratum of brick-clay. This is finely exhibited at Wardmill Hill, and at Red Castle on the Lunan. The valley also of the Brothock and the plain of Inverkeilor are nearly on the same level, about ninety feet above high water. Hitherto no or

ganic fossils have been found in these alluvial strata, excepting petrified reeds. In the quarries from which the pavement is taken, which is a lower branch of the red sandstone, berry-like marks, fossilized joints of reeds, and leaves of rushes or grass are occasionally found deeply situated in the rock.

Between the soil and the subsoil, on a great part of the western triangle of the parish, there is often a cake of a substance like bog-iron ore, called *pan*, evidently formed not from the iron in the decay of the vegetation, but from the carbonaceous matter of the roots through successive ages, combining with the oxide of iron by which the red diluvial clay below is impregnated and coloured. This cake is very pernicious to the fertility of the soil, retaining the moisture in winter, and subjecting it to parching drought in summer.

II.—CIVIL HISTORY.

Parochial Registers.—The oldest register in this parish commences with the settlement of Mr Patrick Strachan in 1665, and was kept by him for thirty years, recording collections and church discipline, and texts of his sermons promiscuously. The baptisms and marriages were recorded at the end of the volume in the same manner. This volume is succeeded by an interval of thirty years without any record.* Subsequent to 1727, a record was regularly kept of all parochial matters, excepting funerals. For a few years after 1727, the sacrament of the Lord's Supper was not dispensed, under a superstitious notion, from the circumstance of the minister committing suicide, that the church was destined to be engulfed in the surrounding hollow, if that ordinance should be administered.

Land-owners.—In the end of the fifteenth century, this whole parish, with the exception of Inverpeffer, belonged to the abbey. The valued rent of the parish is L.8307, 7s. 5d. Scots money; and the chief proprietors are, John Hay, Esq. of Lethamgrange, L.1085 Scots; Lord Panmure, non-resident, L.1200, 5s. 6d.; Mrs Renny Strachan of Seaton, L.953, 8s. 1d.; James Mu-die, Esq. of Pitmuies, non-resident, L.864. There are, besides these, the following proprietors, with less extent of valued rent, resident in their mansion-houses in the parish: Captain Robert Scott, Abbethune; David Scott, Esq. of Newton; John Duncan, Esq. of Parkhill; David Louson, Esq. of Springfield;

* Two volumes were said to have been burnt by the wife of a session-clerk for alleged ill treatment to her husband.

John Lindsay, Esq. of Almeriecloss; George Canning, Esq. of Millbank; George Chaplin, Esq. of Colliston; Patrick Rickard, Esq. of Woodlands; Thomas Scott, Esq. of Beechwood; Mrs Baker of Hospitalfield. The mansions of all these are modern, except Colliston, said to have been built by Cardinal Beaton for his son-in-law. The Earl of Northesk and Sir John Ogilvie, Bart. of Inverquharity, the Town-Council of Arbroath, and Dr Ogilvie of Parkconan have also estates in this parish; but they are not resident proprietors.

III.—POPULATION.

The population of this parish has been, for the last 100 years, continually on the increase. According to Dr Webster's report, the population was then 1592. Since 1780, the increase has been rapid in the neighbourhood and suburbs of Arbroath. In 1754, there were but 12 families on the lands contiguous to the royalty, containing then, in all likelihood, 60 individuals. In 1793, only 1369 persons of all ages, 669 males and 700 females, were there. There are now in the same limits, within the Parliamentary boundary, 1004 families, consisting of 6037 individuals. By the census of 1841, there were found in the parish, comprehending the three ecclesiastical districts, 8780 individuals, of which 2743 resided in the country, including the country villages of Auchmithie, Marywell, and Gowansbank. Auchmithie contained about 280; the village of Marywell, 170; and Gowansbank, 120. In the town of Arbroath there resided, as above, 6037 individuals belonging to the Inverbrothock and Ladyloan districts.

The number of illegitimate births during the last three years within the three ecclesiastical districts has been in all 42, or one annually for every 670 of the population.

The inhabitants of this parish are kind towards one another, and particularly interested in each others health and welfare. Though the operatives are not highly educated, they are intelligent and sober. It is, however, to be lamented, that many of the farm-servants, having been bred from their boyish days in bothies, are but coarse and clownish in their manners. The competition for farms, and the consequent high rents, compel many of the masters to exact from their servants severe and rough toil in all kinds of weather; and it must be evident, that such exertions are scarcely consistent with much refinement of manners or much intellectual cultivation. Besides, the universal habit in farm-servants of frequently changing their abode, is not favourable to their religious improvement and demeanour.

Within these few years, an occupation has been taken up in Arbroath which is threatening to change the habits of part of the population; it is that of brokers who afford ready accommodation to the inconsiderate to part with their necessaries, and thus increase their misery. Forty years ago, few females were employed at the loom; now, on the lighter fabrics, they are employed in numbers, as stated particularly in the account in this paper of "Manufactures" by Mr Canning.

IV.—INDUSTRY.

The extent of land in this parish is 13,400 acres, consisting of,

Arable in present cultivation,	11,440
Not cultivated, but capable of being so,	450
Not suited for cultivation,	280
Land under plantations of wood,	840
Suburbs of Arbroath in houses and gardens,	90
Roads, quarries, streams,	300

Total, 13,400

There are eleven miles of turnpike roads, five of railroads, and thirty miles of roads repaired by the commutation or parish road money. All these are favourably situated for the accommodation of the parish and public.

