

1866, Report of Mr. Arnold Taylor to the Secretary of State as to the Alleged Nuisance Occasioned by the Deposit of Refuse at Phillips Street Wharf, Liverpool

LOCAL GOVERNMENT ACT OFFICE, WHITEHALL,

20th November, 1866.

To THE RIGHT HON. SPENCER H. WALPOLE, M.P.,

Her Majesty's Principal Secretary of State for the Home Department.

SIR,

I have the honour to lay before you the following Report on an inquiry held by me at Liverpool, on the 4th, and subsequently, by adjournment, on the 12th October, 1866.

The following is a brief history of the circumstances under which the inquiry was directed.

In the month of August last a memorial was forwarded to you from certain inhabitants of Vauxhall ward, in the borough of Liverpool, complaining of the annoyances which they experienced from the deposit of the-town refuse at a public wharf in Phillips Street, and asking for an inquiry into the facts of the case, under the 49th section of the Sanitary Act of 1866.

This memorial having been sent to the Town Council of Liverpool, as the local authority, was by them acknowledged, and answered. on the 24th August, 1866.

Their answer was in effect this:-

1st. That the evils complained of were not so great as the memorialists represented

2nd. That the Town Council were taking steps for the immediate abatement of those evils which really did exist at the Phillips Street wharf.

This reply was forwarded to the memorialists, but the latter not being satisfied with it, again, on the 30th August, pressed for a local inquiry.

After some further correspondence on the subject, between the memorialists and this office, it was finally decided that an inquiry should take place on the spot, and under the powers given to you for that purpose by the 49th section of the Sanitary Act, 1866.

I was accordingly directed to visit Liverpool, and did so on Tuesday, the 2nd October, when I made a careful inspection of the three public manure wharves, at which the town refuse is, or was then, deposited, previous to its shipment in barges, for transport into the country districts.

These three manure wharves are-

1st. Phillips Street wharf,

2nd. Sandhills wharf,

3rd. Harrington dock wharf,

which are marked in red, and with corresponding numbers on the plans annexed.

Having seen for myself the condition of the above-named wharves, and the existing arrangements for the removal of the town refuse, I then called upon Mr. Rayner, the Town Clerk, and arranged with him that I should meet the Health Committee of the Town Council and the memorialists on the following Thursday, October 4th, at the Town Hall, but as the whole matter could not be got through in one day, the inquiry was subsequently adjourned until Friday, October 12, 1866.

In the following report, however, I have made no distinction between the evidence received on the one day or the other, but have treated the whole as the subject of a single inquiry.

And first, to give some idea of the magnitude of the scavenging arrangements needed at Liverpool, I annex the following tables:-

In 1841 the population of the borough was	286,487
1851	375,955,
1861	443,938,

The present nett rateable value being £2,150,133.

The municipal income and expenditure are on a proportionately large scale. The details of these will be found in the printed report No. 1, from which I here extract merely the abstract given on the first page of that report

For 1865, The total nett receipts were	£161,281
The balance in hand	36,367
Total income	£197,648
The ordinary expenditure	£121,024
Extraordinary expenditure	31,918
Total outlay	£152,942
And of this amount the item for scavenging is	£21,562
For emptying ash-pits, &c.	10,179
In all	£31,741

independently of the cost of the Engineer's and the Inspector of Nuisances' departments.

Attached to report No. 1 is a tabulated statement of the various local rates levied in the borough for all purposes, from 1847 to 1865.

In 1861 the number of inhabited houses of the borough was returned at 65,781, and the present yearly increase is about 2000.

A brief glance at the revenue returns of the Town Council will show that, whatever may be the defects of Liverpool, in a sanitary point of view, these are not due to any niggardly spirit in the expenditure of the municipal finances. But it was not till 1857 that the Town Council may be said to have begun that more efficient system of improved house and street arrangement, which has since been carried out in a greater or less degree.

From 1850 to 1857, not a single privy was converted into a water-closet, under any order of the Town Council, and, it was not until this latter year that every builder of a new house was required by the Town Council to furnish the same with a water-closet.

