

PUBLIC HEALTH ACT

(11 & 12 Vict, Cap. 63.)

REPORT 224B

To The

GENERAL BOARD OF HEALTH,

on a

PRELIMINARY INQUIRY

INTO THE SEWAGE, DRAINAGE, AND SUPPLY OF
WATER, AND THE SANITARY CONDITIONS
OF THE INHABITANTS

of the Town, Borough, or place of

WREXHAM

By Geo. T. Clark

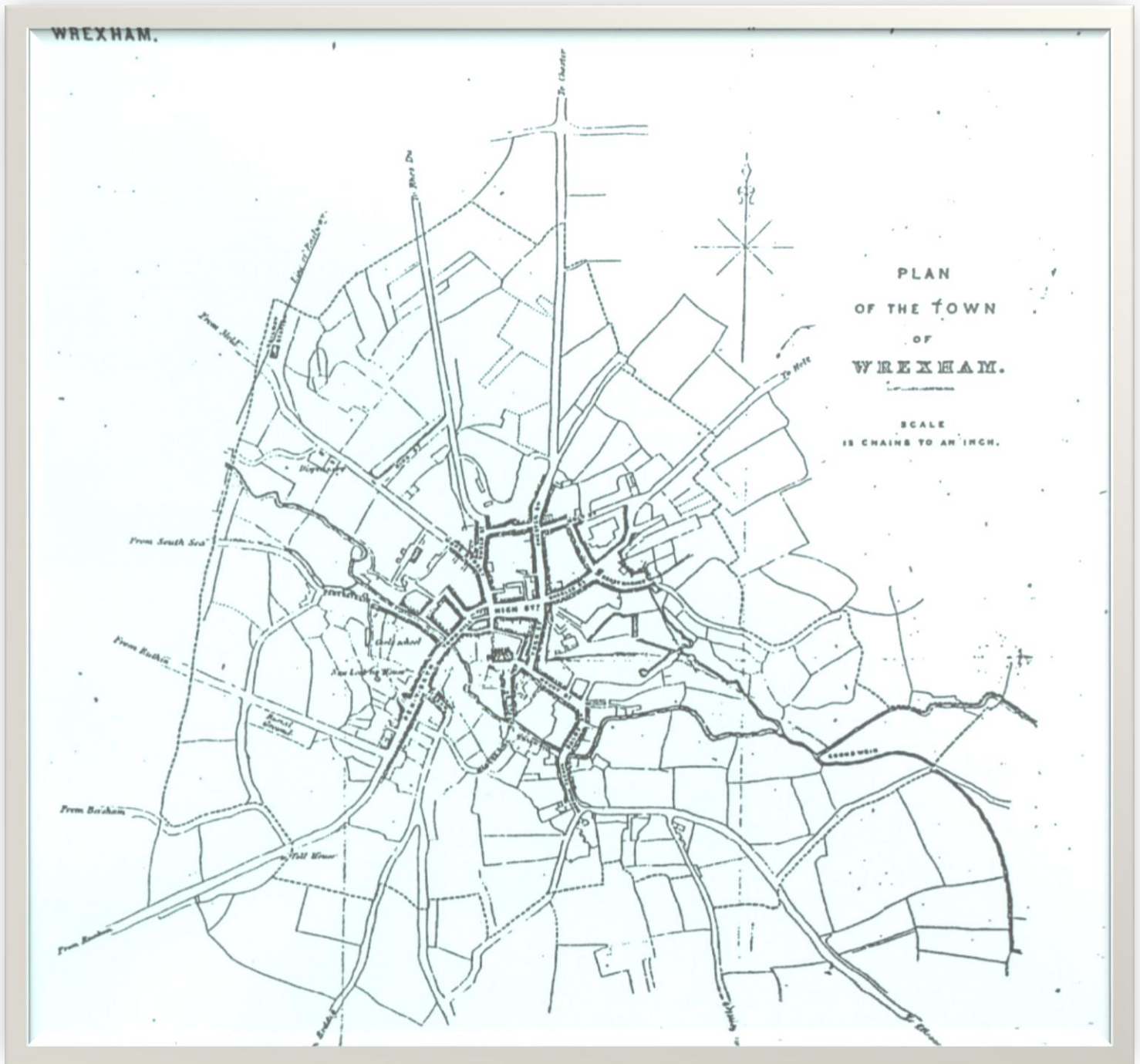
Superintending Inspector.

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NOTIFICATION

The General Board of Health hereby give notice, in terms of Section 9th of the Public Health Act, that on or before the 10th of June next, written statements may be forwarded to the Board with respect to any matter contained in or omitted from the accompanying Report on the Sewage, Drainage, and Supply of Water, and the Sanitary Condition of the Inhabitants of the Town, Borough, or Place of Wrexham, or with respect to any amendment to be proposed therein.

By order of the Board,

Henry Austin, *Secretary*

Gwydyr House, Whitehall,
2nd May 1849

PUBLIC HEALTH ACT (11 & 12 Vict., cap. 63).

Report to the General Board of Health on a Preliminary Inquiry into the Sewage, Drainage, and Supply of Water, and the Sanitary Conditions of the Inhabitants of the Town, Borough, or Place of WREXHAM. By GEORGE THOMAS CLARK, Superintending Inspector.

London 30th October, 1849.

My Lords and Gentlemen,

In obedience to your instructions, and under the powers of the Public Health Act, I have visited and made inquiry into the sanitary condition of the town of Wrexham, in the County of Denbigh. After notice duly given, I held public sittings in the Court House there on the forenoons of the 17th, 18th, and 19th instant, and I employed the remainder of those days in the inspection of the town and its suburbs, and in collecting information, the result of which I have the honour to lay before you in the following –

REPORT

1. The inquiry took place upon a petition from the “ TOWN, BOROUGH, or place of WREXHAM,” to which was attached a great number of signatures, being far more than one tenth in number of the rate-payers of the Parliamentary borough as well as of each of the two townships of which the town is virtually composed. The “borough,” is not “corporate,” and, excepting the boundary of its townships, the “town or place” of Wrexham, as contradistinguished from the Parliamentary borough, has no definite or recognized boundary.

2. Among the promoters of the inquiry, all of whom took an active part in the proceedings, I may mention the Rev. George Cunliffe, Vicar; Mr. Lewis, senior surgeon to the town infirmary; Mr. Thomas Edgworth, Superintendant Registrar; Mr. James Buckton; Mr. Rowland and Mr. J. K. Lewis, surgeons, the latter to the Union; Mr. J. Hughes, Registrar; Mr. E. Rogers, Surveyor of Highways; Mr. T. Painter, Mr. R. H. Jones, Mr. G. C. Parker, Mr. A. W. Thornley, Mr. J. Lewis, clerk to the magistrates; Mr. Edward Williams, surgeon; Mr. Richards, house surgeon to the Infirmary; Mr. R. Clark, collector; and Mr. Gummow, surveyor. Nowhere, in proportion to the size of the town, have I received more uniform support.

3. As I shall have occasion, in this Report, to comment very freely, upon the condition of Wrexham, it is right that I should allude to the efforts that have been made to amend it [84] B2 –

About twelve months ago, upon the approach of the Asiatic cholera to this country, the inhabitants, headed by the vicar, and their neighbour, Sir R. H. Cunliffe, Bart, formed a sanitary committee, divided the town into eleven districts, and appointed two visitors to each. I find in the records of their meetings, and better still in the state of the town, which, bad as it is, has evidently been much worse, and in the diminution of sickness and mortality ample evidence of the value of their labours.

4. Those who are the most anxious petitioners for the enquiry, and for the application of the Public Health Act, are the very persons who have pushed, to the extent of its power, the provisions of the existing law, especially of the Nuisances Removal Act. I think it important to notice this, because I have almost invariably found the sufficiency of the existing law to be the excuse of those persons who have neglected their duties as owners of house property, and who justly dread the constitution of a tribunal which shall make known their delinquencies in an unimpeachable manner.

5. DESCRIPTION. - Wrexham is placed upon the North Welsh border, upon a tract of hilly and broken ground, which intervenes between the lofty mountains of Flint and the flat fertile meads of the Cheshire Dee.

6. The coal-field, extending from Oswestry northwards to the estuary, is here supported on the west by the limestone's of Mold and Halkin, and on the east is covered up by the new red sandstone. Wrexham stands nearly upon the junction of the two formations, here covered up by a tract of gravel, and derives its mineral wealth from the one and its agricultural supplies chiefly from the fertile soil of the other.

