Dr. F.W. Barry's report to the Local Government Board on the general sanitary condition of the South Blyth and Newsham urban district / [Fred. W. Barry].

Contributors

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Wellcome Collection 183 Euston Road London NW1 2BE UK T +44 (0)20 7611 8722 E library@wellcomecollection.org https://wellcomecollection.org Dr. F. W. Barry's Report to the Local Government Board on the General Sanitary Condition of the South Blyth and Newsham Urban District.

> GEORGE BUCHANAN, Medical Department, August 22, 1883.

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Area, 1,442 acres; rateable value (Blyth), 5,9321. Population: Blyth (1871), 1,918; (1881), 1,983. Newsham (1871), 994; (1881), 848. Inhabited houses (1881), Blyth, 357; Newsham, 176. Persons per house: Blyth, 5.5; Newsham, 4.9. Persons per acre, 2.0.

I .- Description .- The Urban Sanitary District of South Blyth and Newsham is coterminous with the township of the same name. It is situated in the Blyth Registration Sub-district, and occupies the extreme north-east of the Tynemouth Registration District. To the north it is bounded by the Blyth estuary, to the east by the sea, to the north-west by the Urban Sanitary District of Cowpen, and to the south-west and south by the Horton and Seaton Delaval townships in the Tynemouth Rural District.

Prior to the 31st March of the present year the whole of the district, with the exception of the town of Blyth and a small portion around it, was included in the Rural Sanitary District. I shall, however, describe the sanitary circumstances of the district as at present constituted. The chief centre of population is at Blyth, a small port, situated at the extreme north of the district, on the estuary of the Blyth. Blyth proper is really the eastern and smaller part of a considerable town of the same name, the bulk of which is situated to the west of a tidal creek called the Slake, and is under the jurisdiction of the Cowpen Local Board. The other inhabited parts of the district are two small colliery villages, named North and South Newsham, which are situated considerably to the south-west of Blyth. The inhabitants of Blyth are employed chiefly in shipbuilding and sea-faring occupations. North and South Newsham are inhabited by miners. The population in Newsham has decreased since 1871.

II .- Dwelling Accommodation .- The houses in Blyth are, as a rule, well built, with ample space around them. There are, however, in Tait Street several back-to-back houses, in which there are no means of through ventilation. Some houses in Ridley Street were noticed, in which the backyards were very confined. The streets have all a well-cared-for aspect, and many of them have raised cemented footways.

North Newsham consists of three rows of single colliery cottages, and South New-

sham of two long rows of houses of the same class.

III .- Water Supply .- Blyth has been supplied with water by the lord of the manor (Sir M. White Ridley). The water is obtained from a freestone quarry situated about two miles from the town, and near the village of South Newsham. There are said to be certain springs in this quarry which supply a considerable amount of water, and this is supplemented by the surface water obtained from the agricultural land in the immediate neighbourhood. The water is pumped from the quarry into a service reservoir having a capacity of 3,000,000 gallons, and is supplied to the town by gravitation through a 6-inch main. The water is not filtered, and there are no means for letting fresh air into the pipes during temporary stoppages for repairs, &c.

At South Newsham the water is derived from a well 36 yards deep, sunk near the pit,

and is pumped into a tank by the same engine which brings the coal to bank.

North Newsham is supplied with water from the colliery, the water being distributed to "pants" or stand-pipes at the ends of the rows. Both these supplies possess the objections applying to other colliery supplies,-that they are temporary in character and dependent on the pits being in work. Being at the ends of the rows, the standpipes are at too great a distance from some of the cottages, and thus a great deal of labour in fetching and carrying water is involved.

IV.—Sewerage and Drainage.—Blyth is sewered throughout by means of brick culverts and 18-inch sanitary pipes, put in at different periods by private owners. The sewage is discharged by means of four outlets into the Blyth estuary, and four into the Slake. The sewers are apparently fairly ventilated by means of open grids at the road level, which were put in subsequent to 1872, when Dr. Airy reported upon the want of ventilation. There are, however, no special means for flushing the sewers. The levels appear in some instances to be defective, and a considerable ponding of the sewage, in portions, takes place in consequence. The slops are, as a rule, got rid of by means of slop sinks, situated in the back yards. In the better class of houses, however, there are some cases in which there is a sink in the kitchen connected directly with the sewer, and several of these houses are also furnished with waterclosets, in which the ventilation of the soil pipe is very imperfectly effected by means of 1½ or 2-inch pipe, carried from the highest point of the soil pipe to the roof, no second opening being considered necessary.