But even now, the rate of improvement bears so little proportion to the fearful extent of the evils to be overtaken, that, in spite of all the expenditure hitherto incurred by the Town Council, the year 1866 has seen the borough of Liverpool recorded, week after week, and month after month, in the Registrar-General's returns as the unhealthiest town in Great Britain.

Before dealing with the more immediate question of the manure wharves, I beg to draw your attention to that which affects not only them, but the arrangements for the public scavenging,—I allude to the privy accommodation of Liverpool.

On this point I would refer to the evidence of Dr. Trench and Mr. Newlands, C. E., the former the Medical Officer of Health for Liverpool, the latter its Borough Engineer, and, both well entitled by experience, position, and special knowledge, to give a decided and conclusive opinion upon the question. Both these gentlemen have stated positively that the worst evils of the scavenging system must continue until the existing common privies are superseded by water closets.

During the last two years, chiefly under the summary powers given to the Town Council by the Liverpool Sanitary Amendment Act, (a copy of which is appended), £64,000 out of £100,000 have been spent by the Town Council in improving the condition of dwelling houses, making water closets, &c.

In this time 750 privies, attached to about 800 houses, have been altered by owners at their own cost, whilst the conversion into water closets of 2483 privies (1817 being completed) has been undertaken by the Town Council.. These 2483 privies accommodate 4652 dwelling houses:—hence, when all are finished, (the average number of occupants being 6.5 per house), water closets instead of privies will have been furnished for the use of 35,438 people.

But, even after this has been done, Mr. Newlands estimates that there will still be left 14,000 privies within the borough, the contents of which must be removed by the public scavenger.

The above statement shows that it has taken nearly three years to get entirely rid of 2567 privies. Hence, if the work of conversion does not go on at a faster rate than during this period of so-called active improvement, it will occupy more than 16 years to do away with the whole of the 14,000 privies which are still uncondemned, and are still awaiting presentment to the Grand Jury.

PRESENT SCAVENGING ARRANGEMENTS.

At the present time, and until the end of 1866, the public scavenging of the borough is done under contract, between Mr. Nathan Ellison and the Corporation.

The system of scavenging by contract is not found to answer, and from the 1st of January, 1867, the work will be done by the Corporation. I need not therefore dwell on this part of the subject, because, whatever the short-comings of the contractor may have been, his work is now virtually at an end.

But a brief abstract of the figures involved in Mr. Ellison's contract will show how large is the question of the scavenging of Liverpool.

1st. The contract sum paid to him for the removal of all house refuse, street-sweepings, sewer refuse, and market refuse, for one year is £15,685, in addition to which an allowance is paid of 8s. per day, per horse, cart and man employed in the removal of "Bell Ashes," so called, because put out in boxes in front of the houses on signal by bell of the cart's approach.

About 100 tons of slaughter-house refuse per week is also removed by the contractor, who pays £100 a year for it. He does not however get the blood, which is retained and converted for manufacturing purposes.

The quantity of refuse removed by the scavenger is estimated by him at about 200,000 tons a year or 4,000 per week, the night soil removed being about 400 tons per night or 2,400 per week. These quantities are exclusive of the slaughterhouse refuse, which amounts to about 100 tons per week.

Mr. Newlands' estimate, which is doubtless more correct, puts the night-soil alone at 500 tons per night or 3,000 tons per week.

The whole borough being under a system of street inspection for sanitary purposes, the contractor receives daily notices from the office of the Inspector of Nuisances, of those middens that require emptying.

From the inspector's return, furnished to me, it appears that for the past year these notices have averaged about 7,000 a month or about 300 notices to empty per night.

To describe how this emptying is done, I must point out a peculiarity in the street arrangements of many parts of Liverpool.

Even in those quarters inhabited by well to do middle class people, it is quite common for the houses to have scarcely any open spaces at the back, and only a very small yard, with just room enough for a coal shed or outhouse, and a common privy with a midden attached.—In the yard wall a hatch through which the midden is emptied, opens into a narrow alley just wide enough to allow a wheelbarrow to pass up it —This back alley runs the whole length of the street, and, as the streets are built as closely as possible, the alley serves for the use of the back premises of one side of two streets, the midden hatches opening into the alley from back premises on either side of it.