7. The Gwenfrwy, a considerable brook, flows from the northwest through the town, and is tributary below it to the Clewedog, itself an affluent of the Dee. The Gwenfrwy winds considerably in the town and its banks are in parts steep, and scarcely anywhere, in the town, low enough to be flooded. All the ground built upon has a sufficient fall for drainage, and much of it has far more than sufficient.

8. The church, celebrated throughout North Wales and Cheshire for its magnificent tower, stands nearly in the midst of, and upon almost the highest ground in the town. At two points, one above and one below the town, and both upon its margin, are low and marshy lands. The latter especially, known as Eagle's Meadow, appears to have been at one time a bog, and is even now not

much better. The brook is never quite dry. When in flood it brings down much debris by which its channel becomes gradually choked up. A few years ago it was cleaned out to the depth of several feet, but it is again in process of saturation.

9. The general appearance of the town is undoubtedly much in its favour. The main streets are broad, and the houses composing them well built.

A public infirmary, a savings bank, a chapel a new market, and several handsome shops give a character to the place, and show that it is on the whole in a thriving condition. The only manufactories are some tanneries and skinners yards. It derives its chief support from its position between a large rural and a mineral district, and its present staple may be said to be beer.

10. The good appearance of Wrexham, however, like that of too many towns, is confined to its main streets and to the fronts of the houses composing them. The backs even of these houses, and whole districts of cottages in other parts of the town, are in a condition it is difficult to describe in general terms, but which appear from the details given in a future part of this Report.

11. CONSTITUTION AND GOVERNMENT.- Wrexham is a Parliamentary Borough, contributory to Denbigh. It contains 1,058 acres.

12. The parish of Wrexham contains 14,200 acres, divided into 15 townships. Of these, Wrexham-Regis, Wrexham-Abbot, and a part of Esclusham-Below (Offas Dyke), surrounded by them, and thus completely detached from the rest of its own township, constitute the Parliamentary borough.

13. The town is wholly within the borough and stands upon parts of Wrexham-Regis and Abbot, and the whole of the detached part of Esclusham. The borough is, in fact, coextensive with the two, and includes the third.

14. The government is parochial: for ecclesiastical purposes extending over the whole of the parish: for other purposes distinct for each township. Thus there are four churchwardens for the whole parish; but for each township, two overseers of the poor, two surveyors of highways, and for Wrexham-Abbot and Regis district gas inspectors. Each of these two townships appoints a deputy surveyor, at present the same person. He is a paid officer, but not a professional surveyor.

15. Wrexham is in the lordship of Bromfield and Yale, of which the Crown is the lord, Sir W. W. Wynn, bart., the steward, and Mr. Faulkes, the deputy. The latter officer annually holds a court leet for the presentation of public nuisances.

16. A superintendent and four men are allowed out of the county police force. The former resides in the town, but his duties are not limited to it.

17. The local government above described is complained of as powerless for sanitary purposes; it is far too complex, and with responsibilities far too much divided, to allow of its conducting efficiently the expenditure of the town. Matters requiring practical knowledge, as the construction of sewers and roads, are entrusted to unskilled persons, whose tenure of office is **besides** the brief to allow of any settled plan being adopted. It will be seen that, in consequence, the public works of the town have been inefficiently performed, and no record of their particulars or cost has been preserved. Greater power, accompanied by direct responsibility, is what is needed.

18. FINANCE. - The church-rate is levied over the whole parish. It is about $2\frac{1}{2}d.$ in the pound. In Wrexham-Regis the poor-rate taking an average of five years, has been $3s.5d.$ in the pound, producing $1,564\text{ }l.$ In 1848, it was $3s.$ and produced $1,380\text{ }l.$ of which $208\text{ }l.$ went towards defraying the county-rate. The highway-rate is $8d.$ in the pound, and produces about $300\text{ }l.$; about $210\text{ }l.$ is paid to the lighting-rate.

19. In Wrexham-Abbot the poor rate for the last five years has averaged $5s. 6d.$ in the pound producing $698\text{ }l.$ In 1848 it was $4s.$ and produced $520\text{ }l.$, of which $80\text{ }l.$ was paid to the county-rate. In 1847, the poor-rate amounted to $1,031\text{ }l.$ an excess caused by the operation of the 10 Vict., cap. 66, which threw upon the town-ship the labourers residing in it, but working and "settled" in the neighbouring agricultural districts. From this charge excepting its proportion to the common fund, the town-ship has been relieved by the 11 and 12 Vict., cap. 110. The highway-rate in the town-ship is $8d.$ and produces about $84\text{ }l.$, and the lighting-rate produces $40\text{ }l.$ The local burthens of Wrexham-Regis are, therefore, about $2,074\text{ }l.$, and those of Wrexham-Abbot about $822\text{ }l.$ per annum, both exclusive of church-rate, which is inconsiderable. Esclusham-Below is not rated distinct from the rest of its town-ship, and it pays no lighting-rate.

20. The collector, Mr. Richard Clark, is of opinion that a rate of $1s.$ upon the town of Wrexham would produce about $550\text{ }l.$

21. POPULATION.- The population of the parish of Wrexham was, in 1841, as follows:-

	Denbigh	Flint	Total
Houses-Inhabited	2,608	26	2,634
.. -Void	241	6	247
.. -Building	26	....	26
<hr/>			
Persons-Males	6,348	59	6,407
.. -Females	6,449	65	6,314
<hr/>			
Persons Total	12,797	124	12,921

22. The Parliamentary Borough of Wrexham, at the same period, contained – Males 2,824. Females 3,007. Total 5,831. The townships of Wrexham-Abbot, Wrexham-Regis, and Esclusham-Below (a part only of the latter being included in the Parliamentary Borough of Wrexham) contained in 1841, -

	Wrexham-Abbot.
Houses inhabited	446
.. void	49
.. building	0
	----- 495
Males	1,022
Females	1,051
	----- 2,073

	Wrexham-Regis.
Houses inhabited	737
.. void	86
.. building	5
	----- 828
Males	1,795
Females	1,950
	----- 3,745

Esclusham-Below. (Entire Township.)

Houses inhabited	123
.. void	9
	----- 132
 Males	 275
Females	304
	----- 579

23. Mr. Edgworth and Mr. Hughes have taken considerable pains to obtain for me the proper population of the town, which appears in 1841 to have been-

Males	Females	Total
2,831	3,023	5,854

The number of houses were in-

	Inhabited	Void	Building
1841	1,291	135	5
1849	1,419	84	4

The present population, 1849, Mr. Edgworth computes at about 7,000 persons.

24. The classification of houses for the townships is as follows:-

	Under £5 Rental	Above £5 and under £10 Rental	£10 and upwards	Total
Wrexham-Regis	435	169	263	867
Wrexham-Abbot	370	80	84	534
Esclusham-Below	12	4	2	18

25. MORTALITY.- It appears from the statement of Mr. Hughes the registrar, that the deaths in the townships of Wrexham-Abbot and Regis, during the seven years ending 30th June, 1848, averaged 168 per annum. This, compared with the population of 1841, the last official census, amounts to an annual mortality of 28.6 per 1,000. In the year 1848-9 the deaths were 305. Here the same comparison gives a mortality of 35 per 1,000, and if the present population be assumed at 7,000, the mortality will be 29.2 per 1,000, a very excessive rate even for a town which there has been, (according to the statement of the registrar and the medical men,) no indigenous case of cholera.

26. According to the Health of Towns Tables, in 1841 the mortality of the Wrexham registration district of 39,542 persons, was 23.7 per 1,000, being the highest mortality in North Wales except Newtown, which has 25 per 1,000. Anglesey and Dolgelly, the two most healthy, were 15.6 and 15.7 per 1,000, and the average of the whole of North Wales was 18.8 per 1,000 per annum.

27. For the three following Tables I am indebted to Mr. Hughes, registrar. The second of these deserves particular attention, since it will afterwards be shown that the localities in which epidemic diseases are here stated to be most frequent and most severe, are also those which in addition to the evils inseparable from poverty, there are present many causes, as damp, filth, and close rooms, which is in the power of ordinary and very practicable sanitary regulations to remove.