Rent of Land, &c.—The rental of land in this parish is exceedingly various,—pendicles near Arbroath paying about L.6 per imperial acre, and an extensive farm paying only at the rate of *bs.*,—the latter on an old lease. There are now only three extensive farms on old leases, all the rest of the parish being fully if not over-rented. There is now no undivided common. The woods in the parish consist mostly of larch, with a mixture of Scotch fir, beech, and elm. Like most of the soil of the east coast, the soil is not particularly favourable for the growth of wood.

The total landed rental of the parish is L.15,500; the police rental within the suburbs of Arbroath for houses and gardens, L.6905; total, L.22,405. And, deducting L.500 for woods and waste ground, the average rental of arable land per acre is L.1, 5s. 6d.

The recent agricultural improvement is furrow-draining, chiefly by flat stones coupled in setting, and covered by small stones. Some estates have been ameliorated by trench-ploughing. Bone-manure for the turnip, one-half fed off by sheep, is also not uncommon.

The subjoined account may be considered as giving the rent, cropping, and produce of what may be reckoned one of the superior or model farms of the parish, with every advantage for manure, green crop, town neighbourhood, and management.

Extent, 300 imperial acres; rent, L.672; or L.2, 15s. per acre.

Quantity of land in oats,	50 acres.	Produce, 7½ quarters per acre.
in barley,	50 do.	6 quarters do.
in wheat,	34 do.	5 quarters do.
in turnip,	50 do.	
in potatoes,	36 do.	
in hay,	50 do.	
in pasture,	25 do.	

Live-Stock.—Cows, queys, or oxen, 48; sheep, 240;* swine, 12. Number of horses of all kinds, 10.

The greater part of the parish at a distance from the town is on the five shift rotation, pasture, oats, green crop (chiefly turnip,) barley, and cut grass. In the western part of the parish there are a great number of small pendicles on inferior land, of which this is the rotation,—the produce of oats and barley being there scarcely two quarters per acre. The quantity of naked fallow in the parish is small; almost all the land fitted for wheat is prepared for crop by potatoes. The quantity of beans and pease is very small, being entirely confined to two farms on the large scale.

Wages.—Married farm-servants are preferred on almost all the farms, and their wages and emoluments are as follows: Wages annually, L.10, with house and yard; oatmeal, 8 cwt. 1 stone; 1 quart 1 pint new milk daily; potatoes, 100 stones; coals, 11s. Foremen or principal men obtain two or three pounds more of wages; and instead of milk they have the produce of a cow. Young unmarried men have L.12, with equal milk and meal as above, but without potatoes. Labourer's wages, 1s. 8d. per day in summer, and 1s. 3d. in winter. Maid-servants have from L.2, 5s. to L.3, 3s. in the half year.

The whole farm produce is disposed of by sample and weight in Arbroath. Great profit used to be derived by farmers in the neighbourhood, from green crop and from grass, for cutting; but this way of disposing of their produce has been much departed from, on account of the difficulty of obtaining payments. Many fields, however, are still let for potatoes, in small lots, at the rate of L.8, 5s. the acre; the farmer furnishing all the horse-work, and the individual planters furnishing the seed and manual labour. Many families, of the manufacturing classes, secure their winter potatoes in this manner, which now constitute two meals of the

* This number of sheep is not usual; only one other farmer in the parish has a similar stock.

four daily refreshments. The use of pork, with the potato diet; has been introduced since the Statistical Account in 1793. Then, there were only thirty swine in the parish; now, there are ten times as many reared for home consumption, and exportation to London.

Of quarries in the parish, there are only three now wrought; one for freestone, and two others for pavement. The rental of the three, about L.150.

*Manufactures.**—In no part of the county of Forfar, Dundee alone excepted, has the rapid increase in manufactures been more strikingly exemplified, than in that portion of St Vigeans which constitutes the suburbs of Arbroath. In the year 1808, there was only one spinning-mill in the parish,† namely, Inchmill, driven by a steam-engine of sixteen horse power, of which only a very small portion was then employed in the spinning of yarns, the remainder having been used as a flour-mill. About seven years after this, the whole was converted into a flax and tow-mill. It is now an extensive work, employed in driving flax and tow machinery, a chemical bleaching work, and plash and beating-mills.

Arbroath and its vicinity had long been famous for the manufacture of several descriptions of coarse linens and canvas; but it was not till machinery had superseded the spinning-wheel, that the portion of the town lying in the parish of St Vigeans became the busy haunt of manufacturing industry.

Intersected by the river Brothock, it was soon found to offer all the advantages requisite for an extensive system of factory spinning. A large piece of land, consisting of about thirty-five imperial acres, called Almerieclose, lying in the very suburbs of Arbroath, and on both sides of the river, was at once given off by its proprietor in feus; and, in an incredibly short space of time, immense factories, with their towering stalks, and whole streets of dwelling-houses were seen to rear their heads, where, only a short time before, the waving corn and the smiling orchard attracted the eye.

The period embraced between the years 1820 and 1826, may be considered as the halcyon era of the linen manufactures in this

* Communicated by George Canning, Esq.

† With the exception of a small mill at Letham, erected in 1793, being the first or second attempt in Scotland, we believe, to spin flax by machinery. It was driven by water, and being entirely experimental, it underwent constant alterations. A small steam-engine was ultimately got to increase the power; but the work has been abandoned for many years, and the buildings are now in ruins.

quarter. It was during this comparatively brief space that by far the largest proportion of the buildings referred to was constructed; and although occasional seasons of prosperity have since occurred, to give a further impetus to this, the staple trade of the district, the five years referred to may, with safety, be mentioned as the period during which it was prosecuted with more uninterrupted success than has ever since been the case.

