

[Report of the Medical Officer of Health for Shoreditch].

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METROPOLIS LOCAL MANAGEMENT ACT.

VESTRY OF
Saint Leonard's, Shoreditch.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH,

For the Year ending 26th December, 1857.

BY
ROBERT BARNES, M.D., F.S.S.,

MEDICAL OFFICER OF HEALTH FOR SHOREDITCH;
SENIOR PHYSICIAN TO THE DREADNOUGHT HOSPITAL.



London :

PRINTED BY ANDREW T. ROBERTS, 2, HACKNEY ROAD,
OPPOSITE SHOREDITCH CHURCH.

1858.

METROPOLITAN BOARD OF HEALTH
METROPOLIS TO THE METROPOLITAN BOARD OF HEALTH
Saint Leonard's, Shorthill.

ANNUAL REPORT
OF THE
METROPOLITAN BOARD OF HEALTH
FOR THE YEAR 1871.

To the Hon. W. St. Leonard, Secretary
of the Metropolitan Board of Health.

THESE REPORTS OF THE METROPOLITAN BOARD OF HEALTH
FOR THE YEAR 1871, ARE THE FIRST OF THE KIND
PUBLISHED SINCE THE YEAR 1857. THE BOARD
WAS ESTABLISHED IN 1857, AND SINCE THAT
DATE HAS BEEN ENGAGED IN A CONTINUOUS
AND SUCCESSFUL STRuggle WITH THE
QUESTIONS OF THE METROPOLITAN BOARD OF HEALTH.
THE BOARD HAS BEEN SUCCESSFUL IN
OBTAINING THE NECESSARY ACTS OF PARLIAMENT
FOR THE REGULATION OF THE METROPOLITAN BOARD OF HEALTH.
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METROPOLIS LOCAL MANAGEMENT ACT.

THE VESTRY OF
SAINT LEONARD, SHOREDITCH.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH,

For the Year ending December 26th, 1857.

To the Vestry of St. Leonard, Shoreditch.

GENTLEMEN,

The following Report embraces a summary view of the Health-movement of the population of Shoreditch, during the year ending on the 26th December, 1857. The leading facts will be found expressed in greater detail in the Quarterly Reports. The usefulness of an Annual Report consists in bringing into greater concentration the history of detached portions of the year, so as to obtain a more comprehensive view, and lay the foundation for larger deductions.

Table I. in the Appendix exhibits the mortality from each disease for the three years 1855, 1856, 1857, side by side. The variations in the influences of particular causes is thus seen at a glance. In Table II. the deaths during the same three years are summed up to show the mortality at different periods of life.

The gross mortality of the three years is represented by the following numbers, which are placed in chronological order: 2998; 2719; 2955. The mortality of 1857 was therefore less, relatively, and even absolutely, than in 1855; whilst it was absolutely greater than in 1856. If we assume the population to have been 123,000 in 1855, and that it has increased at the ratio of 3 per cent. during 1856 and 1857, we find that the death-rate was for 1855, 1 person to every 41 living, or 244 to 10,000 living, or 2.44 per cent.; for 1856 with an estimated population of 126,000, the death-rate was 1 person to every 46 living, or 216 to 10,000 living, or 2.16 per cent.; for 1857 with an estimated population of 130,000 the death-rate was 1 person to every 44 living, or 227 to every 10,000, or 2.27 per cent.

It appears that although the mortality was somewhat higher in 1857 than in 1856 (the excess being 11 more deaths to every 10,000 living), the general health of Shoreditch has been steadily improving. In the 10 years from 1841 to 1850 the death-rate was

estimated by Dr. Farr at 280 per 10,000. The death-rate of all England in 1857 was rather less than 2·20 per cent., that of the metropolis generally about 2·31 per cent. giving a slight life-balance in favor of Shore-ditch as compared with London.