28. A List of Epidemic Cases that have occurred from March 4, 1847, to October 12, 1849, in the following streets.

	Fever.	Rheumatic Fever.	Scarlet Fever.	Diarrhoea.	Small Pox.	Measles.	Hooping Cough.	Total.
Holt Street . . .	..	..	..	1	..	..	..	1
High Street . . .	..	..	..	1	..	..	..	1
Penybryn	11	..	1	1	1	..	..	14
Hope Street . . .	..	..	..	2	..	..	..	2
Walks	1	..	..	..	..	..	..	1
Queen Street . . .	1	..	..	1	..	..	..	2
Beast Market . . .	7	..	..	3	2	1	..	13
Vicarage Hill . .	1	..	..	..	..	..	..	1
Charles Street . .	1	..	..	3	5	..	..	9
Brook Side . . .	3	..	1	1	..	..	..	5
Lambpit Street . .	..	..	..	1	..	..	..	1
Seven Bridge Lane .	4	..	1	4	2	..	..	11
Tuttle Street . . .	8	..	..	3	5	1	..	17
Chester Street . .	2	..	..	1	..	..	..	3
Barn Field . . .	1	..	..	..	..	..	..	1
Yorkshire Square . .	10	..	..	2	..	..	..	12
Pentrefelin . . .	17	1	4	6	..	1	1	30
Wrexham Fechan .	1	..	..	2	..	..	..	3
Salop Road . . .	5	..	..	2	..	..	..	7
Mount Street . . .	6	1	..	..	..	..	..	7
Henblas Street . .	1	..	..	1	..	..	..	2
Vicarage Hill . . .	1	..	..	..	..	..	..	1
Street Draw . . .	..	1	..	..	1	..	..	2
Church Yard . . .	2	..	..	..	..	..	..	2
Abbot Street . . .	1	..	..	..	..	..	..	1
College Street . .	..	..	..	1	..	..	..	1
Total . .	85	3	7	36	16	3	1	151

29. A Table showing the Number of Houses, the Population, and the Annual Proportion of the Number of Deaths in the most populous parts of the Borough of Wrexham, upon an Average of the Three Years 1846-47-48.

	Number of Houses.	Population.	Deaths in 1846.	Deaths in 1847.	Deaths in 1848	Total Number in Three Years.	Proportion of Deaths in 1000 per Annum	Deaths from Epidemic Diseases during Four Years, ending October, 1849
King Street . .	23	120	1	2	2	5	13.8	1
Holt Street . . .	33	154	2	..	6	8	17.3	1
High Street . .	33	255	7	4	3	14	18.3	5
Penybryn . . .	168	850	14	16	17	47	18.4	14
Hope Street . .	66	320	7	3	9	19	19.8	3
Walks	24	163	..	5	6	11	22.4	3
Town Hill . . .	17	114	5	..	3	8	23.4	..
Queens Street . .	22	90	2	4	1	7	25.9	2
Beast Market . .	84	420	10	7	16	33	26.2	5
Vicarage Hill . .	12	62	2	..	3	5	26.8	2
Charles Street . .	40	175	1	8	6	15	28.5	8
Brook Side . . .	60	265	6	9	8	23	28.9	12
Lambpit Street .	40	183	6	1	10	17	30.9	6
Seven Bridge Lane	36	160	3	4	10	17	35.4	4
Tuttle Street . .	51	247	12	7	8	27	36.4	2
Chester Street . .	56	240	11	11	5	27	37.4	5
Barn Field . . .	18	80	3	3	3	9	37.5	2
Yorkshire Square .	20	96	5	5	1	11	38.2	4
Well Street . . .	12	41	2	..	3	5	40.5	..
Pentrefelin . . .	58	460	22	16	20	58	42.2	15
Wrexham Fecan	21	100	5	4	4	13	43.3	3
Salop Road . . .	43	220	11	6	13	30	45.4	10
Mount Street . . .	61	300	12	16	11	42	46.6	17
York Street . . .	38	200	13	8	10	31	51.6	10
Henblas	8	37	2	2	2	6	54.0	2
Abbot Street . .	33	160	15	6	6	27	56.2	6

30. A Table of Deaths from Epidemic Diseases in Wrexham-Abbot and Wrexham-Regis, from September, to October, 1849.

	Small Pox	Measols	Scarlatina	Hooping Cough	Diarrhea	Dyscentery	Cholera	Fever	Typhus	Total
King Street . .								1		1
Holt Street . . .		1								1
Queen Street . .							1		1	2
Vicarage Hill . .			2							2
Tuttle Street . .			1					1		2
Barn Field . . .					1			1		2
Henblas								1	1	2
Hope Street . .		1			2					3
Walks				1				1	1	3
Town Hill . . .		2		1						3
Wrexham Fechan		1			1	1				3
Seven Bridge Lane			2		2					4
Yorkshire Square .	1	1						1	1	4
High Street		1	2		1				1	5
Beast Market . .				1	2			2		5
Chester Street . .	1							3	1	5
Lambpit Street .				2	1			3		6
Abbot Street	2			2				2		6
Charles Street . .	1		1		2		1	2	1	8
Salop Road . . .	1	2			4			3		10
York Street . . .		1	3	2	1		1	1	1	10
Brook Side . . .		1	3		3			4	1	12
Penybryn	2		4		3			3	2	14
Pentrefelin . . .	1	3	4		2		2	2	1	15
Mount Street . . .	1	3	3		3	1		4	2	17
Total	10	17	25	9	28	2	5	35	14	146

31. SEATS OF DISEASE. – As usual, the medical men took a very prominent part in the inquiry, and promoted, energetically and with judgement, the improvement of the condition of the lower classes. I received, through Mr. Lewis, the following statement in evidence :-

“The undersigned medical men who have resided in this town for various periods, from 5 to upwards of 37 years, have always observed, that certain parts of Wrexham had been in an unhealthy state, frequently visited by epidemic and endemic diseases; often of a fatal character, and generally severe, especially as compared with other parts of the town more favourably circumstanced with respect to the character of houses, cleanliness of inhabitants, air, and water.”

“They regret to state that the strong language used in the year 1845, by a Government Commission, from personal observation and inquiries, which is to be found at page 217 of Vol. i., Second Report of Health of Towns’ Commission, is still too correct. He says, ‘I regret to have to report so much neglect of all necessary precautions for the health, decency, and comfort of the habitations of the lower classes.’

“They have observed through the course of these several years that *the whole line of houses on both sides of the brook from the upper end of the Walks to the Bridewell*, has abounded with fever of a low type, and frequently of a very grave character, and every description of Typhus, and eruptive fevers are seldom absent; and the proportionate mortality has always been high. This they attributed to the overcrowding of small, filthy, ill-ventilated, and inconvenient houses, to a total absence of proper drainage, accumulations of dung heaped up at the doors of the houses, and to offensive and noxious smells arising from pigstyes, donkey huts, open privies, and collections of stagnant filthy water.

“This description applies also to *the cottages between the Swan and Bryn Castle, on both sides of Pen-Y-Bryn, upper part of St Draw, and from Highgate down to the river on both sides*; also in a peculiar degree to *all the houses adjoining Bath-street, Well-street, Vicarage Hill, Abbot-street, and the west side of the Town Hill, as well as to College-street, the churchyard, Town Hill from Rhuabon Bridge and High-street, on the right hand, and York-street, including houses in the back premises and collateral streets; Tuttle-square and Tuttle-street, on both sides; Mount-street, on both sides, with a few exceptions, to which may be added Caia and Dog-kennel Hills.*

“The attention of the Superintending Inspector is especially called to the *Eagle’s and adjoining meadow.*

“*In Charles-street and the ,Beast Market extending to the east end of Holt-street, with Seven Bridge-lane, exist many courts and alleys which have ever, within their recollection, abounded with fever in every form.*

“*In Chester-street serious and offensive nuisances arise from enclosed yards, with open drains continually pouring out the contents of privies, wash-houses, pigstyes, &c.*

“The back premises of nearly the whole mass of buildings, constituting a square, bounded by *Lambpit-street, Queen-street, Hope-street, Chester-street, and High-street*, are generally in a state of filth, creating offensive and hurtful effluvia, and this to a greater degree than could be suspected from the respectable appearances of many of the houses fronting the streets.

“There are also enclosures containing yards, courts, alleys, &c., on *the west side of Queen-street and east side of Hope-street*, from the Talbot Inn up to the slaughter-house adjoining the savings’-bank, which are equally sources of disgusting and malarial odours and gases.

“The yards generally connected with the houses *from Bryn-y-Fynnon to the Town Hall, and thence along Black Chamber-street to Abbot-street, are confined, with very insufficient drainage*; and the air consequently offensive and unwholesome.

“ G. Lewis,	} <i>Surgeons to the</i>
“ Thomas T. Griffith,	} <i>Wrexham Infirmary</i>
“ William Rowland,	} <i>and Dispensary.</i>
“ Joseph Thomas,	
“ Ed. Williams,	
“ J. Dickinson,	<i>Surgeon to the Union.</i>
“ J. Kendrick Lewis,	<i>Surgeon to the Union Workhouse and the West District of the Wrexham Union.</i>

“*Wrexham, October 15, 1849.*”

32. INSPECTION OF THE TOWN. – In this part of the inquiry, I was accompanied by Mr. Edgworth, Mr. Lewis, and Mr. J.K.Lewis, and several of those gentlemen whose names have been already mentioned.