As the alley is not wide enough to turn a barrow in, covered side entrances leading from the front street communicate with the alley, at right angles to it, and at the interval of every eight or ten houses, as the case may be.

After twelve o'clock, nightmen who are regularly employed on this work go round to those middens of which notice to empty has been previously given.

The contents of each midden are put out into the back alley first, then shovelled into a barrow, the latter wheeled down one of the side entrances, and the load shot down in the front street. By and bye the scavenger's cart comes round, picks up the soil and conveys it to one of the manure wharves. There the night-soil is again deposited to be picked and sorted, finally it is tipped into a manure barge at any hour between 10 in the morning and 3 or 4 in the afternoon. Thus for 10 or 14 hours

every day throughout the year, except on Sundays, there are about 500 tons of the foulest and most offensive refuse being handled, turned over, and carted up and down the streets, or lying on a manure wharf in the very heart of the town.

Nor is the place even then clear of the night-soil, for the loaded manure barges, each with 40 or 50 tons on board, may and sometimes do lie in the canal for days together before they get away.

I ascertained these facts by personal inspection, and after doing so, I wish to express my entire concurrence in the opinion of Dr. Trench and Mr. Newlands that by the conversion of privies into water-closets only, can the present most offensive system be effectually remedied.

As things now are, the atmosphere at the backs of those streets where privies and middens still exist, is perceptibly tainted with the stench arising from these places, even though no emptying be in progress.

In passing up and down the different back alleys, I was in every instance conscious of this stench, though the night of my inspection was clear and fine. And if the tainted atmosphere was felt by one outside the premises, how much worse must it be for the inmates of rooms, the windows of which look directly down upon the privies and middens.

Some of the latter have drains into the nearest sewer, and when these drains are not choked or out of order, the liquid matter running off leaves the solid refuse comparatively inoffensive.

But when the midden happens to be what the nightmen call a "a wet un," the stench is something dreadful.

The arrangements above described refer to streets of good, respectable houses.

I need hardly say that the case is far worse in the close crowded courts, which form so prominent a feature in the bad structural street arrangements of Liverpool, rendering the number of inhabitants per acre, greater in that town than in any other in the kingdom, London not excepted.

It is however but right to notice that much has been and is being done by the Town Council in the improvement of this class of property. Indeed it is in the direction of the close courts and alleys occupied by the lowest of the population; that the local authorities have chiefly used the large powers conferred on them by the Liverpool Sanitary Act of 1864.

It is estimated by the contractor that four-fifths of the nightsoil scavenged, as above described, is carted to the Phillips Street manure, wharf, the place complained about by the memorialists.

Most of the remainder has been hitherto carted to Burlington Street wharf, also in Vauxhall ward, or to Sandhills dept at the north end of the borough—Harrington Dock depot, at the south end, having been used chiefly for the deposit of street mud and scrapings.

The Burlington Street premises had been discontinued as a manure wharf previous to the date of my inquiry, and these will not therefore be further noticed by me.

In addition to the above named public manure wharves, there are several others in the hands of private persons, who deposit there the refuse which does not come within the limits of Mr. Ellison's contract, such as stable manure and the refuse of breweries and manufactories.

The private manure wharves hardly came within the scope of my inquiry, but I have alluded to them towards the close of my report, as Mr. Samuelson referred to them in his evidence for the memorialists, whilst Mr. Newlands gives it as his opinion that these private manure manufactories should not be suffered to exist in Liverpool, or indeed in any town.

Under the present contract there is no system in force for dividing and distributing the refuse of the town, according to the locality from which it may be scavenged.

The contractor is naturally anxious to make all the money he can out of his contract, and to give the manure he collects its highest market value. For this purpose the wharf at Phillips Street is the most convenient, as a place for depositing, mixing, and sorting the manure, and thence for shipping it for farm use.

Hence Harrington dock wharf, which from its situation ought to receive the refuse of the southern and eastern portion of the borough, is but little used for two reasons, which the contractor very frankly gave:

1st. Because he could not get so good a price for his manure there.

2nd. Because it is sometimes difficult for the barges to get out of the dock into the Mersey.

Again, Sandhills depot requires a longer lead, and has been, therefore comparatively but little used. Indeed it is only recently that it can be said to have come into use at all.