Duration of Life. Table II. shows that 779 deaths took place under the age of 1 year; and 615 above 1 year and under 5, or 1394 under 5 years; being ·47 or rather less than one half. If this infantile mortality is contrasted with that of 1855 and 1856, it exhibits a deterioration of 0·1. It might, however, on well established hygienic laws, be anticipated that the continuing concentration of the population would tend to greater destruction of infant life.

Pursuing the analysis into the particular causes of death, we find that the diseases may be arranged in the order of destructiveness as follows: 1st. *Phthisis*, destroying 371 persons; 2nd. *Bronchitis*, especially fatal to persons in advanced years, 243; 3rd. *Pneumonia*, the scourge of infants in cold weather, 235; 4th. *Fever*, 184; 5th. *Tubercular or Scrofulous Diseases*, other than Phthisis, 171; 6th. *Hooping Cough*, 162; 7th. *Diarrhœa* 146; 8th. the infirmities of *Old Age*, which a perfect sanitary condition would raise to the first place, 133; 9th. *Convulsions*, and 10th. *Atrophy*, numbering respectively 107 and 88, two indefinite heads, under which

are ranged many deaths the exact cause of which is not determined, and which especially includes many children dying of hereditary diseases, such as Scrofula and Syphilis; 11th. *Causes not specified*, a head which I have adopted as the most convenient for the classification of all deaths, the cause of which is not certified by medical practitioners, and of deaths the cause of which has been the ostensible object of inquiry in the Coroner's Court, ending in the unmeaning verdicts: "Died of the visitation of God," "Natural Death," &c., 85; 12th. *Measles*, 83; 13th. *Diseases of the Heart and Blood Vessels*, 79.

On comparing the mortality from the chief diseases in the three years, we find that Measles, Hooping-Cough and Diarrhœa, have been more fatal in 1857 than in 1856 and 1855; whilst Small-Pox, Scarlatina, Croup, Typhus-Fever, and Puerperal Fever were less fatal.

The following shows the progress of Vaccination in the three years under comparison. The numbers of vaccinations have been supplied to me by Mr. Edwards the Clerk of the Trustees:

	Vaccinations	Births	Proportion
Sept. 29th, 1854, to Sept. 29th, 1855 ..	2812	4542	= .62
„ 1855, „ 1856...	3094	4748	= .65
„ 1856, „ 1857...	3280	4869	= .69

Although the vaccination-year does not quite correspond with the statistical-year, the comparison is close enough to prove that Vaccination has been steadily extending. It is clear, however, that there is yet room for a closer approximation than 31 per cent. between the number of vaccinations and the number of children born. If we deduct from the births of last year 500 children dying under three months, we find that 75 per cent. of all children bound by law to be vaccinated were registered as having undergone this operation. The balance of 25 per cent. even after making every allowance for non-registered vaccinations and other exceptions, is still large; and indicates a considerable number of unprotected persons.

The great increase in Diarrhœa, amounting to 33 per cent., was due to the prevalence of a Choleroïd epidemic. Upon the exact value of our improved defences against cholera, it would be presumptuous to speculate; but it is not unreasonable to conclude that but for these improved defences, the choleraic influences present last autumn would have proved much more fatal. The Typhoid fever which has hitherto been constantly endemic in London is more strictly dependent upon local conditions than Diarrhœa; is less influenced by seasons or atmospheric changes; and is therefore a better test of the sanitary state of a town than Diarrhœa. It is no doubt true that Typhoid fever

is occasionally communicated by contagion : and in two or three instances I have seen reason to conclude that the disease has been imported into the district by persons who had contracted the disease elsewhere.

Still the great fact remains that the origin of Typhoid fever is essentially connected with the evolution of miasmata arising from animal and vegetable matter. These must, however, attain a certain degree of concentration, and probably, must undergo some chemical change during stagnation in a confined place, in order to acquire morbid force. Hence the superlative importance of free ventilation as a preventative of Fever. By the free circulation of air in a dwelling, any miasm arising from inherent causes of infection, such as over-crowding, or the emanations from cess-pools, may be kept so diluted as to be comparatively harmless; and stagnation is impossible. This is, of course, no argument against removing those inherent causes, to the utmost possible extent: but it is a powerful argument for the strenuous enforcement of ventilation in those closely-built and densely-inhabited localities where the entire prevention of the developement of the fever-poison is impossible.