33. Pentrefelyn is a district on the right bank of the brook, in which the rents vary from *7p.* to *1s.* a week. It is chiefly composed of cottages of a very bad description, thatched, quite undrained, damp, with few or no privies, ill-paved courts, pigstyes, donkey stables, close or no back premises, and windows not made to open. Water is scarce, and its want, for culinary purposes, much complained of. The people bring it from the “Big well,” 200 to 300 yards distant. The tenants store manure for sale in large quantities. In one case were 15 houses with but one privy. At *Tanet’s-buildings*, where the rents vary from *1s. to 1s. 8d.*, the people sometimes purchase water. Fever has prevailed here.

34. In *Davis's-court* there is but one privy to 19 houses. There is a want of water, an open and very foul cesspool, and the ground is damp. This is a seat of fever. In *Naylor's-yard* are 16 houses to one privy. The cottages are built back to back, without ventilation. The landlord has refused to open a covered up well on the spot. These premises are in a most discreditable state. *Castle-yard* is much in the same condition.

35. *The Isle of Man* is a very low part of Pentrefelyn, close to the brook, between it and the tail race of the mill. It is low, damp, the houses thatched, without privies, and the people, chiefly Irish. In one court 20 tons of manure was stores for sale at 4s. 6d. a ton. Fevers are seldom absent here. Under the *Welsh Independent Chapel* is a close damp dwelling in which fever had been very severe. *Pen-y-Bont-yard* is low and damp, with filthy cesspools and pigstyes. Diarrhoea has prevailed here. Near this is a **neats'**-foot oil manufactory, much complained of.

36. All the above places are in Pentrefelyn, which is one of the most unhealthy districts in the town, the mortality being 42.2 in 1,000. Nevertheless the surface has a good natural fall, and the district could be rendered healthy, and the property improved in value at a moderate expense. The landlords did not appear.

37. *The Walks*, on the opposite side of the brook, includes a group of cottages, if possible, worse than those described. This district is very unhealthy, as is *Bath-street*, a very damp and dirty place.

38. *Brook Side, right bank.* These cottages are set back a little from the brook. Their natural position is good. Near the bridge are a few cottages, well built, and in good order, letting at 4/ per annum.

39. Even here, though the landlord is evidently very attentive to the comfort of his tenants, are pigstyes, dung-heaps, and a privy above, and drainage upon the house, and the lower windows do not open. Beyond there are other houses of the same class and under much the same natural circumstances, but the landlord neglects them, and they are in a very filthy and unhealthy state. They let at 1s. 9d. a week. Beyond these again Mr. Gummow has several cottages in pretty good order, with a well arranged drain and proper grates. Near is a *slaughter house* in a very bad place. The floor has been recently washed, but in the yard was a cesspool full of offal and refuse.

40. Concerning Owen's-yard in this quarter, the visitors report that "the privies and drains are very offensive, and there is much illness occurring there in consequence." Having received a complaint of a tallow-melting house in this quarter, I called upon Mr. J. P. Hughes for his evidence; it is as follows:-

"I am a whitesmith and bellhanger in the town of Wrexham, and live at the town side of the Town-hill before coming to the bridge leading to Pen-y-Bryn. I have been the occupier and proprietor of the premises, and have lived there for many years. The premises next adjoining my house and property nearer to the brook, have for some years been occupied as an inn, called the Albion, and during such occupancy I had no complaint to make as regarding any nuisance pertaining to the premises; but a few months since the same have been rented to a grocer, chandler dealer, who since such occupancy, has erected furnaces for the rendering of fat to make candles, &c.; the result has been a most dreadful, repetition of smells, which has occasioned the health of my family to be seriously affected. We have let lodgings, and the nuisance has become so great that my lodgers have given notice to leave, so that I am sustaining a positive damage in property as well as injury in health to all my family. This is quite a new nuisance."

The Brook-side annual mortality is 28.9 in 1,000.

41. On the opposite side of the brook, between it and Abbot-street, occur some of the worst places in the town. The front houses at Town-hill let for 20l. to 40l. per annum, but they have scarcely any back premises, and their cellar-kitchens are subject to land-floods, and always damp. The cesspools from above become flooded with rain-water, and ooze and overflow into the lower premises. The drains are useless. Several houses on the Brook-side, though of a good class, are much in the same condition. Mrs. Brewer's lodging-house is close and damp, and has a collection of dung in the yard of three months' standing, which she values highly. Near this is a court with a covered entrance and an open gutter from an ill-pitched yard. There is one privy for the whole court, and the space around it is covered with ordure. As usual, the lower windows do not open. The whole of the houses on the west side of Vicarage-hill are in a very bad condition. Behind Mrs. Brown's is a peculiarly filthy open cesspool, of great size, which is supplied with straw. Here is a large pool of soil, worth from 1l. to 2l. per annum.

42. *Abbot-street* is the most unhealthy street in the town, the annual mortality being 56.2 in 1,000. In one place a privy and cow-house are placed in a dark room, beneath a dwelling-room with a common boarded floor. Opposite, *Harrison's-yard* is in a dirty condition, with two offensive privies and 6 pig-styes.

43. In the *Cross Foxes-yard* are pools of water under the arch, standing in holes in the pitching. *Butcher-yard* contains a large cesspool filled with offal and soil, and there are other nuisances about the *Welsh Calvinistic Chapel*. The *Bull-yard* is also very filthy.

44. The south side of the *Town-hill* is very close. *College-street* contains among other dirty places, a court close to and somewhat below the churchyard, very damp, and a seat of fever. *Temple-row* borders on the churchyard. Some of the houses are old and bad; all are undrained, and some rendered very damp, by the adjacent high ground of the churchyard.

45. Between the churchyard and High-street is a block of most disreputable tenements, close behind the best houses in the town. In the *High-street*, behind Mr. Price's new house, is a large and uncommonly filthy cesspool, filled with fluid soil. Near this are a butcher's yard and pigstyes much complained of.

46. Between the churchyard and York-street the state of things is even worse, since the courts are equally crowded, and are in level 20 or 30 feet below the adjacent churchyard.

47. Contiguous to the south-east corner of the churchyard are some wretched tenements. A row of cottages of the most miserable description face and are below the level of the churchyard. They have neither privy nor back premises of any description; all their refuse is thrown into the churchyard, and drains down the public steps and into Tuttle-street. The backs of these cottages are built against some of another group known as *Old Yorkshire-square*. Here are altogether 35 tenements with one privy, and that in a state quite unapproachable. The court is occupied by dung-pits and collections of filth, and in parts sodden with ordure. The privy of these cottages drains into a succession of open pools of soil, which extend at the back of other cottages, and into a public way opening from Tuttle-street. The sickness here is severe, and the annual mortality is 38.2 in 1,000. There is nothing in the situation of these cottages to render a complete drainage, and the erection of proper conveniences, expensive. This landlord is also the owner of other property already noticed, in nearly as disgraceful a state.

48. *York-street* has already been alluded to. It lies east of the church. All the wells between it and the churchyard are tainted. On the opposite side, its courts, which are numerous and crowded, descend to the margin of the Eagle's Meadow, and in some of them are large open manure tanks excavated in the marshy soil, and contributing, no doubt largely, to the particularly unhealthy condition of York-street. Here the annual mortality is 51.6 in the 1,000.

49. In the north side of High-street is the *New Market*, particularly clean and well drained, with a hardstone front. On either side are some of the principal shops in the town, but their back premises are very close, and absolutely undrained.

50. *Wrexham-fechan, Mount-street*, and the low marshy land near the Gas-works, include some very unhealthy habitations. Mr. R. Humphreys Jones, of Willow Bank, in this quarter, states:-

“I could give you instant proof of the unbearable effluvia in my house, offices and garden, opposite the gas-works, so deleterious as to oppress the lungs at each inspiration.

“For several years past the stench arising from the works, and the dark volumes of smoke emitted through the chimney by day and night, render the garden vegetables very unpalatable and unhealthy, and fill both garden and house and offices (if the windows, should happen to be left open) with blacks and flakes of soot, that cover my papers, linen, &c., with dirt; and the offensive effluvia are so pernicious to health, that for several years my family have been made seriously ill thereby. My wife and daughters and all my servants have been so overcome with these noxious matters, that they have been obliged to go away for various long periods to recover their health, after being attended by medical gentlemen.