Thus, for the convenience of the contractor, by far the largest part of the town refuse has been, and is allowed to be carried to Phillips Street wharf, that place being in Vauxhall ward, which is one of the unhealthy districts of the borough.

In other words, because Vauxhall Road is occupied by the, poorest class, who are already in point of health much worse, off than their neighbours, therefore the Vauxhall district is to have yet one more fertile cause of disease and unhealthiness added to its already long list, by receiving into its midst four-fifths of the night-soil of the rest of the borough.

Whilst saying this however, I am bound to draw attention to Dr. Trench's evidence on the state of Vauxhall ward. In that gentleman's very able and valuable reports on the mortality of the borough between 1863 and 1865, and specially in his report for the year 1864, he has carefully considered the many and complex causes to which may be due the excessive rate of mortality in Liverpool. And, in his evidence at the inquiry, he stated that he attributed the unhealthiness of the Vauxhall district rather to the manufactories on the banks of the Leeds and Liverpool Canal, than to the state of the canal itself. At the same time, amongst the unhealthy manufactories, Dr. Trench enumerates the public and private manure wharves at Phillips Street and other spots along the canal.

But the following results, for which I am indebted to returns kindly furnished me by Dr. Trench, will show how badly Vauxhall ward contrasts with the rest of the borough.

In 1861 the population of Liverpool was 443,938. The total mortality from January 1st to September 29, 1866, was 15,801, or 35.6 per 1000, for 9 months, on the population of 1861.

The total mortality from cholera, for the same period, was, 1,529, or 3.44 per 1000 of the same population.

In 1861 the population of Vauxhall ward was 24,816. The total mortality from January 1st to September 29th, 1866, was 981, or 39.53 per 1000, for 9 months, on the population of 1861, or 3.93 per 1000 in excess of the borough average mortality.

The mortality from cholera in Vauxhall ward, from January to September 29, 1866, was 219, or 8.82 per 1000, for 9 months on the population of 1861, or 5.31 per 1000 in excess of the average cholera mortality of the whole borough.

In total figures—

The Vauxhall mortality from all causes being 981 should, on the borough average, have been only 883.

The Vauxhall cholera mortality being 219 should, on the average of the borough, have been only 85.

I have no reliable returns of the estimated population of Liverpool in 1866, and I have therefore calculated the mortality for 1866 as against the population of 1861 only, so that the proportion of deaths per 1000 is inaccurate. But for purposes of comparison between Vauxhall ward and the rest of the borough, the calculation is quite fair, and shews that the Vauxhall district is one of the most unhealthy in the un-healthiest town in Great Britain.

On this ground alone; I consider that the Town Council should be required to remove from any place so circumstanced, and as speedily as practicable, every preventible cause of disease and mortality.

I regret to state that the Town Council do not appear to have any intention of ceasing to deposit and to ship night-soil from Phillips Street wharf.

On the contrary, a large outlay has been and is being incurred to allow of manure being shipped from Phillips Street wharf on a larger scale than ever.

The mention of this brings me to the next point in my report.

THE STEPS TAKEN AND TO BE TAKEN BY THE TOWN COUNCIL, IN RESPECT TO THE FUTURE SCAVENGING, AND THE MANAGEMENT OF THE MANURE WHARVES.

From report No 2 appended, it will be seen that this scavenging question has been under consideration for many years past, and that as far back as July, 1849, Mr. Newlands, the present Borough Engineer, had furnished the then Health Committee with a plan and report on the complete removal and appropriation of the borough refuse.

In spite, however, of this report of 1849, nothing was practically done in the matter until August, 1864.

The subsequent proceedings are detailed in report No. 2, from which it would seem that the Town Council eventually agreed to expend £2000, on the improvement of Phillips Street wharf, as a manure depot, though the Borough Engineer valued the work to be done at about half that amount.

These improvements were in course of execution at the time of the inquiry.

The latter part of report No. 2 shows that Mr. Newlands contemplated a great many other additions and alterations in the mode of transport and shipment of the town refuse. And as no one is so competent to deal with the question as Mr. Newlands himself, it is to be hoped that he will now be allowed to carry out the whole of his plans; because in that case there can be no doubt of their efficiency.