The following Table exhibits the relative activity of the Diarrhœa and Fever poisons at different seasons of the year.

	FIRST QUARTER.			SECOND QUARTER		
	Fever	Diarrhœa	All Causes	Fever	Diarrhœa	All Causes
1856	62	15	711	67	6	637
1857	37	4	706	31	20	691
	THIRD QUARTER.			FOURTH QUARTER.		
	Fever.	Diarrhœa	All Causes	Fever.	Diarrhœa	All Causes
1856	53	80	580	41	6	691
1857	51	110	753	65	11	789

If we take a wider survey and embrace the mortality of all London, we observe analogous phenomena. It is familiar to every one that Diarrhœa is an autumnal disease. It is not so generally remembered that Fever may prevail more uniformly at all seasons. The useful practical lesson that flows from this latter fact, is, that a sanitary improvement which is efficacious against Fever is a perennial blessing: it implies that the

dwelling wherein such improvement has been effected is rendered permanently more salubrious, and is therefore increased in value.

In every Report I have had occasion to dwell upon the subject of Fever. It is indeed a disease that can never fail to excite interest and inquiry so long as it shall prevail. The progress of observation appears to me to prove more and more distinctly that it is essentially dependent upon local conditions. It is therefore a test of the sanitary condition of any given locality or dwelling. It is a test always available : for unlike Diarrhœa or Cholera, it does not require the heat of summer or autumn, or the concurrence of a specific epidemic poison for its developement. It is a far more certain test than the general death-rate deduced from a comparison of the mortality with the estimated population ; this is liable to sources of fallacy which it is in many instances impossible to unravel.

Granted that Fever is the great Sanitary Test, it follows that wheresoever Fever is, there is the indication for sanitary work. It follows, unless it be further proved that there are other diseases that depend for their developement or aggravation upon causes operating from a distance, that it is absurd to look for any amelioration of the general health-condition of a locality, from the execution of presumed sanitary works in

places remote from that locality. To put the question in a practical shape, I will ask : Can the health-standard of Shoreditch be improved by works having for their object the diversion of the sewage from the Thames ? Is there any malaria emitted from the Thames capable of being wafted over the intervening space in such a form as to produce sickness amongst you ? In putting the question in this shape, I am not exposing myself or you to the charge of looking at the Main-Drainage Schemes from a parochial or selfish point of view. For "Shoreditch" any other district of the metropolis might be substituted. If the question, as applied separately to the districts which in their aggregate constitute the metropolis, be answered in the negative, the problem now engaging the anxious attention of the whole metropolis, will be solved.

In a Report dated 23rd November, 1856, which has deservedly excited much public attention, your Chief Surveyor, Mr. Freebody, urged many forcible objections against the principles of the Main-Drainage Intercepting Sewer schemes. These objections were directed from an engineering point of view. In two Reports, one for the quarter ending December, 1856, the other for the quarter ending September, 1857, I called in question the truth of the assumption upon which hangs the expediency of resorting to any scheme for diverting the Sewage from the Thames. Unless it

ST LEONARD'S, SHOREDITCH

could be proved that the Thames under its present *regime* exerted a baneful effect upon the health of the inhabitants of London, it followed that the sanitary necessity for the Sewage-Interception works did not exist. In the presence of this fundamental difficulty, it is superfluous, or at least premature, to enter deeply into the numerous consequential questions arising if decided in the affirmative. I pass over, therefore, as of contingent interest only, the very grave doubts that may be justified as to whether the principle of Sewage-Interception for discharge into the river at a point below the metropolis, be really calculated to effect any important improvement in the river, or to solve the question: "How shall we dispose of the excreta of the metropolis?" Two questions take logical precedence of all Sewage-Interception schemes. Both must be settled before any Sewage Interception scheme can be entitled to take rank as a practical question. These are: 1st.—The question of the deleterious influence of the Thames under the existing order of things. 2nd.—How far any ill consequences arising from the present mode of discharging the sewage into the river, may be obviated by works adapted to the improvement of the bed and banks of the river. That the bed and banks of the Thames urgently need improvement on other grounds than that of increasing the self-purifying capacity of its waters, is admitted on all hands. It is therefore a matter of the plainest expediency and