“The directors and shareholders of the Gas Company have turned a deaf ear to all my complaints and remonstrance’s, and have taken no steps to abate this abominable nuisance and source of sickness. I feel the ill effects thereof myself; and I attribute my not being laid up with sickness from these pestilential gases and black smoke to the circumstance of my being frequently called from home to a purer atmosphere.”

The following statement by Mr. J. C. Owen, relates to the same nuisance:-

“I reside in a house a little higher on the hill than Mr. Jones, but near to the gas-works. Even in this position, both myself and the other members of the family have great cause to complain of the offensive smell which comes from those works, and which, from experience we find to be injurious to health, attacking as it does the lungs, causing, when the effluvia is great, considerable difficulty in breathing. I have made inquiry from my neighbours as to whether it affects them, and those whom I have seen on the subject all complain of the same thing in a more or less degree, as their habitations are more or less approximate to the works. I refer to the many houses (among others) in the field on Madeira-hill.

“In addition to the above, these houses are deprived of the means of providing themselves with water from one common pump in the field, by reason of the works being on a lower level, and too frequently draining or taking away water by means of the well sunk at the gas-works.

“I may, perhaps, be excused referring you to a great nuisance arising also from water and gas-oil being carried into the public river a little below Mr. Humphreys Jones’s house, through a large barrel-drain, which, besides being offensive and injurious to the river water, is in my view an infringement of an Act of Parliament (3 and 4 Wm. IV., c.90)”

At the time of my visit to this quarter the smell from the gas-works was certainly very offensive. They were then under repair. Near the works, and opposite to Mr. Jones’s house, are a row of cottages, each of which discharges its

refuge through the raised footpath into the open road. I have no doubt that this state of things contributes in no slight degree to the nuisance complained of.

The annual mortality of Wrexham-fechan is 43.3 in the 1,000.

51. *Charles-street*, though a considerable thoroughfare, contains some very exceptionable courts, and is badly supplied with water. At the back of the “Feathers” inn is a collection of manure-heaps, pigstyes, and cesspools, in a badly pitched yard, and close by, in *Jenkins’s-yard*, is a repetition of nearly the same state of things. Next to this are Mr. Parker’s premises. His well is tainted, and he states his health and comfort to be materially affected by these local nuisances.

52. In *Cutler’s-entry* are 11 cottages without back premises, narrow, close, and very damp, with a badly pitched court, and an open gutter for house refuse. At the inner end is a group of privies, and a very large and offensive open cesspool. Concerning this Entry the visitors report- “Pigsty very offensive”. Privies all empty themselves into a *large open ditch, very offensive and injurious to health*”. Some of the houses let for 5*l.* per annum. There has been much sickness here. The water is slightly tainted. In *Elephant-yard* is a slaughterhouse, and large offal and soil-pits. The yard is badly pitched, and the ashes are thrown out in heaps, and blown about by the wind.

53. The *Beast Market* is a large open and in parts elevated space, one of the best situations in the town; as usual no advantage has been taken of this. Here are cellar dwellings, no drainage, and in parts much sickness. *Owen’s-entry* has the privy, cesspool, manure-pit, and pump close together. The well is in one of the cottages. The site, though naturally excellent, is now unhealthy. *Mason’s-entry* is little better, but its owner allows the adjacent poor to use his pump at certain hours. Next this is a stable and filthy yard draining upon a house. In the next court sickness has been present. The opposite side of the *Beast Market* is upon the elevated edge of the *Eagle’s Meadow*, naturally an extremely pleasant situation, but partially blocked up by low cottages without drainage, water is very scarce in this quarter.

54. *Holt-street*, on the margin of the town, is a considerable thoroughfare, and contains many good houses in an elevated and airy position. They are, however, without drainage, and the refuse from them stagnates in open gutters in the street. Water is scarce here. *Seven Bridge-lane* is the only street in the town with a tolerable sewer, but as the houses do not communicate with it, and the grates are large and untrapped, it is in its present state, rather an evil than an advantage. The dirt and ashes are cast into and blown about the street, and the open gutter is choked up with house refuse and offensive filth.

The annual mortality is 35.4 in the 1,000.

At the back of the *Hat Inn* is a pool of ordure, overflowing into the street close to some cottages, and much complained of by the people. There is no water here. The inhabitants go to Mr. Mason's pump. In *Coopers-yard* is a large cesspool. Water is scarce.

55. *Chester-street*, though broad and airy, and a principal thoroughfare with good houses, has no drainage. There are several very dirty courts, and an open street-gutter charged with offensive refuse.

The annual mortality is 37.4 in the 1,000.

Poole's-entry is very damp, close, and dirty, and a source of great nuisance to the vicarage behind it, and to Mr. Griffiths's premises on its lower side.

56. *Lambpit-lane* is as bad, or perhaps a little worse.

The mortality is 30.9.

Queen-street contains a number of courts, cesspools, and filthy places, close to several first class houses. Mr. Lewis, surgeon, complains of a nuisance of this kind and other persons pointed out to me that they were obliged to keep their back bedrooms windows closed. *Hope-street* contains a number of very crowded and close back courts, draining upon the adjacent houses, and materially deteriorating the property. *Vernon's-yard*, in *Hope-street*, is a specimen of such places. In this street Mrs. Turner, occupying an expensive house, suffers from the drainage of a filthy court and cesspool next door, the drainage of which passes her premises.

57. In the above account of my inspection only a few cases in each district or street have been selected. A much larger number, with one or two exceptions as bad as those enumerated, are recorded in the books of the Sanitary Committee, and were witnessed by those who accompanied me. I regret much that none of the landlords of the worst properties thought fit to be present. No doubt the display of so much misery enhanced, and of so much sickness almost wholly produced by their neglect, would not have been an agreeable sight, but they would have learned that under the new law efficient remedies will be placed within their reach, at a cost which will raise rather than depreciate the value of their property, and they would, I think have seen that their pecuniary interests, and the life and wellbeing of their townsmen are not necessarily in opposition or incompatible.

The Registrar-General, in his note upon Wrexham, published just before the arrival of the cholera, observes:-

“The sanitary state of the town remains much the same as it was six months ago, and at present there is not the least effort made to meet the approaching cholera. The small back streets, courts and alleys are in a most wretched condition in regard to cleanliness. Here the eye sees filth of every description, manure of all sorts heaped up for months from pigstyes, &c.; gutters and drains full of putrid matter, which in some instances runs under the cottages, and is not to be removed by any existing means of purification.”

58. I am told by owners of cottage tenements that there are numerous drawbacks upon cottage property, much affecting the much affecting the profits derived from it. Possibly this is in particular cases or at particular times, to some extent true, but I believe cottage property to have been on the whole, property of a most valuable description to its owners, and to this time I found the poor paying rents of 3*l.*, 5*l.*, and 7*l.* per annum for tenements which no surveyor would of ventured to value, unless they had been required for a railway, at 30*l.*, 50*l.*, or 70*l.* value, including ground, and for which the owners are excused paying poor-rates.

59. SEWERS.- Mr. Gummow, surveyor, prepared for me a plan of the town, upon which were laid down all the street or public drains, that could be discovered. The town contains about 6,000 yards of public thoroughfare, and there are about 1,400 yards of drains of all kinds. Of these, however, only 170 yards are reported as efficient or at all approaching to efficiency, so that only about 1-35th. part of the town may be said to be sewered. The other drains are put in at irregular depths and levels, they are flat-bottomed, with upright sides, and usually constructed of rubble. No record is kept of their capacity, position or cost. Such is the natural state of things, with a non-professional officer who is liable to be changed annually, without fault of his own. The gutter-grates laid upon these drains are very large, and as usual a source of bad smells.

60. In forming the drains to which reference has been made, the brook has been regarded as the proper receptacle for the filth of the town, and into it they discharge their contents. Fortunately the flow of the brook is perpetual, and the waters come down in rainy weather in great volume, so that the channel is scoured from time to time; nevertheless, it is always more or less of a nuisance.

61. The sewage of one portion of the town has hitherto been discharged into the low boggy spot, close to the town, known as *Eagle's Meadow*. Here it has been customary to pen it back, and either to sell it or put it upon the land, causing a most serious nuisance to this quarter of the town. There is a similar but much smaller marsh, into which is drained the refuse from a number of houses between the top of Penybryn and the new Bridewell.