So far the Town Council have decided upon the following arrangements, which are to come into operation on the 1st January, 1867, when Mr. Ellison's contract expires.

1st. They have appointed a Scavenging Inspector, at a salary of £400 per annum.

2nd. Near Phillips Street Wharf they have purchased a number of dilapidated houses, some of which have been already condemned as unfit for human habitation, and on the sites of these they propose to erect stables and sheds for the live and rolling stock which the Town Council will have to buy.

When these alterations are completed, the nearest dwelling-house will be 150 feet from the boundary wall of the manure wharf in Phillips Street.

3rd. At the south end of the borough, the Town Council have arranged with the Dock Board for a suitable wharf, in the event of their losing the River Craft Dock, which belongs to the Corporation. This wharf will be used instead of the Harrington Dock Depot, already spoken of and the Borough Engineer hopes also to arrange with the Railway Companies, having a station in this part of the town, for the transport of the manure inland, by rail as well as by water.

4th. At the north end of the borough, the Sandhills Depot is to be enlarged and improved for the transport of refuse, both by canal and railway.

Thus, then, in the centre and at the two extremities of Liverpool, there are to be three great manure depots, from which the town refuse is to be transported with all possible despatch, to certain plots and tracts of land purchased by the Town Council, at a distance from the Borough, and sufficiently removed from all other houses and villages, to prevent the proposed permanent manure depots from becoming a nuisance to any- one. And, instead of the present system, by which the contractor sorts and mixes the manure on the wharves themselves, this process will go on at the various permanent depots outside of the town.

For the details of these changes I must refer you to the printed report of Mr. Newlands' evidence, given at the second day's inquiry, on the 12th October.

It cannot be doubted that these measures, which will involve a large outlay, must cause a decided improvement, and that the existing evils will be lessened by the greater regularity and rapidity with which the town refuse will be got away from the precincts of the borough.

But it must be borne in mind, that the evils complained of cannot and never will be cured, until privies are converted into water-closets, and the present disgusting "midden" made into a place of deposit for dry ash and refuse only, like the "dust bin" attached to a London house.

Dr. Trench in his evidence on this point, says,--"I think that the contemplated arrangements of the Town Council are the best that can be made. But the worst of the evil, the night soil, is always there, and the only efficient remedy is by the conversion of privies into water-closets."

Mr. Newlands said the same, adding "That if the work of conversion went on no faster than it had done for the last three years, it would take twenty years for its completion."

Mr. Newlands, however, is of opinion that this most desirable work might be pushed on at a quicker rate, and that the whole of the 14,000 privies still remaining in the borough could, and ought to be, converted into water-closets in five years from the present time.

But it is, I regret to say, a matter of certainty that no such conversion will or ever can be made, until the Town Council have determined to deal vigorously with a far larger question than that of the removal of the town refuse. I allude to the water supply of Liverpool. Indirectly the question is mixed up with that of the manure wharves, and I am therefore bound to bring it under your notice.

It is notorious that the water supply of Liverpool has been deficient for some time past. During the dry season of 1865, the town was threatened with a water famine, and though the immediate dread and likelihood of such a calamity have been averted by the greater rainfall of 1866, yet even now the borough is scantily and insufficiently supplied. It is therefore impossible for the Town Council to set to work in real earnest to convert or to enforce the conversion of even one thousand privies a year into water-closets, much less the number which the Borough Engineer states might and ought to be so treated.

To make water-closets, without providing the means to flush them, would be to render bad worse.

Thus then the evil caused by the removal of the town refuse and manure cannot be cured till the common privies are done away with, and these cannot be converted into water-closets, until the existing water supply is largely augmented. It is this last named question, the largest by far of the three, which most presses for an immediate solution.

I beg to draw your attention to it more particularly, in case you may consider that the provisions of the Sanitary Act, 1866, under which the inquiry into the public manure wharves was held, gives you the power of bringing any pressure to bear upon the Town Council of Liverpool with respect to this all important subject.

THE STATE OF THE WATER IN THE LEEDS AND LIVERPOOL CANAL.

The state of the Leeds and Liverpool Canal did not come within the limits of my inquiry, except as regards the fouling of the water by the manure barges or their contents.

On this head, as will be seen by the printed report, evidence was given by Mr. Samuelson for the complainants, by Dr. Trench, and by Mr. Tatham, the canal manager.

Dr. Trench did not consider that there was anything pre-judicial to health in the state of the canal water. This may be, but I am convinced, from my own observations, that a good deal of manure was slopped or spilled into the water at Phillips Street wharf, when I inspected the manure loading there. Mr. Samuelson produced some bilge water from a manure barge, which had been pumped into the canal, and this was, as might be expected, of the foulest description.

A sample of this bilge water had been sent to Dr. Frankland for analysis, and he states in his written report, that one gallon of it contained as much noxious matter as sixty-eight gallons of average London sewage, adding "That the admission of any considerable quantity of this liquid into a canal, would doubtless be attended with dangerous consequences to persons living near its banks."

The canal manager stated that no manure barge was allowed to pump her bilge at Phillips Street wharf or basin. But I have myself no doubt that the order is constantly disregarded. According to Mr. Tatham's own statement, 300 tons of mud are cleaned out of the canal basin every fortnight, and

though it is stated that this mud never has any smell, he admitted that a good deal of it was no doubt due to the scavengers' refuse, which had got into the water.

Mr. Tatham considered that it was far better to ship all the manure at Phillips Street wharf, rather than any of it should be carried to the other two depots at the north and south ends of the borough. He was also of opinion that the neighbourhood of the manure wharf was peculiarly healthy, and that the manure might almost be regarded as a preservative of health.

Dr. Trench's mortality map of Liverpool in 1865, which is appended to this report, tells a very different tale, as will also that, if one be made, descriptive of the cholera epidemic of 1866.

At present, under the 48th section of the Canal Company's Act of Parliament (10th George, 3, c. 114), the owners and occupiers of land &c., through which the canal passes, have the right to ship manure, sand, &c., on the wharves, and convey the same along the canal, free of charge. But whatever obligation this may impose on the canal company, I presume it could never authorise either them or the owners and occupiers of land near the canal so to use the powers of the company's act of parliament as to create a nuisance. And under this term, the constant shipment of hundreds of tons of night soil, in the heart of a great town, might, in my judgment, be said fairly to come.

To conclude—and, returning to the more immediate subject of my report—it would, in my opinion, be premature to require any immediate alteration in the proposed arrangements of the Town Council, as it is their intention to begin the public scavenging of the borough under their own officers, and with their own plant, on the 1st January, 1867.

But I am of opinion, that on or before the 1st February, 1867, the Town Council should be required to report to you.

1st. That they have accepted tenders, and have commenced the proposed additional works for the improved manure depots at Sandhills for the northern, and at or near the River Craft Dock for the southern portions of the borough; and that they should also, at the same time, report when these two manure wharves are expected to be completed and ready for use.

2nd. That within one month after such period of completion and readiness for use, the Town Council should be required to give an undertaking to lead no night soil refuse whatever to Phillips Street Wharf, but to convey the whole of the night soil to the wharves at the northern and southern extremities of the borough respectively, leaving Phillips Street Wharf for the reception of street scrapings and other refuse of a comparatively inoffensive kind.

3rd. That the various private manure wharves should be more rigorously dealt with; and, if there be legal powers for that purpose, that these places should be entirely suppressed as nuisances more or less dangerous to the public health.

4th. And this—I wish to make as a suggestion merely—whether, with the large staff of inspectors and others, whom the Town Council have at their disposal, some means could not be devised to distribute to all houses of a better class, in which there is privy accommodation only, some cheap and simple disinfecting substance, with directions how and when the same should be used; and that in the poorer class of houses, in the courts and alleys, and in those let off in tenements, a similar system of disinfection should be periodically applied to the middens and privies, by the men on the staff of the Scavenging. Inspector, or on that of the Inspector of Nuisances.

I cannot but believe that many householders would only be too glad to carry out a regular system of disinfection in their own privies and middens, in order to get rid of, or at least diminish, the disgusting and most offensive stench which now arises nightly in every street in the borough that the scavenger's cart has to visit.

I remain, &c.,

(Signed) ARNOLD TAYLOR