economy to begin with this great work. Let the sanitary effects of this work be tested first. Then when experience shall have proved its sanitary inefficiency, let further remedies be considered.

The Vestry will not expect from me in this place an elaborate detail of all the observations and inquiries which I have made as to the condition of the waters of the Thames, and the health of those who dwell on or near the river. But I think it due to you to take this opportunity of stating, that since the publication of the Reports referred to, in which I distinctly challenged the production of evidence in support of the proposition that "the influence of the sewage upon the Thames is pernicious", I have made diligent inquiry amongst those likely to be informed upon the subject without succeeding in eliciting any such evidence. No one has yet undertaken to show what form of disease it is that the Thames produces, or, in what way it acts deleteriously upon health. On the other hand, extended observation furnishes more and more reasons for taking a step that ought to have preceded the enactment of the Sewage-Interception clause of the Metropolis Local Management Act, namely:—a deliberate Parliamentary inquiry into the sanitary necessity of that clause.

In concluding, I wish to submit another point which is deserving of consideration before any great

departure from the present system of discharging the London sewage by a multitude of outfalls, be decided upon. It appears to me that the enormous masses of solid and liquid matters which make up our London sewage can best be grappled with on the principle of subdivision, as opposed to that of concentration. If it be found that we have no resource, but to throw the sewage unaltered into the river, then its subdivision into numerous small streams entering the river at different points through several miles of its course, affords the greatest facilities for its speedy conversion into innocuous organic and inorganic forms. If it be found that the putrifiable elements of sewage can be profitably extracted or intercepted, then again it seems probable that subdivision of the sewage will offer the greatest facilities for the necessary operations. With regard to the most imperative want, that of getting rid of the sewage as speedily as possible from our habitations, there can be little doubt about the advantage of discharging it by the shortest and most natural outfalls to the river, over a plan for collecting it in gigantic cloacæ.

I have the honor to be,

GENTLEMEN,

Your faithful Servant,

ROBERT BARNES, M.D.

13, *Devonshire Square, N. E.*

20th February, 1858.

TABLE I.
Deaths Distributed according to diseases—for 1855, 1856, and 1857.