62. The house drainage is what might be expected in a place without street sewers. Mr. Gummow has laid some good drains in his cottages in Brook-street, but they are the only drains that I heard of. In many cases there is not even a gutter; in others the gutter runs along a covered entry into the open street. Sometimes there is a trench cut beneath the floor, and covered with the loose flags or bricks of the dwelling-room. The privies, where there are any, have cesspools, which are usually open, and without drains, so that when full, as they frequently are from rain, the diluted and most offensive filth overflows into the yards and courts, and

not unfrequently into the houses. Wrexham is full of instances of such places. Perhaps the worst are in and below Old Yorkshire-square, on the south side of Abbot-street, and on the south side of Pentrefelyn.

63. These cesspools and the cottage pigstyes are among the chief evils of Wrexham. Not only are the privy cesspools in them very numerous, but the people are in the habit of forming very large pits on their premises, and storing manure collected in the streets and elsewhere. Into these places they put straw, with a view to it becoming rotten and from the sale of the whole they derive a considerable revenue, selling the stuff at 3s. to 4s.6d. a ton. One man recently received 10*l.* per annum from such a cesspool. In the Irish quarter such places are numerous. I saw one collection of about 20 tons on sale at 4s. 6d. per ton. The profit derived in this way is very considerable. I inquired very closely into the matter, and believe 7s. 6d. per house per annum on the whole town, to be a very low average, although this amounts, for the whole town to a sum of 532*l.* Of course this sum is gained by individuals, at a great loss to the community, from the consequences of the pauperism, sickness, and premature death directly attributable to such filthy practices. Although much valuable manure is lost from this detached and ill arranged method of collecting and storing it. Its removal would, without doubt, materially diminish, its well-regulated collection and sale would probably nearly pay, the poor rate.

64. WATER SUPPLY.- In the course of the inspection I received numerous complaints of the scarcity of pure water. The whole of the population of the Pentrefelyn district fetch water from Bryn-y0ffynnon, a remarkably clear and copious spring near the old vicarage, the water of which is reputed soft in the town. A century and a-half ago it was celebrated for its medicinal virtues. At present it supplies a large bath, remarkable for its excessive coldness.

65. On the west side of York-street, next to the churchyard, the wells are tainted, and the people go elsewhere for drinking water.

66. There are in the town 148 private pumps and 4 public wells or pumps. These cost from 2s. 6d. to 20s. annually to keep in order; but probably do not average above 5s. The wells average from 12 feet to 20 feet deep, and, with a pump, cost from 15*l.* to 20*l.* each.

67. Mr. Hughes states:-

“The 148 pumps in the different parts of Wrexham are, with the exception of very few, confined entirely to the use of those families on whose premises they are erected, and but very few of the above number are open for the use of the

general public, and those are only upon sufferance. A very large portion of the inhabitants complain most bitterly for want of water more convenient for their use.”

68. With reference to Bryn-y-ffynnon, I have received from the vicar the following statement:-

“Bryn-y-ffynnon well, renowned for the excellence and purity of all who delight in that wholesome beverage, which ‘cheers, but does not inebriate’, and which no other rival pump or spring in the whole town can concoct in such perfection as these sparkling waters. These, passing over a stratum of limestone, spring up in this well almost as cold as ice itself; and after supplying the wants of hundred + daily , its superabundant streams mingle with the filthy brook below. Here numbers of women and children resort hourly, even from the more distant parts of the town, for the purpose of ‘fetching water’, and also carrying away all the gossip they can collect. Here the events of the day are discussed, magnified, and distorted. Here many a frail pitcher is broken; and it had been far happier for some had they daily dipped their pail in the filthy brook, than have sought the pure waters of the fynnon. About 30 feet below the well there exists an old bath, significantly called ‘The Cold Bath;’ so cold indeed, that few submit to the petrifying shock a second time. The refuse water of the well flows into this, and so passes off to the river. The bath is about 14 feet long, 10 feet wide, and 5 feet deep. It is now in a dilapidated and dirty state, though full of water.

“It is a matter of much of regret that the vast body of pure water emitted every moment from this well should not have been applied to other more beneficial purposes, to supplying the inhabitants with wholesome water in their own dwellings, to the saving of much labour and time. It is conceived that a powerful ram, fixed in the neglected bath, would throw up sufficient water for the daily use of 7,000 inhabitants of the town. Immediately above the well is a garden, the property of Sir Watkin Williams Wynn, Bart. At the corner next to Hope-street (the higher part of the town), a large reservoir might be erected, more than 50 feet above the level of the well. The constant action of the ram would supply this with many hundred gallons of the purest water, which might be distributed into every street and house, besides affording a body of water to flush the sewers once a-week. The refuse water might be conducted, at its own level, into another reservoir, near the Market Hall, which would supply High-street, part of Chester-street, Charles-street, Beast Market, York-street. If pipes could be carried from the upper tank, through Mr. Lewis’s premises, through Llyn Isa, to the top of Chester-street, the drains and houses in the vicinity would be flushed and supplied. Pen-y-Bryn presents the only difficulty. If the spirit and **enterprize** of the inhabitants of the locality have succeeded in carrying gas into the streets and lanes, the same **enterprize** will accomplish this seeming difficulty, and convey to each house, what is of far greater importance – a constant supply of pure water.

Pentre Velin might be supplied either from the mill-stream or from the upper reservoir.”

There are two fire-engines in the town, one of which is efficient; but the supply of water is not such as to allow of these engines being employed with effect, unless the fire occurred close to the brook, or near the Bryn-y-ffynnon; so that, practically, these engines are of very little use.

69. PAVING AND SCAVENGING.- The main street of Wrexham is in good order, and the footways have been neatly flagged by subscription among the inhabitants. The flagging, however, extends to but few of the subordinate streets. The carriageways in these are pitched with builder-stones, of irregular size, shape, and hardness. The alleys are, for the most part, pitched with smaller boulders or pebbles, with a central gutter. This pitching is generally laid very badly, and full of holes. Of course, a gutter formed of such materials can never be clean. Very many of the courts and back yards are not pitched at all, and it is difficult to distinguish between the proper surface of the ground and the coating of dust and ordure upon it. In wet seasons the state of things is very bad.

70. The high roads are chiefly repaired with limestone, brought from Minera by rail, and delivered, broken, at the station at 3s. 6d. a ton. The flagstone used for paving is Llangollen slate, and costs, fixed, 4s. 6d. a superficial yard. The kerbstones are brought from Flint. The bulkeley-Mountain quarry- tiles and blocks are much used here for ground-floors, door-sills, and paving the better class of yards. They have a neat appearance, and are far more durable than ordinary stone or slate.

71. There is no scavenger, public or private, in the town. 17ℓ. per annum is paid for watering the streets of Wrexham-Regis during a part of the summer season.

72. PUBLIC NUISANCES.- Of these the chief are the *low lodging houses*, concerning which *Mr. E. Griffiths*, Superintendent of Police, states:-
“There are in the town of Wrexham 41 lodging-houses; the majority of these houses are of the very worst description, and situate in the worst locality of the town. I have known, upon certain occasions, such as at fairs and races, as many as 200 persons have been admitted without suitable accommodation; and on these occasions I have seen as many as 12 dogs accommodated at one house, thereby increasing the nuisance. This part of the country is much frequented with persons travelling with dogs and cats.”

73. There are 11 slaughter-houses and about 600 pigsties in the town. Both are nuisances of a dangerous order, especially the latter, from their number, and their

presence ordinarily in the most crowded and damp localities, in close proximity to the dwelling-rooms of the poor.

74. *Superintendent Griffiths* also states, with reference to crime : -

“Drunkenness among the lower classes, male and female, is very frequent, and difficult to check, owing to the bad state of the lodging-houses.

“Prostitution is also to be complained of; scarcely a lodging-house in the town refuses to harbour for this purpose.

“Thefts are very numerous; and altogether I consider the town, as regards crime and immorality, among the worst in North Wales.”

75. Drunkenness I found complained of, by all parties, as the disgrace of Wrexham. Mr. Griffiths states, that “there are in town 60 licensed victuallers, 5 beer shops, and 4 spirit vaults. The license victuallers brew their own beer.” I have endeavoured, but in vain, to arrive at an approximation to the quantity or spirits retailed in the town. It appears to be large, certainly as much in one year as would pay the whole sum required for the sewage and water supply of the town.

76. LIGHTING.- The town is lighted with gas, manufactured by a private Company, and supplied under a contract, with gas inspectors appointed by the township. There are 60 public lamps, lighted for eight months of the year, omitting five nights at and about each full moon. The lamps are lighted and cleaned by the Company and repaired by the parish. The payment is at the rate of 8s. per light per month.

77. Gas is supplied by meter at 8s. per 1000 cubic feet. The Rhuabon coal, employed by the Company, is delivered at 7s. 6d. per ton; the price charged is therefore excessively high.

78. BURIAL GROUNDS.- My attention was directed to this subject by the vicar, who put in evidence the following statement, and accompanied me to the places to which it refers:-

“There are two churchyards in and near to the town of Wrexham.

“One at the mother church, situated almost in the centre of the town, enclosing an area of about one acre and a quarter, surrounded on the north and the east by inhabited houses. This yard is rather crowded on the lower or eastern side, and has chiefly been appropriated for the burial of paupers and Irish residents, who would rather carry their dead to Chester, than not be allowed to bury in this old yard. Many graves might still be opened in ground formerly appropriated to families who have long become extinct. No complaints have ever been made, to our knowledge, of any noxious effluvia arising therefrom.

“The other burial ground is distant from the town about a quarter of a mile, and is two acres in extent. The nature of the soil is a rough gravel. The yard is rather full; but there still remains much ground unoccupied. No complaints have ever been made of the effluvia arising from this yard.

“There are four or five other burying-grounds within the parish, viz., at Brymbo church, Minera church, the Wern, Coed Poeth, and Rhosddu; the three latter are burial places belonging to the Dissenters.

“Robert Bailey, the sexton, and Richard Lovett, clerk, are prepared to give evidence on the above statement.

“The average of burials for the last three years is 300.

“George Cunliffe, Vicar

“W. Davies, Curate.”

79. The churchyard contains an unusual number of tombstones, excepting at the corner referred to as set aside for paupers. It is also very high above the adjacent streets, and many complaints were made to me on the spot of percolations from it. On the south side three or four cottages actually abut upon it, and Old Yorkshire-square, already referred to as a group of most objectionable tenements, is but a few yards distant. The Superintendent Registrar’s office is a new and substantial building on the east side. Mr. J. Bury, Clerk to the Registrar, states,-

“I am a clerk in Mr. Edgworth’s office, and the room I occupy looks upon the east side of the parish churchyard; the office is closed at 7pm. and re-opened at 9am., at which hour I usually commence the duties of the day, and when I very frequently perceive, in my office and that adjoining me, fronting the same locality, a most offensive smell, and which, at times, is so overpowering, that the rooms are not habitable until they have been copiously sprinkled with a solution of lime or zinc.

“That portion of the churchyard which lies nearest to Mr. Edgworth’s office, is crowded with dead bodies, being used principally for the Irish people and paupers, of whom I have seen three internments at once.

“The oppressive smell referred to is frequently perceptible from the steps near Mr. Edgworth’s office to the corner near Mr. Bennion’s office.

“*Wrexham, October 17, 1849.*

“J. Bury.

“We beg fully to corroborate the above statement.

“Tho. Shaw,

“C.J. Jackson,

“*Clerks to Mr. Edgworth, Wrexham.*”

80. The new burial ground is on a gravelly soil, quite outside the town. It was opened 56 years ago. The corpses have been interred without arrangement, and the ground consequently appears full, though it will probably hold, decently,

many more bodies. The ground about it is open, and it might easily be enlarged when necessary.

81. These two burial grounds have been very materially relieved since the opening of those at Brymbo and Minera.

82. LOCAL ACTS.- Of these there are none.

83. REMARKS.- In Mr. Slaney's Report on Birmingham and other towns, he observes, with reference to Wrexham, quoting the answers of a local Committee.- "There are no regulations for drainage, except those vested in Surveyors of Highways. The whole of the filth on one side of the town is conveyed into a meadow in the town, where large open ditches are cut for its reception and retention in a stagnant state, and from which an abundant exhalation of **miasmata** arises. There are no proper decent necessaries belonging to the houses of the lower classes, and the state of those which do exist is most disgraceful and offensive.-

"There is no service of scavengers; no cleansing the courts or alleys where the poorer class live; no supply of water but from wells and pumps, and this often complained of. Many of the lower classes collect dung and filth from the roads, and keep it up against their houses for sale, which is only removed once a year."

84. I am sorry to be obliged to state that although an active Committee have been at work for a year and have removed many nuisances, yet that, with the exception of some partial improvement of the Eagle's Meadow, on the whole the present condition of the town appears to be in all respects worse than when Mr. Slaney reported upon it in 1844.

REMEDIES.

85. The remedy most needed in Wrexham is, as the basis of all improvement, a local government, with full powers to levy rates and compel individuals to obey the local laws. Such a government the Public Health Act will at once provide, under the name of a Local Board which, being elected by the rate-payers, over whom it exercises control, will probably possess their confidence, and be supported by public opinion in its acts for the benefit of the community.

86. One of the first steps to be taken by the local Board will be to cause a survey of the district to be prepared, upon a scale sufficiently large to allow of every house and curtilage being laid down upon it, without confusion, and this should be accompanied by levels of the ground. These essential preliminaries completed,

the next step should be the provision of a proper water supply and system of main sewerage. The two are inseparably connected, and as, on the one hand, drains without water, becomes choked, so, on the other, a full supply of water, without drains for its removal, is of little benefit.

87. Closely dependent upon the main sewerage and water supply are the house improvements, by which the owners of house property, assisted by their tenants, will be called upon to take advantage of the benefit of the public arrangements provided by the community. The leading particulars of these arrangements and improvements occupy the following sections.

88. How much these remedies are needed, is shown by the facts already recorded in these pages, corroborated by the testimony of the Sanitary Committee in the town. If the Act be applied, it will fall upon the rate-payers to elect, as their local Board, men in whose real, honesty, and prudence they can confide. Upon the members of this Board, when elected, will devolve the future condition of the town. If they will devote themselves to constructing proper by laws, regarding lodging houses, forbidding pigsties and dung-heaps, and providing for the cleansing of the town, and if they take measures to secure a constant and copious supply of water, a complete system of sewerage, and those house improvements to which all the other improvements are but subordinate; if they carry out, with skill and economy, all these points, no one of which can advantageously be separated from the rest, the condition of the people will be amended, and the property in the town improved in value.

89. At this time the proprietors of small cottages profit at the expense of the rest of the rate-payers. As a body they, no doubt, in most cases unconsciously, promote sickness, pauperism, drunkenness, and crime, because they, possess and let out a description of tenement which is certain, in a greater or less degree, to bring these evils upon its inhabitants. The new measure gives them a fair opportunity to amend all this at a cost so low that even poverty cannot be pleaded against it, at a cost, for each tenement, but very little above that of a glass of spirits weekly.

90. WATER SUPPLY.- The position of the town, I fear, is such as not to admit of its economical supply with water by natural pressure. It is, however, desirable to make more of this point by having a section taken of the Gwenfrwy above the town. The supply required for the 7,000 inhabitants may be stated at about 14,000 cubic feet, or 87,500 gallons daily, a larger quantity than the Bryn-y-ffynnon can yield by the employment of any hydraulic machine worked by its own water. Recourse must therefore be had to the Gwenfrwy brook, which is never dry. A short distance above the railway crossing, a reservoir should be formed, containing a two month's supply, and upon this a small steam-engine be placed,

by which the water may be pumped into a raised tank, upon the high ground near Bryn-y-ffynnon House, whence a main pipe and branches would supply the whole town. The particulars of this plan it is impossible to lay down until a detailed survey shall have been made, but about the general feasibility and cost of the plan here proposed there exist already the means of forming an opinion.

91. SEWERAGE.- The actual details of a plan of sewerage for Wrexham can, in like manner, only be laid down when proper surveys and sections shall have been prepared to a scale to be decided upon by the General Board, but the general features of the plan are sufficiently obvious.

92. The brook should be preserved as a brook, and no longer allowed to do the work of a sewer. The Eagle's Meadow at its lower level should be drained, and the no sewerage whatever allowed to be carried across it. The stagnant pond and bottom behind Penybryn and the New Bridewell should also be filled up or drained.

93. The Beast Market, Charles-street, Holt-street, Chester-street, Queen-street, Hope-street, and High-street, will all drain by sewers, converging upon points between the theatre and the Wynnstay Arms, whence, passing, one trunk close east of York-street, and the other below the theatre, they should unite in a main sewer, which will proceed nearly direct for a point in the brook below Cook's Weir.

94. The drains of Abbot-street and Town-hill should unite to form a sewer, which will passing south of the churchyard and Yorkshire-square, would receive the drainage of Tuttle-street and the Salop-road, and fall into the last described main trunk below the town.

95. The small tract of town south of the Gwenfrwy will require considerable management. It should drain into a main sewer running south of and generally parallel to the brook, and be led across it, at one or two points, by iron piping, so as to unite with the principal outfall.

96. By this means, and a proper water supply, the whole town may be very economically and efficiently sewered, the whole of the sewers being brought within moderate limits, excepting perhaps the main outfall, which possibly may require to be 3 feet diameter. The existing drains and the street gutters should be reserved for the passage of the surface water into the brook.

97. It is important for the general drainage of the land on which the town is built that the brook should be cleansed out and kept free of the rubbish and debris brought down by floods. This would be very effectually secured if the channel of

the brook were lined by a brick or stone invert. By this means the brook would scour itself clean.

98. HOUSE IMPROVEMENTS.- Under this head are included all those remedies which must be applied to individual houses. Thus the general rate will cover the expense of forming the sewers through the streets, or near to the backs of the houses, and will lay the street water mains, and send the water into the houses when the service pipes are laid; but these latter, as well as the house drains, must be paid for by the individual whose property is benefited. The house-owners, also, may be called upon, under this rate, to construct proper privies or water-closets, to fill up cesspools, to erect dust-bins, and to provide the usual appendages to a clean and decent labourers' tenement. This at present, in many cases, they cannot do, the community not having done their part in laying on the water, or providing a main sewerage, but this, when done, will be almost labour thrown away, unless the house-owners are called upon, authoritatively, to profit by it. The provision in the Act which enables the Local Board to execute these works, if required, for the owner at once, and to charge the repayment upon the estate, in instalments distributed over 30 years, places these remedies within the reach of all, and fixes the repayment upon those who actually enjoy the property, and only during their possession of it.

99. These house improvements must be regulated as the most important part of the remedial measures, if not of those for which the whole machinery of the Act is mainly devised to accomplish. Before any improvement, moral or physical, can be effected in the condition of the poor, it is essential that their dwellings, should be rendered clean and dry, that they should be enabled to breathe pure air, and that they should have, at a trifling cost, a plentiful supply of pure water.

100. SEWAGE DISTRIBUTION.- The farmers around Wrexham appear to be unusually well aware of the value of town manure in agriculture, and the people in consequence dispose of it at a profit; some merely selling the contents of their cesspools; others, of the lowest and worst-lodged class, employing themselves in collecting the stable manure from the streets. The direct profits to the individuals dealing in manure, and the injuries inflicted by this trade upon the community, have already been pointed out. Of course, under any well-regulated town government, the rate-payers at large will object to the practice of storing manure in the town, and will, through the local Board, insist upon the frequent and periodical removal of all ashes, rubbish, and house and street manure. Under the proposed system of a proper sewerage and house drainage, with a sufficient number of privies, dustbins &c., and a public scavenger, a far larger quantity of manure will be collected than at the present, with less labour, and in a more

valuable form, since the street manure, the sewage, and the ashes will be separately collected.

101. At the mouth of the main sewer, near Cook's Weir, a tank should be constructed, with an overflow into the brook, and from this tank, by means of a pump, the fluid manure may be delivered to the farmers in water carts, or may be emptied by natural pressure in irrigating the meadow lands below and along the course of the brook; or should solid manure be found more advantageous, it may be here obtained by evaporation of any chemical process. In the estimate of cost a sum has been allowed for this tank, but to avoid taking a credit for prospective profits, however payable, the return of revenue has been taken at the sum already stated as that which there is reason to believe to be now actually paid for the manure.

102. BOUNDARIES.- These are laid down upon the annexed map. They include parts of the townships of Wrexham-Regis and Wrexham-Abbot, and the part of Esclusham-Below which is surrounded by those townships.

103. CHARGES.- The cost of water supply , that is to say of land, reservoirs, engines, pipes, and working expenses, will amount to about 7,000£., that is to say, to a charge on cottages of an average of about 1½d.per house per week, of 6s.6d.per annum.

104. The cost of the sewerage, including street sewers and main trunk, will be about 4,600£., or under a penny per house per week, or 4s.4d. per annum, on houses under 5.£rental. That is to say, supposing the money to be raised, and the works executed at once, upon economical principles, and the cost to be repaid, principal and interest at 5 per cent, in equal instalments over 30 years.

105. For this charge there ought to be provided a constant supply of water in every street, and within a few feet of every house, at a pressure commanding every roof in the town, and a corresponding system of street sewers. To make these available for the supply of water to and the passage of refuse from each house, is the business of the owner of the property, and his share of the work may, probably, taking one house with another, be executed for another 1d., per week upon each. Of course, these estimates are approximate only, nor can they be made in greater detail until proper surveys and sections are prepared.

106. The adjustment of the charges incurred in carrying out the proposed improvements is very equitable. The repayment of all sums borrowed may be distributed over any period not exceeding 30 years; so that, on the one hand, posterity cannot be burdened with the debt, and on the other, the expenses will be

borne by those who actually enjoy the benefit, and will be so moderate as to be within the reach of all. A payment of 2d. or 3d. a week upon each house under 5ℓ rental, would be ample to secure water and drainage, and would more than repay itself in the reduction of medical expenses and the improvement of health consequent upon the abolition of cesspools, pigsties, and heaps of manure, such as have been found to a greater or less extent in every town in England inspected under the Public Health Act.

107. SUMMARY.- I have to state, in recapitulation,-

1. That Wrexham, as a town, has no definite boundaries, and only a rural government, composed of the parochial authorities of two, or perhaps three townships, which is complex, without power, and found to be quite ineffectual for the economical management of the town.

2. That the general mortality of the town amounts, if compared with the population of the last official census, to 28.6 in the 1,000, and in the year 1848-9, to 35, or, if compared with the supposed present population, to 29.2 in the 1,000; also; that in certain streets in the town, the observations being made over three years, the annual mortality is as high as 42.2, 45.4, 46.6, 51.6 and 56.2 in the 1,000, these observations being taken severally upon populations of 460, 220, 300, 200, and 160 persons.

3. That this sickness and mortality is distinctly traced to those streets and districts of the town which are damp, undrained, badly supplied with water, without privies or dust bins, often in crowded places, and usually with windows not constructed to open; and that a portion of this sickness and mortality is no doubt due to causes inseparable from poverty, that by far the larger proportion of it may be easily and economically prevented.

4. That these evils of damp and filth are thus the cause of a serious annual charge upon the town in the support of sick poor, besides tending to promote crime and pauperism.

5. That in this town of 1,419 houses, there are 65 inns or public houses, and 41 low lodging-houses, and that drunkenness prevails in a very great degree in the town, and that this and the crimes connected with it are, in a large measure, locally traceable to these houses.

6. That certain of the inhabitants of the town at this time derive a revenue of not less than 532ℓ. per annum from the sale of manure, which they store in and about dwelling-houses, where it produces sickness, and tends thus to swell the poor rate; and that under the proposed system a sum at least equal to the above will accrue to the rate-payers at large.

7. That an efficient local government will be formed upon the application of the Act, and that the evils of want of drainage and water may be supplied at a cost which will be in part repaid by the saving in existing expenses in pumps and the carriage of water, so that if the arrangements be carried out with economy,

and allowance made for the diminution of the poor-rates, the town of Wrexham will actually save money by the proposed remedies, and by a proper regulation of its internal economy.

8. That it is desirable that the churchyard should be closed, levelled, and a deep catch-drain formed around it; and that in future the new burial-ground should be regarded as the regular place of interment for the town.

108. RECOMMENDATIONS.- I therefore recommend,-

1. That the Public Health Act, with the exception of clauses 50 and 96 be applied to the town of Wrexham; that is to say, to those parts of the townships of Wrexham-Abbot and Wrexham-Regis, and the whole of the detached part of Esclusham-Below, all in the parish of Wrexham, all inhabited by mthe petitioning rate-payers, and shown in the annexed map.

2. That the Local Board of Health to be elected under the said Public Health Act shall consist of 12 persons; and that the entire number shall be the whole of the said district.

3. That the 25th of March shall be the day on which one third in number of the said Local Board shall go out of office in each year subsequently to that in which the said election takes place, as required by the Public Health Act.

4. That the property qualification for members of the said Local Board, shall be the possession of real or personal estate, or both, to the value of not less than 500l., or shall be so resident and rated to the relief of the poor in the proposed town district of Wrexham as laid down on the annexed map, upon an annual value of not less than 20l.

I have the honour to remain,
My Lords and Gentlemen,
Your obedient Servant,
Geo. T. Clark.

The General Health Board of Health,
&c. &c. &c.

ℓ = Libra: The currency's symbol is £, a stylised representation of the letter L, standing for livre or lira. Historically, £1 worth of silver coins were a troy pound in weigh.

Any text highlighted green is in need of a closer examination to check that the meaning is correct