South Newsham is drained by a 12-inch glazed pipe, which discharges into Link

House Burn.

North Newsham is also drained by pipes which discharge into the sewer that takes the drainage of Forster Pit and Newsham Freehold, villages in the Tynemouth Rural

and Cowpen Urban Districts.

The Slake, already referred to, is a considerable source of nuisance at low tide, a large surface of mud, rendered filthy by the admixture of sewage from both Blyth and Cowpen, being then exposed.

V.—Excrement and Refuse disposal.—A few houses in Blyth, as noted above, are supplied with waterclosets, but the large proportion have the usual uncovered midden privies, which are, as a rule, situated in small back yards. No change has apparently taken place in the construction of these since Dr Airy's visit, when he very strongly animadverted upon them, except that most of the middens are now furnished with a large door opening into the street, which enables the scavenger to remove the contents with greater ease than formerly. I was informed that this official now looks upon scavenging as a "real pleasure." As most of the pits are below the level of the ground, and so constructed as to receive all the rain falling upon them and the adjoining closet, the contents are always in a more or less sloppy condition, and are undoubtedly a source of dangerous nuisance. In Ridley Street I noticed one which was situated 5 feet from the window of a living room. The back-to-back houses in Tait Street are apparently unfurnished with privy accommodation of any kind.

At South Newsham the houses have wooden privies in the gardens, the excrement

passing into cesspits dug in the soil.

At North Newsham the middens of the privies are sunk 2 feet 6 inches below the

surface of the ground, and each is common to either two or four closets.

The scavenging of Blyth is carried out by the Sanitary Authority, and the middens are said to be emptied every three weeks. The public ashpits are cleaned weekly. "Disinfectants" are used when it is considered advisable. The midden contents are carted to the Links, and then used to level up some waste land. At the present time this refuse is being laid on to a thickness of 3 feet, and on the surface of this grass seeds are sown. A large field to the east of the Ropery and Hospital has been entirely covered in this manner with refuse, and on this raised surface there is a possibility that buildings may be erected at some future time. The total cost of scavenging in 1882 was 1451.

In North and South Newsham the scavenging is under the control of the colliery proprietors.

VI.—Slaughter-houses.—All the slaughtering in this district is carried on in the range of public slaughter-houses erected by the Sanitary Authority in 1873. These, at the time of my visit, had recently been whitewashed for the first time since their erection. Water is laid on to only one of the slaughter-houses, but I understand that a large tap is about to be erected in the yard. Sufficient attention does not appear to have been paid to the carrying out of the Authority's byelaws with regard to slaughter-houses.

There are no common lodging-houses in the district.



VII.—Hospital Accommodation.—A description of the Blyth Cottage Hospital will be found on page 59 of Dr. Thorne Thorne's Report to the Local Government Board "On the use and influence of Hospitals for Infectious Diseases." Up to the present year no change has been made in the construction of the hospital, but I understand that the building is to be re-roofed and the wards raised in height in order to increase the amount of cubic space, which has hitherto been only some 800 or 900 feet per bed. It is also stated that, as a cottage hospital for general purposes is shortly to be erected, it will be possible to dedicate the old building to the purposes of an infectious diseases hospital. During the last three years nine cases of enteric fever have been treated in the hospital, but four of these cases were received from ships, and the remainder were paupers, whose expenses were borne by the guardians of the Tynemouth Union. No attempt has yet been made to isolate scarlatina in the hospital.

VIII.—General Sanitary Administration.—The Local Government Act was adopted for the district of South Blyth in 1863, and the district was extended to embrace the whole township of Blyth and Newsham in the spring of the present year.

South Blyth, in conjunction with Cowpen, was visited and reported upon by Dr. Airy in 1872. The special defective points to which he then drew attention were, the insufficient ventilation of the sewers, the improper means of excrement disposal, the defective system of refuse removal, and the want of hospital accommodation. As already noticed, these, with the exception of the second, have been dealt with in a more or less efficient manner, and the town itself undoubtedly has now a well-cared-for and clean appearance. It is to be hoped that now the Board will take some effective means to get rid of the present objectionable privy midden system.

The only loan that has been sanctioned since the formation of the Board was one of 500l., for the construction of the slaughter-houses.