Causes of Death.	1855	1856	1857	Causes of Death.	1855	1856	1857
I. ZYMOTIC :				Enteritis	20	7	10
Small Pox	53	13	7	Peritonitis	10	4	12
Measles ..	48	50	83	Ascites	2	3	1
Scarlatina ...	138	111	109	Ulceration of Intestines...	5	3	4
Hooping Cough	131	129	162	Hernia (Rupture)	3	5	...
Croup	35	34	31	Ileus	6	5	...
Thrush	12	7	13	Intussusception	2	5	1
Diarrhœa	112	107	146	Stricture of Intestinal			
Dysentery	7	4	6	Canal	2	...	3
Cholera	6	8	3	Disease of Stomach, &c.	5	16	15
Influenza ..	6	3	9	Inflammation of Liver			
Ague	4	1	...	(Hepatitis)	15	11	14
Remittent Fever	2	...	3	Jaundice ..	8	4	9
Infantile Fever .....	...	2	3	Disease of Liver	10	21	23
Typhus Fever	153	225	184	Disease of Spleen	1	...	...
Puerperal Fever (Metria)	13	11	8				
Rheumatic Fever	6	9	6	VIII. KIDNEY, &c.:			
Erysipelas	13	21	15	Nephria (Bright's Dis.)..	4	3	4
Syphilis	8	9	5	Stone	7	1	...
Noma (Canker)	4	1	1	Cystitis	4	1	2
				Stricture of Urethra .....	...	1	1
II. DROPSY, &c.:				Disease of Bladder, &c..	...	...	...
Hæmorrhage	7	13	4	Disease of Kidney.....	8	10	14
Dropsy	77	51	34				
Abscess	5	2	8	IX. CHILDBIRTH ;			
Ulcer	5	3	5	Ovarian Dropsy	3	1	2
Fistula	1	1	...	Childbirth (see Metria)..	12	13	15
Mortification	1	9	4	Disease of Uterus, &c. ..	9	9	9
Cancer	42	31	46				
Gout	3	...	1	X. JOINTS, BONES, &c. ;			
				Rheumatism	5	6	...
III. TUBERCULAR :				Disease of Joints, &c. ...	10	3	...
Scrofula	15	16	24				
Tabes Mesenterica	55	50	86	XI. SKIN, CELLULAR TISSUE			
Phthisis (Consumption)	392	334	371	Carbuncle	1	2	1
Hydrocephalus	64	60	61	Phlegmon	1	2	...
				Disease of Skin, &c. ....	...	2	1
IV. BRAIN AND NERVES :							
Cephalitis	31	27	30	XII. MALFORMATIONS ;	10	4	6
Apoplexy	72	59	44				
Palsy (Paralysis)	85	66	45	XIII. PREMATURE BIRTH			
Delirium Tremens	7	4	22	AND DEBILITY.....	53	65	68
Epilepsy	22	15	17				
Tetanus	1	...	12	XIV. ATROPHY	118	92	88
Insanity	18	5	14				
Convulsions	107	102	107	XV. OLD AGE.....	86	80	133
Disease of Brain, &c.....	26	22	24				
				XVI. VIOLENT DEATH ;			
V. HEART & BLOOD VESSELS	75	81	79	Intemperance	3	4	2
				Privation of Food	3	2	2
VI. LUNGS AND ORGANS OF				Want of Breast Milk ..	23	19	6
RESPIRATION:				Neglect .....	...	...	...
Laryngitis	16	14	13	Cold	1	...	...
Bronchitis	189	191	243	Poison	3	4	1
Pneumonia	256	235	235	Burns and Scalds ..	6	2	3
Asthma	39	41	28	Hanging	6	8	5
Disease of Lungs	11	7	21	Suffocation	14	13	4
				Drowning	7	13	5
VII. STOMACH & DIGESTIVE				Fractures & Contusions..	6	9	4
ORGANS:				Wounds	4	1	1
Teething	37	19	22	Other Violence	4	4	7
Quinsey	2	1	3				
Gastritis	4	4	4	XVII. CAUSES NOT SPECIFIED	78	52	85