But this very prosperity, in the end, proved the fruitful source of wide-spread calamity. To meet the increasing trade of the town and suburbs, a native bank was established in Arbroath, contemporaneous with which, an agency, from an Edinburgh bank, was opened, which, added to the two previously existing, presented the formidable number of four banks to a population, including the environs, of about 10,000 souls. Naturally anxious to do business, and to participate in the profits of such apparently unexampled prosperity, as that which everywhere met the eye, the utmost facility and accommodation were afforded by the banks to almost every class of customers,—an unhappy feature, during prosperous times, of the banking system of the country in general, and which has not unfrequently led to the most disastrous results. The consequences were, in this place as elsewhere, that a number of individuals, destitute of capital, embarked in trade to an unwarrantable extent; and towards the close of 1825 and beginning of 1826, when the memorable panic in London convulsed the whole commercial community, its effects were experienced here with overwhelming severity, engulfing in one common ruin, not merely the speculator and adventurer, but many who for years had deservedly borne a character of unquestioned respectability,—a melancholy illustration of the instability of a commercial life, and a dear-bought warning to one and all, to avoid the fatal effects of over-trading.

Nor has the warning been unavailing. The recollection of that disastrous period has never ceased to retain and to exhibit its salutary effects, as well in the administration of the banking business of the district* as on the whole body of merchants and manufacturers; and hence it is that, during the last four or five years, while the neighbouring town of Dundee has been a prey to the baneful effects of a system similar to that which, in 1826, pro-

* It is here deserving of remark that, while in 1825-26 there were four banks to a population of about 10,000, there are at present, and have been since the last-mentioned year, only three banks to a population now increased to 15,000.

strated Arbroath, the latter has been distinguished by a moderation which has enabled its merchants and manufacturers to bear up against a series of bad trade, unparalleled in point of duration since the application of steam to manufactures.

At the present time (January 1842), there are in that portion of Arbroath comprehended within the parish of St Vigeans, fifteen mills or factories for spinning flax and tow into various sizes of yarns, from $1\frac{1}{2}$ lb. per spindle upwards. These are driven by 20 steam-engines of 250 horse-power, and give employment direct to 1240 persons. Of these, 275 males are employed in the hackling or dressing of the raw material, about four-fifths of whom are adults, the remainder being apprentices of from fourteen to eighteen years of age. The persons who constitute the remaining number of workers are employed exclusively within the factories, properly so called, in the proportion of 250 males to 715 females. Of these about 110 are men employed as millwrights, foremen, overseers, &c.; about 250 are women twenty-one years of age and upwards, and the remainder young persons of both sexes from thirteen to twenty-one.

The quantity of flax consumed in these mills may be estimated at 5500 tons per annum, of the average aggregate value of about L.200,000. The value of the yarns spun therefrom, and from the tow which is thrown off in the process of hackling, may be calculated at about L.264,000. The largest proportion of the flax thus consumed is imported direct from Russia, the port of Riga furnishing the greatest quantity and the kind held in the highest estimation, both on account of its quality and colour. From St Petersburg there are also considerable supplies occasionally derived, but the quality of late years has been falling off, and the article is consequently in less repute. Some of the Prussian ports, chiefly Memel and Pillau, furnish a certain portion. A small quantity is also imported from Ireland, but the flax of that country is in general too high-priced for this market.

With regard to the morals of the persons employed in these works, we have no hesitation in pronouncing it as our decided conviction, that they are not only not more lax than any other numerous body placed in similar circumstances of unavoidable juxtaposition, but we have reason to believe that they are, upon the whole, more circumspect in their general walk and conversation than those in any other place of equal extent within the manufacturing districts. The health of the people thus employed is

also unquestionably above the average of those devoted to similar pursuits elsewhere. Dr Arrott, a highly respectable medical practitioner of forty years' standing, whose residence is contiguous to one of the principal factories, and who has had ample opportunities of ascertaining the fact, assures us, that the health of the mill people here is, on the whole, good; that, notwithstanding the reduced wages of late years, and consequent lack of nourishing food, cases of typhus have been comparatively few, and that epidemics are not more prevalent or more fatal amongst them than any other individuals confined to in-door occupations.

This gratifying state of things we attribute to the operation of several causes. And first we may notice the favourable position of the town, and the description of houses appropriated to the residence of the working classes. Lying partly along the shore of the German Ocean, and extending thence up the valley of the Brothock, from which the streets rise and recede on both sides, there is, as it were, a natural capability for cleanliness; and assisted as this is by an active police, ever busy in the work of improvement, Arbroath, including much of the suburbs, may be safely pronounced as decidedly the cleanest manufacturing town in Scotland. But besides this, it is happily recommended by an entire absence of those huge buildings, *Scoticé lands*, in which, in some of the larger towns, the humbler classes are congregated together in dense masses, producing a physical as well as moral miasma at once pestilential and fatal. Here whole streets are composed of small tenements of one storey, where the weaver, hackler, or other artisan, enjoys his self-contained house, with his little piece of garden-ground behind. The advantages of such a system of domiciliation are observable in habits of cleanliness and self-respect rarely to be met with in those abodes of wretchedness to which we have alluded. The health is obviously far less liable to be impaired, and a higher standard of morality amongst the inmates may, as a necessary corollary, be inferred. To the dry and salubrious situation of the town and suburbs then, and to the favourable construction of the dwellings occupied by the working-classes, in conjunction with the active exertions of the Sabbath-school teachers, and other means of religious and moral instruction elsewhere referred to, do we ascribe the comparative good health and decency of conduct which, in the midst of much privation, characterize, generally speaking, the factory workers in this quarter.