The Medical Officer of Health receives an annual salary of 40l., of which half is repaid from the moneys voted by Parliament. This officer also holds a similar appointment for the Northern Division of the Tynemouth Rural Sanitary District. He is apparently thoroughly acquainted with the sanitary circumstances of every portion of his district, and has reported from time to time to the Sanitary Authority the defective conditions noted in this Report. When cases of infectious disease are heard of by him, certain steps are taken to prevent their spread, and in some instances he has secured the removal of cases to the Cottage Hospital. It would be advantageous if effective isolation were more frequently ensured. There are no means for the proper disinfection of clothing, bedding, &c., and there is no mortuary accommodation. As his father is the Registrar of Births and Deaths, the Medical Officer of Health has knowledge of every death immediately on its occurrence.

The Inspector of Nuisances also acts as Surveyor, and receives a salary of 15l. (half of which is repaid), in the former capacity, and 20l. in the latter. His duties are apparently well performed.

The Sanitary Authority possess a code of byelaws with regard to-

(a.) New streets and buildings.

(b.) Slaughter-houses.

(c.) Prevention of nuisances arising from snow, filth, &c.

(d.) The cleansing of footways, &c., removal of refuse, and cleaning of privies.

This code is now quite out of date, having been in force since 1864. The byelaws with regard to new streets and buildings are very defective and indefinite, nearly everything being left to the discretion or approval of the Local Board or their Surveyor. The provisions with regard to health are especially defective. All reference to provision of damp course, construction of foundations, space in front of houses, ventilation of soil pipes, disconnexion of the house wastes, &c. is entirely absent, and the byelaws with regard to the construction of flues, privies, ashpits, &c. are so deficient as to be practically useless.

IX.—General Mortality Statistics and Prevalence of Disease.—In the subjoined table will be found the mortality statistics for the South Blyth Urban Sanitary District for the 10 years 1873–82. As the Newsham portion of the district was only added in the present year, the statistics with regard to it have been included with those for the northern division of the Tynemouth Rural Sanitary District.

MORTALITY STATISTICS for the URBAN SANITARY DISTRICT OF SOUTH BLYTH, for the 10 Years 1873-1882.

ATTACKS OF	1000	Total Deaths from all causes registered in the District.	Total Deaths corrected for Workbonso.	Corrected Death-Rate per 1,000 living.	Deaths from						ses in 1,000		Age.	ιΛge	
Year.	Esti- mated Popu- lation.				Small Pox.	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Fever.	Diarrhea, Dysentery, &e.	Death-Rate from Discases in Columns 5-11 per 1,000 living.	Births.	Deaths under 1 Year of Age.	Deaths under 1 Year of Age per 1,000 Births.
Columns	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
1873	1,935	60	60	31.0	-	_	13	_	-	3	2	9.3	94	12	128
	1,941	74	75	38-1	-	_	19	1	-	2	2	8.7	92	13	141
	1,947	67	67	34-4	_	9	2	1	1	2	3	9.3	103	18	175
	1,953	44	45	23.0	_	-	2	-	1	1	-	2.0	102	13	127
1877		31	33	16.8	-	-	-	1	-	2	1	2.0	79	13	164
1878		39	39	19.8	-	-	-	-	-	2	2	2.0	78	11	151
1879 -	2 000	31	32	16.2	-	-	5	_	-	_	-	2.5	75	3	40
1880 -	1,977	44	45	22.7	-	-	1	-	-	-	2	1.5	73	13	178
1881 -	1,983	38	42	21-1	-	-	-	-	-	1	2	1.5	66	6	91
1882 -	1,989	41	41	20.6	-	-	-	-	-	-	1	.5	66	9	136
Mean for 10 years 1873-1882	1,962	47	48	24.3	-	4.60	17.85	1.53	1.02	6.64	7-66	3.9	82	11	133
	Blyth Sub-distr	Registr	ation }	22.6	0.05	3.00	16:30	1-40	3.05	6-05	8.65	3.8	- N	-	167
Mean of 0 years, < 873-1882	Tynemouth tion Dist	Reg	istra-}	22.0	0.05	2.48	13.25	0.72	4.77	4.42	10-16	3.6	-	-	155
	England an	d Wale	s -	20.8	0.79	3-76	6.94	1-27	5.03	4.22	8.45	3.0	-	-	145

Rates per 10,000 of the population per annum.