Cases of Death.				Cases of Death.			
1885	1886	1887		1885	1886	1887	
10	7	30	Enteritis	10	7	30	Enteritis
12	4	10	Peritonitis	12	4	10	Peritonitis
1	3	2	Ascites	1	3	2	Ascites
4	3	3	Obstruction of Intestine	4	3	3	Obstruction of Intestine
...	3	3	Hæmorrhoids (Internal) .....	...	3	3	Hæmorrhoids (Internal)
...	3	3	Hæmorrhoids (External) .....	...	3	3	Hæmorrhoids (External)
1	3	3	Intestine	1	3	3	Intestine
...	...	...	Stricture of Intestine .....	...	...	...	Stricture of Intestine
...	...	...	Cancer .....	...	...	...	Cancer
15	15	5	Disease of Stomach, &c.	15	15	5	Disease of Stomach, &c.
...	...	...	Inflammation of Liver .....	...	...	...	Inflammation of Liver
14	41	15	Hepatitis	14	41	15	Hepatitis
...	4	3	Jandice .....	...	4	3	Jandice
23	21	10	Disease of Liver	23	21	10	Disease of Liver
...	...	1	Disease of Spleen .....	...	...	1	Disease of Spleen
...	...	...	Vill. Rupture, &c. .....	...	...	...	Vill. Rupture, &c.
...	...	4	Nephritis (Bright's Dis.) .....	...	...	4	Nephritis (Bright's Dis.)
...	1	7	Stone .....	...	1	7	Stone
...	1	4	Cystitis .....	...	1	4	Cystitis
1	1	...	Stricture of Uterus	1	1	...	Stricture of Uterus
...	...	...	Disease of Bladder, &c. .....	...	...	...	Disease of Bladder, &c.
14	10	8	Disease of Kidney	14	10	8	Disease of Kidney
...	...	...	IX. Cancer .....	...	...	...	IX. Cancer
...	...	...	Ovarian Tumor .....	...	...	...	Ovarian Tumor
1	12	12	Calculus (see Mole)	1	12	12	Calculus (see Mole)
...	9	9	Disease of Uterus, &c. .....	...	9	9	Disease of Uterus, &c.
...	...	...	X. Tumor, Breast, &c. .....	...	...	...	X. Tumor, Breast, &c.
...	...	...	Rheumatism .....	...	...	...	Rheumatism
...	...	10	Disease of Joint, &c. .....	...	...	10	Disease of Joint, &c.
...	...	...	XI. Scars, Contracted Tissues .....	...	...	...	XI. Scars, Contracted Tissues
...	...	1	Carbuncle .....	...	...	1	Carbuncle
...	...	1	Furuncle .....	...	...	1	Furuncle
...	...	...	Disease of Skin, &c. .....	...	...	...	Disease of Skin, &c.
...	...	10	XII. Malformations .....	...	...	10	XII. Malformations
...	...	...	XIII. Burns, Frost Bites, and Dermatitis .....	...	...	...	XIII. Burns, Frost Bites, and Dermatitis
...	...	...	XIV. Atrophy .....	...	...	...	XIV. Atrophy
...	...	...	XV. Old Age .....	...	...	...	XV. Old Age
...	...	...	XVI. Violent Death .....	...	...	...	XVI. Violent Death
...	...	...	Intemperance .....	...	...	...	Intemperance
...	...	...	Intoxication of Food .....	...	...	...	Intoxication of Food
...	...	...	Want of Breast Milk .....	...	...	...	Want of Breast Milk
...	...	...	Neurosis .....	...	...	...	Neurosis
...	...	...	Gold .....	...	...	...	Gold
...	...	...	Idiosyncrasy .....	...	...	...	Idiosyncrasy
...	...	...	Burns and Scalds .....	...	...	...	Burns and Scalds
...	...	...	Blasphemy .....	...	...	...	Blasphemy
...	...	...	Substitution .....	...	...	...	Substitution
...	...	...	Browning .....	...	...	...	Browning
...	...	...	Presences & Contusions .....	...	...	...	Presences & Contusions
...	...	...	Wounds .....	...	...	...	Wounds
...	...	...	Other Violence .....	...	...	...	Other Violence
...	...	...	XVII. Cases not reported .....	...	...	...	XVII. Cases not reported

TABLE II.

Shewing the Deaths at different periods of life, in 1855, 1856, and 1857.

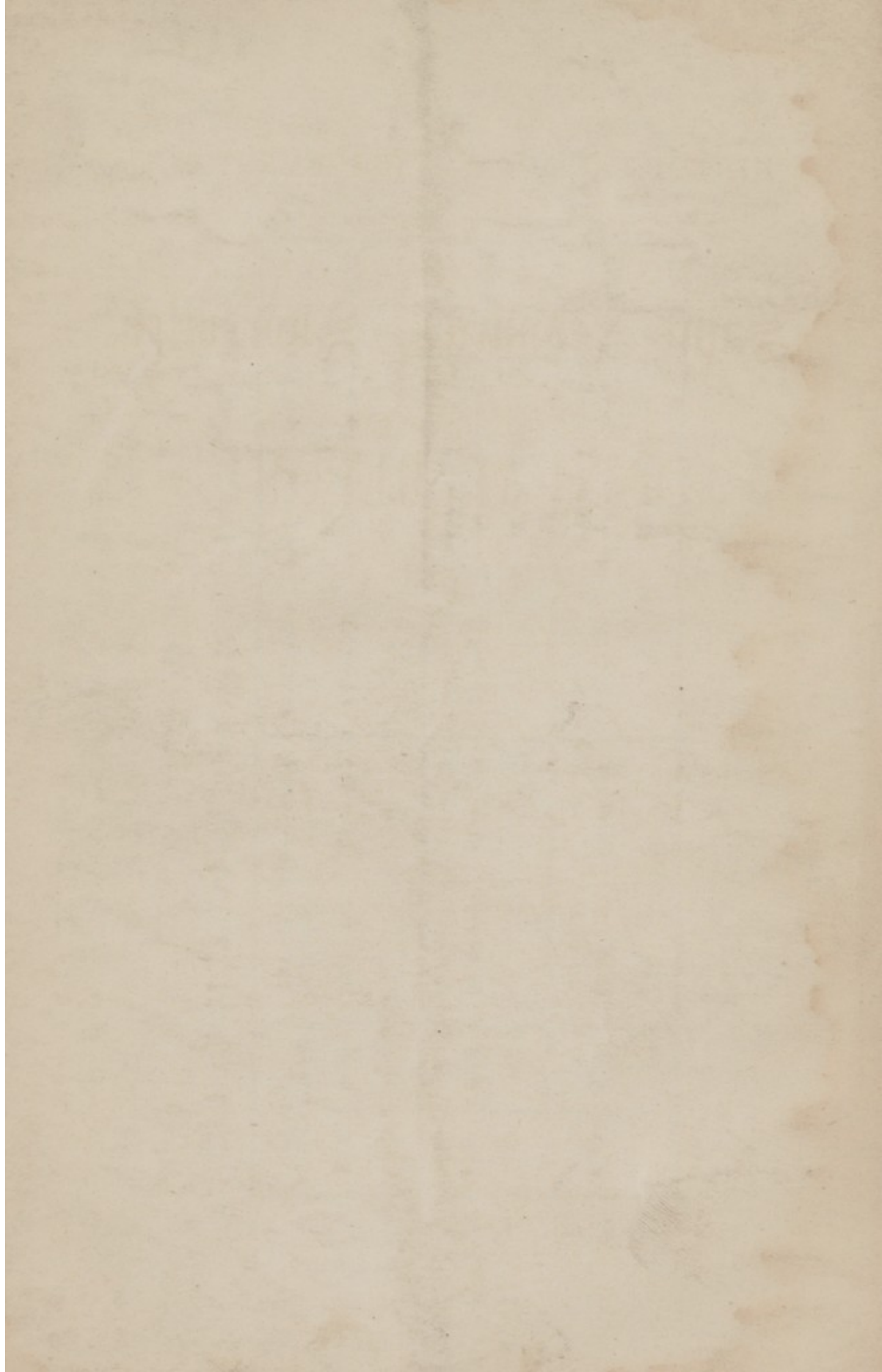
	Under 1 Year.	From 1 to 5.	From 5 to 40.	From 40 to 60	From 60 Upwards.	TOTAL Deaths. Births.	
1855	714	675	570 = .19	442 = .15	597 = .20	2998	4542
	1389 = .46						
1856	690	542	511 = .18	425 = .16	551 = .20	2719	4748
	1232 = .46						
1857	779	615	555 = .18	462 = .16	544 = .19	2955	4869
	1394 = .47						

Showing the Deaths at different periods of life in 1855, 1856, and 1857.

TABLE II

1855	1854 — 45		55 — 10	63 — 10	74 — 10	80 — 10	Deaths From 40	Deaths From 40		
	319	915								
1856	1863 — 40		57 — 10	62 — 10	71 — 10	81 — 10	Deaths From 40	Deaths From 40		
	620	915								
1857	1850 — 40		55 — 10	61 — 10	70 — 10	80 — 10	Deaths From 40	Deaths From 40		
	314	915								
Under 1 Year		From 1 to 5		From 5 to 10		From 10 to 20				
314		915		55 — 10		61 — 10				
Under 1 Year		From 1 to 5		From 5 to 10		From 10 to 20				
314		915		55 — 10		61 — 10				
Under 1 Year		From 1 to 5		From 5 to 10		From 10 to 20				
314		915		55 — 10		61 — 10				





SHOR6

By - M. Surgeon

METROPOLIS LOCAL MANAGEMENT ACT.

VESTRY OF

Saint Leonard, Shoreditch.

QUARTERLY REPORT

OF THE

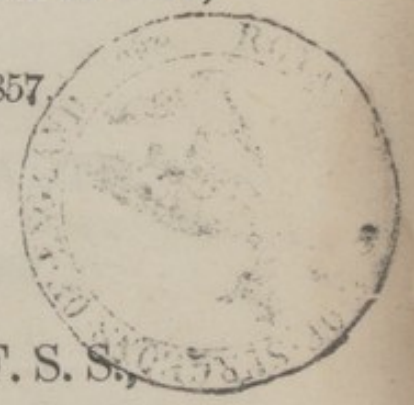
MEDICAL OFFICER OF HEALTH,

FOR THE QUARTER ENDING 27TH JUNE, 1857.

BY

ROBERT BARNES, M.D., F.S.S.,

MEDICAL OFFICER OF HEALTH FOR SHOREDITCH;
SENIOR PHYSICIAN TO THE DREADNOUGHT HOSPITAL.



London:

PRINTED BY ANDREW T. ROBERTS, 2, HACKNEY ROAD,

OPPOSITE SHOREDITCH CHURCH.

1857.

WESTMINSTER LOCAL MANAGEMENT ACT

1852

James Stansfeld Esq.

WESTMINSTER LOCAL MANAGEMENT ACT

QUARTERLY REPORT

FOR THE QUARTER ENDING 31ST MARCH 1853

MEDICAL OFFICER OF HEALTH

FOR THE QUARTER ENDING 31ST MARCH 1853

MEDICAL OFFICER OF HEALTH

FOR THE QUARTER ENDING 31ST MARCH 1853

JOHN BARNES M.D. F.R.S.

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METROPOLIS LOCAL MANAGEMENT ACT.

THE VESTRY OF

SAINT LEONARD, SHOREDITCH.

R E P O R T

OF THE

MEDICAL OFFICER OF HEALTH,

FOR THE QUARTER ENDING JUNE 27TH, 1857.

To the Vestry of St. Leonard, Shoreditch.

GENTLEMEN,

The following Report embraces the thirteen weeks ending on the 27th June, 1857.

The total deaths registered in this period amount to 691, to be compared with 629 in the corresponding quarter of 1856. This absolute increase is not, however, to be taken as evidence of greater comparative

mortality. A statistical scrutiny tends rather to the opposite conclusion. In the first place, we have a largely increasing population. In my Preliminary Report, it was shown that the annual ratio of increase of population for all London was about 2 per cent, and that of Shoreditch 3 per cent. Calculating from this, the gross population of London was estimated last year to be 2,500,000, and that of Shoreditch, about 125,000, being exactly one-twentieth part of the metropolitan population. Throughout the year, this proportion has been made a convenient term of comparison to test our relative mortality, gross and from particular causes. There is abundant evidence to show that this ratio of increase is fully maintained in Shoreditch. Thus the births, during the two first quarters of the present year, exhibit an increase of 5 per cent over 1855 and 1856. The actual increase of population from excess of births over deaths, in 1856, was nearly 2000. To this we have to add the increase from immigration, which is known to be large. Assuming, however, the ratio of 3 per cent to hold, we cannot estimate the population of Shoreditch, for this year, to be less than 128,000. