Johnson is made and constituted calf herd for keeping of the calves upon the green for that year, and he is to get meat and drink daily about of them that has the calves, together with 6d. frae ilk ane that has the same, and siclike frae them that has land beside the green for keeping off their cow, and that no horse be found thereon untangled, and to enter service next day, with power to Archd. to poyn'd for queys or great stirks, he also giving surety for guide service and behaviour." We could multiply these notices, and show that the practice was common throughout Scotland, and that every town had large commons for this purpose, and hence most old towns had their cow loans. Whether Partick had a public herd paid for as in Glasgow, and where the common was that any villager had a right to send his cow to we know not. We were told that the meadow was once held common for that purpose. In our day the meadow was part of the Bunhouse Farm, but always lea; and as George McGregor's cows, driven by the herd, passed through the village, several of the inhabitants who had cows let them out the byre, and they were taken charge of by the herd, and as they were being driven home in the evening, each cow, as they came along, went to its own byre; but probably this privilege was by arrangement between the proprietor of the meadow and the owner of the cow. In some of the old title deeds for cottages there is included a right to feed a cow on a certain portion of land; but this differs from a common right of which we will have something to say again.

We have often heard a wish expressed by some that they could have an idea of the general plan of the village
a hundred years back. We will endeavour to gratify this wish to the extent of between fifty and sixty years back. With the aid of one or two friends who remembered the village at that time, I have drawn out a Map of the village as it then existed.

The village proper, taking it from the west, began with three thatched huts which stood on the north side of the Main Street (now Castlebank Street), a little to the east of the foot of Cow Loan. On the south side two similar huts stood attached, after which houses straggled on each side to the Knowehead, where the street branched into two directions, one branch going down the Knowe, the other by the Cooper's Well, the two branches being connected by houses along the Old Dumbarton Road (now Bridge Street). The Byres was a distinct district. The few houses stretching eastward from the Byres Road along the New Dumbarton Road formed a sort of new town. Westward along the New Dumbarton Road was the Mason Lodge, and another two-story house near where the Gas-Work now is. Opposite this was Dowanhill porter lodge, and one house at Overnewtown. Then came the small porter's lodge at Muirpark, and next Turnerfield House, foot of Crow Road, but these were not considered as belonging to the village. Where Wallace Place now is was then a quarry, and opposite it, where a three-story house now is, was a sawpit and woodyard. Of streets going west of Byres Road along New Dumbarton Road there were the Goat on south, and Coarse Loan on north side. Then Cow Loan on south, and Green Loan or Rab's Road, nearly opposite, on north side. Then came Crow Road on north, and a little west Sandy Road on south. As far
back as we can trace there was a dye-work and print-
work at Meadowside, where the Messrs. Tod & M'Gregor's
building-yard now is. The celebrated Papilon, who first
introduced Turkey-red dyeing into this country, had this
field for a short time, and during his possession it was
burned, and we do not think he continued in it after.
Another printing and bleaching works of very old stand-
ing was where the works of Mr. John Walker, jun., now
are. These works are built upon the old bleaching green.
The proprietor's house was that little slate house still
standing, nearly opposite the foot of Douglass Street.
In this house was born one of the most respectable of
the citizens of Glasgow, Mr. William Euing, shipbroker,
whose father had these works for many years; and we
have already given a copy of the advertisement for the
letting of these works by Mr. Euing (see page 41).
Since we remember they were in the possession of a
George M'Farlane, calico printer, who, as we have
already mentioned, built, for the purpose of carrying on
the business of calico printing and dyeing, the large
four-story house afterwards so long occupied by the
Lancefield Spinning Company as a power-loom factory.
The fitting up this house as a weaving factory, and the
erection of Mr. Walker's large bleaching-works, gave
the first impulse to that progress in manufactures and
population which has gone on with such astonishing
rapidity these last thirty years, a rapidity unparalleled
in this country. We have, with the help of another
native of the village of about our own age, counted
every family dwelling in the village and its suburbs
about the year 1820, from Gilmourholm to Whiteinch,
including Bunhouse, Bridgend, Slit Mills, the Byres,
and Partickhill. We cannot state the exact numbers in each family, but there were in all 247 families, which, allowing five persons for each, gives the total population of that district at that date 1235, and we are confident it did not exceed that number. Mr. Shanks informs us that he took the population of this portion of Govan Parish in 1834, and then found the number to be 1842.

We give the following from the Census tables, including our own estimate for 1820, and that of Mr. Shanks for 1834:—

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1820</td>
<td>1235</td>
</tr>
<tr>
<td>1834</td>
<td>1842</td>
</tr>
<tr>
<td>1841</td>
<td>3184</td>
</tr>
<tr>
<td>1851</td>
<td>5043</td>
</tr>
<tr>
<td>1861</td>
<td>10,917</td>
</tr>
<tr>
<td>1871</td>
<td>17,693</td>
</tr>
</tbody>
</table>

Average Yearly Increase:

- 1235
- 43
- 47
- 186
- 584
- 678

The greatest proportional increase has been between 1851 and 1861. During these years the Messrs. Tod & McGregor's docks, and a number of other public works at Partick and Whiteinch, were erected, and since then the increase has been steady and rapid. Allowing the same ratio of increase to continue, it will require a yearly provision of not less than 140 dwellings. The first marked rapid increase is between 1841 and 1851, when the average increase is four times that of the preceding interval; and it is during this interval between 1841 and 1851 appears the first dawning of that necessary combination for self-protection which culminated in the formation of the burgh.

During or bordering upon the year 1843, Mr. Shanks,
my informant, said that a stout semi-Irishman, during a drunken spree, went through the village challenging any Irishman in it to fight. Upon this, a band of Irishmen, armed with shillalahs, turned out and literally took possession of the town, threatening and striking every person they met. To prevent the recurrence of this, application was made to the Sheriff, and by arrangement a portion of the Anderston police were sent out to watch and patrol the village for a time. The inhabitants afterwards agreed to keep watch by turns at night, but of this they soon tired, and two or three men were hired to watch by night and one by day.

About that time, also, there was a considerable recess at the end of the new bridge at Gilmourhill, and frequent acts of violence took place there during the winter season. To prevent, or at least to mitigate, this evil, in 1846 a number of gentlemen in the village and neighbourhood agreed to erect a few lamps along the road. These were found useful, and were gradually increased in number. The management of these matters was in the hands of a Committee appointed by the subscribers to the scheme. These subscriptions were voluntary, although there was a sort of understanding that each should pay 6d. per pound of rental. The working-classes were not called upon to pay. By the self-sacrificing labours of a few gentlemen, this system, we are informed, wrought pretty well for a time, although, as usual under such circumstances, the willing workers got the work to do. While the public-spirited gentlemen of the village were providing for their protection against lawlessness, another and no less dangerous
enemy which this organization did not meet lay in and around the whole village in open drains, ditches, middens, and piggeries, beastial and human. The following letters, written in 1851, will give some idea of the matter:

"THE SANITARY CONDITION OF PARTICK.

"To the Editor of the Glasgow Saturday Post.

"Mr. Editor,—The strong desire which now exists among the better classes, as they are termed, to get away from the crowded city after the business of the day is over, is indicative of an improvement in the right direction—a seeking after a more healthy and pleasant situation in which to rear their families and spend their leisure hours; but in this movement there is often displayed a very great amount of ignorance of the requisites for health which should be the primary consideration in all voluntary movements. There seems to be only one rule to guide them, namely, to get to a certain distance from the city and to the west; but that the conditions of the locality be healthy naturally, or made so artificially, is, if at all considered, only secondary. Hence we see fine mansions built in the immediate vicinity of a filthy village, where not a yard of the streets is drained, and all the waste waters are allowed to accumulate and stagnate before the doors—where open ditches and burns are made to serve the purpose of common sewers, giving off a constant stench. The reader will see an eminent instance of this by taking a walk out to, and through, Partick, where a new town is rising round a village the most filthy and ill-drained to be met with in the island—a disgrace to authorities, the proprietors, and landlords, and, we may add, to professing Christians, for Christian faith and filth are inimical. If
there is anything can account for the respectable and wealthy citizens locating themselves quietly in the neighbourhood of Partick, as it now exists, it is ignorance. For a powder magazine and a blast furnace fitted up contiguous to each other at the foot of Partickhill would not be more dangerous nor destructive to life than are the streets, the houses, the ditches, and burns of that village. That the wealthy should congregate around these reeking sinks of filth is not the least astonishing feature of the present age of improvement—showing that the poor are not the only parties to blame, neither are they, thanks to some of the laws of Nature, the only parties who suffer, for the consequences of filth are widespread. I need not refer to the sufferings which that village has undergone during every visitation of fever, cholera, and such epidemics, as proof of what is here stated, or to the drinking, fighting, Sabbath-breaking, &c., &c., which filth engenders, but state, that with a little attention and care on the part of the villagers, and the money party being compelled to do their duty—for nothing short of compulsion will affect that quarter—to drain their lands and provide means of cleanliness, the village of Partick and neighbourhood could be made what Nature has designed, the most pleasant and healthy locality in the country, instead of producing, as it generally does, the first and most fatal fruits of all our epidemics. Were the proverb true that fools learn in the school of experience, we would have been looking now for the fruits of such extensive and expensive schooling as this village has gone through. But the proverb is a fallacy; it is only the wise who learn by experience—fools never learn. Let the inhabitants of Partick and neighbourhood apply this test of character to themselves.—I am, yours, &c.,

"J. B. N.

"Partick, 4th June, 1851."
NOTES AND REMINISCENCES OF PARTICK.

"SANITARY STATE OF PARTICK.

"To the Editor of the North British Daily Mail.

"Sir,—You will probably allow me space for a few remarks upon the present sanitary condition and future prospects of the beautifully situated and naturally healthy village of Partick.

"The early introduction of all epidemics, as cholera and fever, and their virulence in this village of late years, is well known; and the cause may also be evident to the most casual observer to lie principally in filth and want of drainage, and this increasing in the Old Town by the growth of the New Town, which, standing over the Old, sends all its waste matters to the open burns and ditches passing through the old village, exhaling a stench almost unbearable. To direct public attention to these evils, and to cause those whose right it is to use the means for their removal, by drainage or otherwise, I send you an account of the present condition of a few of the nuisances.

"To make the matter more obvious to the reader, it may be stated that one great source of disease and of predisposing influences is decaying animal and vegetable matters. These send into the atmosphere matters highly prejudicial to health—gaseous exhalations which diffuse themselves through the atmosphere, and are breathed or inhaled into the system. Two of these, named sulphuretted hydrogen and hydro-sulphuret of ammonia, are known to be very poisonous. Experiments made by Sherrard and others showed that air having 1-1500th part of its bulk of this gas killed little animals, as birds; and with 1-800th part it is fatal to such animals as dogs; and very minute quantities breathed for any length of time prove fatal to any kind of animal. These are the gases given off from the ditches, burns, and dams of Partick."
NOTES AND REMINISCENCES OF PARTICK. 119

"The following observations have reference to these deleterious gases, and the quantity of elements that go to form them, which are existing in the burns, &c., here. In collecting the matters, the water and mud were stirred together, and the vessel filled, the solid matters allowed to subside, and the water decanted. All the waters tried contained sufficient sulphuretted hydrogen to colour paper moistened by acetate of lead when held over it during evaporation. The mud in drying gave sulphuretted hydrogen gas strongly, also hydro-sulphuret of ammonia.

"The first ditch examined is one coming along the side of Crow Road, going behind Wylie & Lochhead's stables, west of Meadow Bank Place, going under the Dumbarton Road, and then running open before the beautiful cottage of Meadow Vale. The mud in this ditch measures about 11 inches deep. One pound of it dried at 212° gave 3½ ounces of organic matter with 60 grains of sulphur. One gallon of the water contained 75 grains of organic matter.

"The second, coming eastward, is the Hay Burn. It comes round the west side of Partickhill, down by Rose Cottage, and enters the Clyde near Meadow Vale. This burn is literally converted into a common sewer, and is fed by a few tributary ditches from the houses along the Dumbarton Road. The mud measures 9 inches deep, mostly animal matter. One pound gave 11½ ounces organic matter, having 57 grains of sulphur. The water contained 57½ grains organic matter per gallon.

"The third, still coming east, is the Goat Burn. This comes down from the east side of Partickhill, and is fed by several ditches. This burn is covered a part of the way, but is open from about one hundred yards from the Kelvin, from which part the sample was drawn. The mud is about 8 inches deep. One pound gave 6½ ounces organic matter,
with 48 grains sulphur. One gallon water contained 56 grains of organic matter.

"The fourth eastward is the Brouster or Brewster Burn. It comes down from the east of Dowanhill, and is covered till it reaches the Gas-Works, in Cooper's Well Road, when it runs open and enters the Kelvin, a little under the Old Bridge. The mud, near the foot of the Knowe, measures about 12 inches deep. One pound dried gave 5 ounces organic matter, and 60 grains sulphur. One gallon water gave 59 grains organic matter.

"The last, but not the least, is the Slit Mill Dam, which seems to be a receptacle of filth. This dam is upwards of an acre in extent, is several feet deep in mud, and lies exposed to the sun. This contains five ounces to the pound of organic matter and 57 grains of sulphur, being nothing behind the ditches in the amount of animal matter it contains. The water filtered from the mud contains 16 grains of organic matter to the gallon.

"The present state of the dam, and some circumstances connected therewith, affects the village in several ways. The Kelvin is the receptacle of the filth and refuse of Hillhead, Woodside, and other places in its neighbourhood above Partick, a quantity of which is carried down the river. The Bishop Mill and Slit Mills are under the same proprietors. The former mill has the right to the first supply of water in the river, the latter to the second; but it is found by the proprietors more convenient not to use the first water for the Bishop Mill, and to let it pass to the Slit Mills; consequently, when little water is in the river, as in most of the summer months, the stream is directed past the village, carrying its filth with it, a great portion of which gets deposited in the dam, and is there left to decompose and stagnate as we have stated. As a result of these circumstances, the river from the damhead at Bishop Mill to the Slit Mills,
running into which portion are the Brewster and Goat Burns, is deprived of the current which should come through the Bishop Mill, and consequently stagnates and sends forth its reeking stench with the other nuisances, except when occasionally relieved by a spring tide. The question whether all the water can be diverted past the village, I leave to the owners of property on the banks of the river, but it is certainly not favourable to the health of the village as it is.

"The above are a few of the more obvious causes calculated to make the village unhealthy and immoral, but there are many others, less obvious, though not less destructive, springing from those named, which, were they described in detail, would hardly be believed except by first taking a walk through Castle Walk or Cow Loan Street, after which any one will involuntarily say, "If this exists in the west end, I can believe anything of the east."

"I need hardly observe that none of these nuisances belong to the village naturally, but may be all remedied and their evil consequences removed by cleaning, drainage, and common sewers; and the proprietors of the land round the village would do well to see to this, before the evil accumulates much further, otherwise gentlemen wishing to build or take houses in this quarter will pause before they run the risk of dwelling in the midst of such questionable materials for comfort and health, where retiring from business will be followed certainly and shortly with retiring from life.

"JAMES NAPIER.

"Hamilton Place, Partick,
""Sept. 25, 1851."

On the publication of the first letter we were greatly blamed by many of the landlords, because it was calculated to deteriorate the value of property in the neigh-
bourhood, and some denied the truth of the statements made, hence I would have put my name to it, which caused the second letter to be written, after which there was a movement begun, and a pretty general inquiry as to the best means of remedying the evils. A meeting of a few of the gentlemen who were interested in the question was called, and the matter discussed. The following two minutes will give the result:—

"At Partick, within Mr. Shank's School-room, on the evening of Wednesday the 12th November, 1851, at eight o'clock, at a preliminary meeting of inhabitants interested in the abatement of nuisances in and about the village of Partick. Present—Messrs. M. Hunter, Cairns, Radie, Patterson, R. Kaye, J. J. Muir, Napier, Boyd, Ralston, H. Kennedy, Geo. Richmond, A. Bell, and G. M'Gregor. Mr. Hunter in the chair.

"After a few preliminary observations, there was read to the meeting two letters, one from the General Board of Health in London, dated 3rd November current, in which it was stated that that Board had no power at present to take cognizance of any complaints relating to the sanitary state of any place in Scotland, and the other from Mr. Kirkwood, Inspector of the Poor in Govan Parish, who stated that the Act 11 and 12 Vict., cap. 123, made it imperative on him to attend to any complaints relating to nuisances in the parish, and also expressed his desire to meet the ratepayers and others on the subject to take instructions thereon.

"The meeting thereafter took into consideration the state of the drainage of the locality in general, and particularly with reference to the district lying to the west and the north of Anderson Street. And the meeting having been informed that the proprietors of the unfeued lands had expressed themselves favourable to an efficient system of drainage, and
were willing to get the necessary works constructed as soon as all the parties interested had agreed to some regular plan, it was unanimously resolved, after considerable discussion, that before getting up any memorial to the Parochial authorities, or taking any other steps in the matter, it would be courteous to the proprietors of the unfued lands to confer with them or their agents for the purpose of endeavouring to obtain their written consent conditional upon all parties agreeing to proceed to the construction of the necessary works forthwith, say the making sufficient common sewers, and deepening and covering over the Hay Burn. The following gentlemen were appointed to carry this resolution into effect, viz.:—Mr. Moses Hunter (convener), Mr. Robert Patterson, and Mr. John James Muir; the parties to be waited on being Mr. Hamilton, Mr. Adam Graham, agent for Mr. Hosie; Mr. Kennedy, commissioner on the Milton Lands; Mr. Pearson, factor for Miss Oswald; Mr. Cumming's representatives; and to report at a future meeting, to be held in the above-mentioned rooms on Wednesday the 26th inst., at eight p.m.