From the above table it will be seen that the mean mortality from all causes during the 10 years 1873-82 has been at the rate of 24.3 per 1,000 living. This is an exceedingly high rate for a district of this character, but upon an examination of the table it will be seen that it is entirely due to the high rates which prevailed in the first quinquennial period, during which the mean death-rate was as high as 28.6 per 1,000 living; whereas in the second quinquennial period it was reduced to 20.1 per 1,000. The mean death-rate from "fever" has during the 10 years been as high as 6.64 per 10,000 living, a rate which is considerably in excess of that which prevailed during the same period in the large cities and towns of England. This rate has, however, materially diminished during the last five years, but so long as the present circumstances which favour the pollution of the air in and around dwellings, which are mainly due to the manner in which the privy midden system is carried out, so long will there be danger that at any time enteric fever may again become prevalent. It is interesting to note that the diminution in the prevalence of enteric fever, which has been referred to, followed upon the date (the end of 1877) when the ventilation of the public sewers was completed.

The mean death-rate from scarlatina during the ten years 1873–82 was 17.85 per 10,000 living, this being considerably higher than that which obtained in the Tynemouth Registration District (13.25), and rather more than $2\frac{1}{2}$ times that of England and Wales (6.95). It was fatally epidemic in 1873, when 13 deaths were registered, and in 1874, when 12 deaths were registered in a population of under 2,000 persons. Since that period it has not been so fatal, but in 1879 five deaths were registered from scarlatina, this number being equal to a rate of over 25 per 10,000 living. The future prevalence of and mortality from this disease must to a great extent depend on the use made of the means for isolation, and on the efficiency with which disinfection of clothing, bedding, &c. is carried out.

The mortality of children under one year of age has been 133 per 1,000 births registered; this is, with one exception, the lowest infant death-rate occurring in the whole registration district.

FRED. W. BARRY.

June 1883.

RECOMMENDATIONS.

(1.) The Authority are fortunate in possessing at any rate some hospital accommodation, but it is desirable that the building should be used solely for the purpose of isolating cases of infectious disease. To render it suitable for this purpose it would require certain alterations, which should be made under the direction, and with the advice of, the Medical Officer of Health, and an architect who has paid especial attention to hospital construction.

A mortuary, as also means for the efficient disinfection of clothing and bedding,

should be provided.

(2.) The condition of the privies should receive the early attention of the Sanitary Authority, and arrangements should be made so that the nuisance resulting from the present system of excrement disposal may be prevented. If fixed receptacles for excrement be retained, they should be reduced to the smallest practicable dimensions and made watertight, with the floor at least three inches above the level of the ground outside, and so constructed as to keep out all unnecessary moisture, and facilitate the mingling of ashes and excrement. It will probably, however, be more advantageous to the Authority to adopt some form of pail closet. For information on the several systems that have been adopted with advantage in different places, the Sanitary Authority may refer to the Report of the Local Government Board on "Certain means of preventing excrement nuisances in towns and villages."

All privies, which by construction, situation or condition, are a source of nuisance, should be dealt with as such, and regulations should be adopted to ensure the proper

construction of all newly erected privies and ashpits.

(3.) No refuse from midden privies should ever be used for filling up sites which may be built upon. No such sites now containing such deposit should be built upon until all material impregnated with animal or vegetable matter shall have been properly removed by excavation or otherwise from such site.

(4.) A permanent supply of wholesome water should be secured for all houses in the district that are without it. In view of the occasional intermissions which must be expected to occur in the professedly constant water service, arrangements should be

made for admitting air freely into the mains during such intermissions.

(5.) The Sanitary Authority should obtain skilled advice with regard to the condition of the sewers, and any defects as to level or ventilation should be remedied. Adequate means for flushing should be provided. Watercloset soil pipes should, wherever practicable, be efficiently ventilated by means of two openings, and all sink, lavatory, and other waste pipes should be brought outside the dwellings, and made to terminate in the open air.

(6.) The advisability of either filling up the Slake or of diverting the public drainage from it is a matter worthy of the consideration of the Blyth and Cowpen Sanitary

Authorities.

(7.) The regulations with regard to slaughter-houses should be strictly enforced.

(8.) With a view to the adoption of certain of these recommendations and to the more efficient sanitary administration of the district, the Sanitary Authority should consider the advisability of revising their byelaws. For affecting such revision the Authority will do well to consult the model byelaws issued by the Local Government Board.

delice of the rest will not be used to be able to be able to the rest of the r