Nor, in referring to this subject, should the laudable efforts of

the friends of temperance be passed over without special notice and commendation. In some of the mills there are many good and pious men active in the cause of promoting sobriety amongst their fellow-workmen; and the writer of this has great pleasure in bearing his grateful testimony to the growing improvement visible in the habits of the men in his own employment, traceable entirely to the power and influence of the Total Abstinence Society, whose principles are progressing gradually, and which are destined ere long, we firmly believe, to work a moral reformation in the manners and habits of the industrial classes, which cannot fail to be productive of the most beneficial results.

To the improvements consequent on the introduction of the Factory Act, some good is also to be attributed, and in nothing more than the necessity which it imposes on all mill-owners to observe the same stated hours for working. In this respect, and the restraint caused by the medical certificates, and the visits of the inspectors, against the employment, whether from the cupidity of parents or the avariciousness of masters, of children of a tender age more than a given number of hours daily, the act is doubtless beneficial. The hours of labour which it prescribes are twelve for each of the first five days of the week, and nine on Saturday, three-quarters of an hour being allowed for breakfast, and a similar time for dinner. Six holidays are allowed in the course of the year. Children between the age of nine and thirteen are not permitted to work above eight hours per day, but of these none are employed in the factories here. Ample time is thus allowed for education before entering the mills; and from the excellent seminary recently opened in connection with the church of Inverbrothock, and other means of instruction, we would fondly hope, though in the present state of trade it is almost too much to expect, that the day is not far distant when no young person will be found within the factories of this place, who has not received the elements at least of a plain education. Low as the fees are, however, of the schools, it is not to be questioned that many well-intentioned parents are totally unable to contribute for any length of time even the small sum requisite for the education of their children. We refer more particularly to the children of weavers; a class respecting whose condition we shall have occasion in the sequel to advert. With all the advantages, therefore, enjoyed by this locality, as compared with many of the seats of manufactures, we doubt of anything short of a national system of educa-

tion being sufficient to check the crying evil of the children of the poor being cast on the world without religious or even secular instruction. In the larger towns there is, there cannot be any other means of grappling with the demon of ignorance; and while the Legislature, by wholesome laws, is bound, as far as practicable, to alleviate the physical sufferings of the people, it is not less called upon to attend to their moral and religious training. The Government or Parliament which neglects both incurs a fearful responsibility.

With respect to the wages of those employed in the factories here, though considerably lower than they have been, we should say, that, looking to age and the preponderance of females, they are perhaps the best paid class employed in the linen trade, with the exception of hacklers. Spinners, who are all girls of fifteen to about twenty-five years of age, earn from 5s. 4d. to 6s. 6d. per week; reelers, from 5s. to 6s.; and those in the preparing departments, from 3s. to 6s., according to the nature of the work assigned to each. The department requiring early and indispensable previous training is the spinning. It consists in expertness and facility in uniting broken threads, and which can only be efficiently acquired by the young. In the present improved state of machinery, the labour is by no means irksome; and hence it is that it is no uncommon thing, in passing through the spinning-flat of a well-conducted mill, to find many of the girls employed in reading. Spreaders, feeders, and reelers have a more laborious work to perform; but the persons employed in these capacities are, for the most part, full-grown women; and, generally speaking, they are allowed a longer time for meals and relaxation than the rest of the hands. The whole of the workers, men, women, and children, are at liberty to leave their employment on giving four weeks' notice,—in some cases even one week being held sufficient. Hacklers are paid at the rate of 2s. for every hundred weight of rough flax which they dress; and it is no unusual thing for a steady hand, with the assistance of an apprentice, whom he allows 3s. 6d. to 5s. 6d., to earn L.1, 4s. per week. The average wages, however, of this class, including those who have no apprentices, does not perhaps exceed from 10s. to 12s. per week.*

In seasons of ordinary manufacturing prosperity, and when pro-

* In the interval between the writing of this article, in January 1842, and the correcting of the proof-sheet in October following, a farther reduction in wages has taken place of five to ten per cent.

visions are cheap, contingencies which rarely fail to coexist, the wages of persons employed in these factories, with the exception of the boys and young girls in the preparing departments, may be considered as sufficient to maintain them, house-rents being here comparatively moderate, and fish abundant and cheap; but in periods of bad trade, such as has been experienced during the last four or five years, when wages are low, and bread high, the remuneration is often inadequate to supply more than the necessaries of life; and the parents of many of the children being in such times either entirely idle, or only partially employed, it is obvious that no small amount of destitution and suffering must unavoidably ensue. Such, indeed, is unhappily the case, to some extent, at the present moment; and this brings us to speak of the handloom weavers, (and here there are none other,) than whom we know of no class whose labour, even when full employment can be got, is so scantily remunerated.

In explanation of this, it seems necessary to take a brief review of the causes which have led to a state of things so deeply to be deplored, and, in a social as well as political point of view, so pregnant with matter for serious consideration. In the earlier stage of the application of steam to manufactures, and even up to a period, as regards the linen trade, comparatively recent, the whole of the yarns spun in the factories were manufactured into cloth at home. This in prosperous times required a great number of hands, and, from the facility with which the weaving of ordinary fabrics can be acquired, the demand was soon supplied, more especially in winter, when masons and other out-door handicrafts, unable to pursue their usual callings, betake themselves to the loom. An immense number of weavers being thus thrown on the market, it was not difficult to perceive, that any derangement of the ordinary course of business, independent altogether of mere temporary stagnations, would seriously affect this numerous body. Such a derangement has at length occurred, in the shape of an extensive and daily-increasing exportation of yarns. It is calculated that already about one-third of the yarns spun in the factories here is exported to France;* and when it is taken into account, that, since the opening of this new market, no additional mills have been erected to supply the deficiency thus occasioned:

* A serious check has been given to this trade by the ordinance of the king of the French, of 27th June, imposing a heavy additional duty on British linens and yarns imported into France. It is impossible as yet to calculate the consequences of this pernicious measure.—October 1842.

in the home manufactory, it is self-evident that the quantity of cloth produced must have suffered a corresponding diminution. Here, then, is at once a solution of the partial or non-employment of hand-loom weavers, and, when employed, their low scale of remuneration.

At first sight, it is apt to occur to those unacquainted with the matter, that, from the facts just mentioned, the value of the linens manufactured at home would be materially enhanced by reason of the diminished supply. This is not the case. It is well known that some fabrics, at one time the staple of the place, are no longer sought for; the demand for others is gradually declining. It would appear, indeed, that the demand for manufactured goods is falling off in a ratio corresponding to the amount of yarns exported. The situation of the manufacturer is thus daily becoming more precarious. It is undeniable, in short, that a change, slow, and it may be to some imperceptible, but not less sure and irresistible, is gradually shutting out the manufacturer from markets at one time exclusively his own; the consequences of which (except to the wealthy capitalist, who is better prepared a little longer to resist the storm,) cannot be other than a few short years of struggling and privation, ending in bankruptcy and ruin. But the mill-owner, it may be said, must at all events be profiting by this additional market for his yarns. The deterioration in value of this species of property of late years unhappily disproves the inference. The principal advantage, in the meantime, arising out of the foreign demand seems to consist in the ability which it gives to the mill-owner of keeping his factory going, which he would otherwise have been totally unable to do, except at an enormous sacrifice. Low prices can alone enable him to command the custom of the foreigner, who has heavy charges to pay before the article reaches its destination. To save these, he will doubtless ere long have factories of his own; and the time is probably not far distant when the spinning trade will fly our shores as the weaving already in a great measure has done. The cure for these alarming evils it would be alien to our purpose to propound; but this much we cannot avoid saying, that any attempt to administer palliatives to alleviate the condition of the present chief and most numerous victims of the revolution to which our staple manufactures are now being subjected, will, however philanthropic the intention, assuredly end in failure and disappointment. The axe must be laid to the root of the tree, or the poor weaver may hope in vain for any permanent relief from his miseries.

Here, as elsewhere, the privations of this class are sufficiently distressing, and would be much worse, were it not for the employment given to their children in the factories. By this means, and owing to the local advantages already-referred to, they contrive to subsist; but when disease and old age supervene, cases of suffering, in its most aggravated form, must and do occasionally occur. The wages paid for the weaving of a piece of linen, which, in 1825, were 17s. 6d., are now 9s. 6d. The fall in the price of canvas-weaving since 1836 has been 20 per cent. At present, a first-class weaver, working fourteen hours daily, cannot earn more than 8s. 11d., and a second-class 7s. 1d. per week.

At the present time, the number of duck-houses, or shops for the weaving of canvas, is twenty, containing 242 looms, with the usual proportion of starching births. These shops are, generally speaking, low, damp, and ill-aired, which, combined with the long hours the inmates are obliged to work, in order to earn even moderate wages, can scarcely fail, with inadequate nourishment, to be prejudicial to health, and hence the squalid appearance of many of the weavers of sailcloth. The linen weavers are differently situated,—these, for the most part, having each his loom in his own house, or in a small shop adjoining, where the air is less impure, and altogether a greater degree of comfort is found; but they labour under the disadvantage of having to provide and uphold their own looms, or to pay rent if belonging to others, which is not the case with the duck-house weavers. There are two items of expense, however, common to both, namely, for winding and light, and when these are deducted from their scanty and hard-won wages, the pittance that remains is poor indeed. Of canvas-weavers the number at present is about 450, of whom 40 or thereabout are women; linen-weavers, 732, of whom nearly one-third are females. These are exclusive of starchers, warpers, and foremen, besides a considerable number of aged women employed in winding the yarns.

The linen manufacture being the staple one of this district, all or most of the other trades carried on therein are subservient to and more or less connected therewith. There are two works for bleaching yarns (a few years ago there were four); the oxymuriatic acid or chlorine employed as the chemical detergent being manufactured at the respective works. In one of them the residuum,—black oxide of manganese, and sulphate of soda,—remaining in the retort after the gas has been worked off, is

subjected to the action of fire in a series of shallow pans, by which means it is calcined and converted into an alkali of no great strength, but which serves as an economical substitute for potash. The offensive vapours arising from this process are rendered innocuous by means of a chimney 150 feet high, which scatters to the winds what would otherwise prove an intolerable nuisance. In these works the number of persons at present employed is very inconsiderable. The average number is about 15 men and 25 women,—the wages of the former being from 10s. to 14s. per week, and of the latter from 5s. 6d. to 6s. 6d. Besides these there is another bleaching work in the parish, of which it may be proper to take notice here. It is named Waukmills, and is situated on the Brothock, three miles from the harbour of Arbroath. Being intersected by the railway to Forfar it enjoys all the advantages of a cheap and expeditious means of communication with the town. It gives employment to about five men and ten women. Here also is a mill for grinding bones, &c. for manure.

Next to the bleaching works may be mentioned the plash-mills for milling brown yarns, and beating-mills for beating or softening the yarns used for weft. There are altogether three sets of plash and beating mills,—one of them driven by water power, consisting of a slight fall in the mill-lead, which, descending from nearly opposite the manse to the dam of Wardmill, belonging to the community of Arbroath, and thence to the southern extremity of Inchmill property, there returns its waters to the Brothock. This mill-race, running through the premises of the bleachers and yarn millers, affords an excellent supply of water for washing the yarns and other operations.

When canvas or linens are about to be shipped either for the home market or exportation, they are generally callendered, that is, passed between and around the cylinders of a powerful engine of cast metal, called a callender, which smooths and gives a gloss to the cloth, similar to the household mangle, but of course much more ponderous and effective. By the lever-power attached to this machine, the cloth passing through it can be stretched in a greater or less degree as required. In connection with these public callenders, there is invariably found the hydraulic press, which is employed to compress into compact bales of different sizes and shapes the cloth and yarns intended for shipment,—the saving in freight from being thus tightly pressed being considerable, especially when the goods are destined for far distant countries. These callenders

and presses are all worked by steam, giving employment to about 15 men.

In a place thus abounding with factories and other works, it may be inferred, that the services of mill-wrights and machine-makers must be constantly in requisition. The number of these, however, apart from the mills, is not considerable. In each factory there is a shop containing all the implements requisite for repairing the various machinery, and a set of mechanics, regularly bred as mill-wrights and machinists, forms a part of every establishment. Besides these, there are two works appropriated exclusively to the making and repairing of driving geer and mill machinery of every description, with the exception of steam-engines. The average number of men employed therein is about 25, whose wages run from 13s. to 17s. per week, with seven apprentices from 4s. to 7s. 6d.

There is only one foundry in the district. It is on a large scale, giving employment to 32 men and boys. The castings consist chiefly of stoves and other articles for the use of the settlers in Canada, to which country an extensive supply is annually exported. Attached to this work is a set of furnaces for making coke for the locomotive engines on the Dundee and Forfar Railways.

In a previous paragraph, the Wardmill was incidentally referred to. It consists of a building of some extent, with the requisite appendages for grinding wheat and oats. It is driven by a water-wheel, the water being supplied from the dam formerly mentioned assisted in seasons of drought by a steam-engine of six-horse power. This property, though, like the rest of the parish, situated without the royalty, belongs to the town (corporation) of Arbroath. The present rental is £231 per annum. On the east side of the dam was, and still in part is, a hill consisting of sand and clay, the former of which is being constantly taken away for ship's ballast and other purposes. A brick-work has been formed of the latter. In the course of a few years, the entire hill will be demolished, when a plain of considerable extent will be formed, and thus will be converted into a valuable piece of ground, what was not long since an unseemly mound surmounted with a few stunted trees.

Having thus noticed the principal manufactures in the suburbs of Arbroath, it only remains to state, that, in addition to those mentioned, there are in the parish other two mills; the one at Collieston, the other at North Tarry. These works being on a

small scale, and employing few hands, it does not seem necessary to give any particular account of them. In the village of Marywell, at Collieston, and other small hamlets, as well as detached cottages throughout the parish, weaving, in brisk times, is carried on to a considerable extent; but, latterly, there has been a sad lack of employment, and many of the poor people have now little to support them, except the produce of their cow and a small pendicle of land, whose scanty crops have been rendered still more scanty of late years, by a succession of bad harvests.

Before concluding this rapid sketch of the manufactures of St Vigeans, it may be proper to warn those unacquainted with the locality, and its peculiar relation to the burgh of Arbroath, that the whole extent of the manufactures of that town is not to be considered as comprised within the preceding statistical details. It so happens, that the parish of St Vigeans runs into the royalty of Arbroath, in a manner so very remarkable, as almost to defy the sagest antiquarians of the district to point out, in some parts, the precise line of demarcation between them. In one quarter of the town, namely, West Port, there is a house of two storeys, which enjoys the peculiar distinction of being situated, one-half in the parish of Arbroath, and the other half in the parish of St Vigeans. There is also one in Guthrie Port, in a similar situation. The name Arbroath, however, is common to the whole continuous range of buildings, whether in the one parish or the other; but, in some important respects, they are very widely disunited. All those, for example, whose property or dwelling-houses happen to be within the ill-defined boundaries of the royalty, are entitled to all the privileges, such as they are, of municipal citizenship; while those beyond the supposed line are excluded entirely from all voice in corporation affairs, however great their stake in the town at large may otherwise be. The consequence of this is, that out of 408 electors for the town of Arbroath, under the Parliamentary Reform Act, there are only 233 qualified as municipal electors.

To the natural facilities enjoyed by St Vigeans, (Arbroath), for carrying on manufactures, it adds certain other advantages, which, in these days, seem almost essential to the progress in improvement of any trading town or district. We refer to railway communication and harbour accommodation. In these respects, Arbroath is in advance of many towns of greater population. About three years ago, a railway was opened, connecting it with the great manufacturing town of Dundee, distant sixteen and three-quarter

miles, about one mile of which runs through that detached portion of this parish which lies along the coast to the westward of Elliot water, in the parish of Arbirlot. Another line of railway was opened in January 1839, connecting Arbroath with the county town of Forfar, distant fifteen and a-quarter miles. The depot, at the Arbroath terminus of this railway, is situated in the parish of St Vigeans, which it intersects for a distance of nearly four miles. These great works are destined to confer inestimable advantages, not merely on the towns with which they are more immediately connected, but on the county generally. The number of passengers annually conveyed along them is much beyond the calculations of their most sanguine projectors; and for the conveyance of flax, yarns, cloth, coals, lime, agricultural produce, pavement, and other articles, they are found to offer such obvious advantages, that they now command the exclusive traffic for these and almost all other goods and merchandize.

The present harbour of Arbroath having been found quite insufficient for the increasing shipping and trade of the place, an act of Parliament was obtained in 1840, for the improvement and enlargement thereof. A new harbour is, accordingly, now in the course of erection; and, when completed, cannot fail, in connection with the railways, to increase and extend the commercial importance of the town, and its populous and industrious suburb, St Vigeans.

Fisheries.—The only fishery worth mentioning in this parish is the sea fishing, carried on by the villagers of Auchmithie. Salmon-fishing has been tried on the shore by stake and bag nets, but never so successfully as to clear the expenses. In the white fishery, there are twelve boats employed, containing five men each. It would be difficult to ascertain the weight of fish taken by each. The cod are taken by contractors, at prices from 5d. to 7½d. for each of full length, that is, seventeen inches from the breast fin to the root of the tail. Under that size they are only half price. The higher price is the winter one, and the lower the summer. The former are salted and barreled; the latter are chiefly salted and dried.*

The number of cod fish caught, from October to the end of February 1840, 1841, was 10,268; and the number from the beginning of March to the end of June, 8702. There were for-

* Private families obtain from the contractor, cod, per favour, at 1s. or 1s. 6d. according to the season.

merly, as stated in last Statistical Account, great numbers of lobsters taken and shipped to London (16,000 in a season); but the breed has been much exhausted, as now, not 1000 are got during a-year. Haddocks are taken in great plenty, and are either smoked and taken to the Dundee market, or sold fresh in Arbroath and through the country. Their price, for full size, varies from 10d. to 1s. 6d. per dozen. Skate and halibut are also taken; the latter are sold by weight, at 1d. per pound. Almost the whole boats annually depart to the north, on the second week of July, to the herring-fishing, where they remain for about six weeks; and each boat contracts for 200 crans, at prices varying between 9s. and 13s. per cran, with two bottles of spirits to each man weekly; and most of the boats, for a number of years, have made up their number of crans. Their bait for white-fishing is dragged for in the mouth of the Tay, or purchased from the lessees in the mouth of the Eden, and deposited among the rocks near their own village, till required.

The fishers are a stout, healthy, and generally sober people. The pilotage of the entrance to the Tay, however, threatens to introduce the employment of their money with less economy and sobriety than formerly.

V.—PAROCHIAL ECONOMY.

Ecclesiastical State.—The parish church is of the old Anglo-Saxon order of architecture, with nave, and arches, and side aisles. Besides being dedicated to St Vigean, St Sebastian also had a chapel in it, which was supported by a small mortified sum. It is built beside the Brothock, on a rock of the soft variegated sandstone formerly described, which evidently had been left when a more powerful stream than the present flowed through the valley. There are similar rocky knolls in the same glen, and at the mouth of the Lunan and Elliot. In the churchyard, there formerly stood a large cross over the grave of some person of eminence, richly carved in hieroglyphical figures of the kind found on sepulchral stones in some other places of Scotland. The cross has been long ago demolished, but the stalk remains, with characters at the base, hitherto undecyphered. There is a square tower by way of spire at the end of the church, once, no doubt, a sanctuary for offenders. It had three stories, and is said to have accommodated the officiating monk during his turn of service in the church.*

* The tithes of this parish were granted by William I., with consent of Hugh, Bishop of St Andrews, to the Abbey of Arbroath, being the first grant of tithes so

The church of Inverbrothock was built in 1828, and opened in October 1829. It cost about L.2000, and is seated for 1230 sitters. The principal heritors and the town-council of Arbroath were the principal subscribers to it. The stipend secured to its minister is L.150, with L.20 for communion elements. The minister of this church and his session have the superintendence of the poor within their district. The proprietor of each pew has a vote in the election of a minister, but the least proposed to them is selected by the five managers.

The church of Ladyloan is in Arbroath parish, but there are 842 persons of the district allocated to that church within the parish of St Vigeans.

Within the parish there are only two Dissenting meeting-houses; one belonging to the Original Constitutional Seceders, and another to the Methodists. The village of Auchmithie and neighbourhood employ a preacher of the Established Church in a small chapel there. The late Countess of Northesk being desirous of more effectual means of spiritual improvement, and of the accommodation of the villagers, built this chapel in 1829. On account, however, of some hesitation of connecting it wholly with the Established Church, it was not opened till 1834. At that time, worship continued in it regularly on the Lord's day for nine months, when it was again shut, and only opened for the parish minister at such times as he could officiate. This continued till December 1840, when the villagers obtained a preacher to officiate in their schoolroom, who, after some time, was admitted to the chapel, with the understanding that the privilege should only be from week to week during the pleasure of the proprietor.

	<i>St Vigeans.</i>	<i>Inverbrothock.</i>	<i>Ladyloan.</i>	<i>Total.</i>
Persons of Established Church,	2397	3498	612	6507
Communicants of do.	1124	1357	290	2771
Episcopalians,	20	159	7	186
United Associate,	60	424	69	553
Constitutional Seceders,	47	92	5	144
Congregationalists,	8	61	3	72
Relief,	10	358	18	366
Methodists,	6	103	10	119
Baptists,	5	31	0	36
Glassites,	3	16	8	27
Roman Catholics,	3	62	2	67
Of no denomination,	40	108	0	148

conferred; and St Vigeans being the parish in which the Abbey was built. The church of St Vigeans would appear from its style to have been built long before. The gift of the teinds, however, displeased the bishop's successor Roger, and a settlement was made by arbitration with the abbot, when the teinds were confirmed to the abbey in the year of the birth of Alexander, William's son. In the fifteenth century, the whole lands of the parish belonged to the abbey, excepting Inverpeffer.

The average numbers who communicate at any one time in the parish church and in Inverbrothock are about 800 in each; but in St Vigeans district, there are, besides, about 245 communicants, who communicate in seven neighbouring parishes.

The stipend of the parish minister was augmented and modified in 1819, and is 17 chalders, old measure; or 5 quarters, 5 bushels, 3 pecks, 1 gallon wheat; 12 quarters, 1 peck, 1 gallon bear; 84 quarters, 5 bushels, and 1 gallon barley; and 130 bolls, 1 fir-lot, 2 pecks oatmeal, with L. 10 for communion elements; amounting on an average of late years, by the fiars prices of the county, to about L. 260.

The manse, offices, and garden wall were built in 1817, at an expense of L.700, and are every way suitable for the accommodation of a minister. The glebe, which was described by a predecessor as one of the worst of the county, contains about seven and a-half acres imperial, and, in general, is not unproductive.

Education.—There are seven schools in the parish, five being within the St Vigeans district, two in Inverbrothock, and one in Ladyloan. One of these, though in St Vigeans, was built for Inverbrothock by subscription, and by aid from Government, during last season, and is large and handsome. The parish schoolmaster's salary is the maximum. He enjoys, besides, a mortification of L. 20 annually, for teaching five poor scholars, according to a bequest from Mr Colville, late town-clerk of Arbroath. The fees may amount to L.40, and his emoluments as session-clerk to as much. He has, besides, a commodious house and garden, the former of which was built about twenty years ago.

The number of scholars generally attending the seven schools is about 790.

The number of those who cannot read at all, above twelve years of age, may be reckoned about 80; but of the laborious classes of society, the number who can only read so as to understand but very imperfectly what they do read, is much greater than is supposed. I should think, from what I have experienced in communicants before their first admission to the Lord's supper, that one-seventh of the peasantry is not too high an estimate of the proportion in this class.

Savings Bank.—There is no saving bank for St Vigeans, distinct from that of Arbroath, and the accounts of the two parishes are so intermingled that the exact amount of deposits from each cannot be ascertained. But assuming that one-third of the depo-

sitors is from St. Vigeans, the deposits would stand as follows, which cannot be far from the truth.

	Deposited.	Withdrawn.	Total in Bank.	Depositors.
1838,	L.1660	L.1448	L.2487	299
1839,	1928	1755	2660	300
1840,	1790	1727	2710	308
1841,			2792	318

Poor and Parochial Funds.—For some years at the end of the last, and at the beginning of the present century, an assessment for the maintenance of the poor became necessary, by the exhaustion of the usual charities. It was, however, only about 1812 that assessments became constant. The annual expenditure on the poor on an average of three years, was then L.258, 12s. of which sum, L.93, 3s. was raised by assessment. From that time to the present, the amount of assessments has gradually increased, and the average of the last three years is as follows: Raised by assessment, L.508, 14s. 5d.; church collections, L.133, 18s.; mortified sums or legacies, L.18, 18s. 5d.; seat rents, proclamations, mortcloths, L.30, 11s. 7½d.; paupers' effects, L.6, 11s. 5d.; total expenditure on the poor, L.698, 13s. 10d.

The assessment has hitherto been raised on the landed property alone, according to the old valued rent. The number of pensions paid to the regular poor and to the occasional is as follows: To the regular poor on the roll, 163; occasionally receiving parochial aid, 30. The sum expended on the former amounts to L.647, 16s. 6d.; so that each pension on an average is L.3, 19s. 7d.; the sum expended on the latter was, L.50, 17s. 4d.

MISCELLANEOUS OBSERVATIONS.

Since the last Statistical Account was written, the population has nearly doubled, the landed rental tripled, the staple manufacture of the suburbs of Arbroath,—the spinning of flax yarn by machinery—has been created, the thrashing-mills are tenfold in number and power, the turnip and potato husbandry immeasurably extended, the fishing boats of Auchmithie doubled. No proprietor then kept a four-wheeled carriage; now seven do so. The dress, food, and accommodation of all classes are much superior; what were foreign luxuries then, have now become necessities. The funds for the support of the poor were then L.70, now they are L.700; the former sum was then accepted with humble thanks, the latter sum is craved with murmuring. Loyalty, according to the writer of that day, was fresh and vigorous, now the suspicion of all power lies deep and rankling. Parents then supported

their children, now multitudes of children prove the support of their father's family. To be without the profession of religion was then a contemptible singularity, now it is very common, and little marked.

Drawn up January 1842.

Revised October 1842.