"It was also unanimously agreed that, while the appointment of the above committee had reference specially to matters relating to the west end of Partick in the first instance, it was understood that the state of the village generally should receive the necessary attention of the parties present, in case the contemplated improvements did not embrace the whole of the existing nuisances connected with imperfect drainage.

"Thereafter, the committee were recommended to write to each of the above gentlemen before calling on them, in order that they might be prepared to discuss the matter fully when the meeting takes place.

"In respect whereof, &c."
"At Partick, and within the Free Church School-room, on Friday, the 5th day of March, 1852, at eight o'clock P.M., at a meeting called by circular to hear the report of the committee appointed to meet and confer with the proprietors of land situated in the western district of Partick, relative to the defective state of drainage in that locality—met, Messrs. Lewis Potter, Moses Hunter, Robert Patterson, John Cairns, David M'Donald, James Eadie, Wm. Strachan, Hugh Kennedy, —— Wilson, sen., and Gregor M'Gregor, (Mr. Geo. Richmond unwell)—

"Mr. Hunter and Mr. Patterson, two of the members of the committee, having fully informed the meeting of the course of procedure adopted by the committee, and also of what had occurred at the various interviews and conferences which had taken place between them and the proprietors or their agents, from which it was evident that there was no probability of the landed proprietors agreeing to carry out any joint or efficient system of drainage, or otherwise to improve the existing drains or sewers passing through their grounds; and the meeting having thereafter taken the statement of the committee into consideration, and having discussed the subject generally, and in particular the course now to be followed with reference to the state of the drainage, the measures which ought to be adopted for abating or removing nuisances, and, in a word, the expediency of introducing the General Police Act into the district,

"It was moved by Mr. Potter, 'That this meeting having heard the statement of the committee, and having considered the defective state of the drainage, the disrepair of the streets and roads, the number and increase of nuisances in the locality, and the inability of the inhabitants either to compel a proper and efficient system of drainage, or to control or abate any nuisance, or to make any sanitary or other regulations for the well-being of the community: Resolve that
it is expedient that the General Police Act of Scotland, 13 and 14 Victoria, cap. 33, be adopted by the householders of the locality, and that the necessary proceedings be taken to get the village of Partick and neighbourhood constituted a populous place, and thereafter to petition the Sheriff to convene a statutory meeting of the householders, and adopt the provisions, &c., of the foreshaid Act of Parliament.'

"Which motion was seconded by Mr. Patterson, and unanimously carried.

"Mr. Potter then moved, 'That Mr. Mc'Gregor, then present, be instructed to prepare the necessary documents, in order that the above resolution be carried into effect; and, further, that so soon as the preliminary petition is signed, he is to call a meeting of the petitioners, for the purpose of electing a committee of their number to take a general charge and direction of the future proceedings, before the Sheriff or elsewhere, and also to make such arrangements as may be considered proper relative to the limits and boundaries of the locality, and generally to do everything to carry out the objects of the resolution.'

"This motion was seconded by Mr. Patterson, and carried unanimously.

"A vote of thanks was then given to Messrs. Moses Hunter, J. J. Muir, and Robert Patterson, the members of the committee, for the great attention they had bestowed, and the valuable time they had given to the matter.

"In respect whereof, &c."

In pursuance of the above resolution, the necessary requisition to the Sheriff was obtained, and at a public meeting, held in the Free Church School, called by the Sheriff, of all householders of £10 rent and upwards, within the proposed boundaries of the Burgh, upon the
17th June, 1852, it was agreed to constitute themselves into a Burgh, under the management of twelve Commissioners, three of whom to be Magistrates, and the following gentlemen were there and then elected:—

David Tod, Iron Bank.
John Buchanan, Dowanhill.
Robert Patterson, Partickhill.
Moses Hunter, Hamilton Crescent.
John Walker, jun., Castle Bank.
A. C. Shank, Turnerfield.
James Napier, Hamilton Place.
Robert Kay, Partickhill.
John White, Scotstoun Mills.
George Richmond, Partickhill.
David Ralston.

The three following were afterwards elected as Magistrates:—

David Tod (Provost).
John Buchanan.
Moses Hunter.

The Commissioners now began to carry out a system of drainage and other sanitary measures with considerable promptitude, and, as the following facts show, to great advantage. The three first years after 1854 the average death rate was 34·5 per 1000 of the population; the average of the last three years, including 1872, is 21 per 1000 of the population, showing a saving of many hundred lives to the community.

In connection with the sanitary condition of the village, we may consider here the water supply avail-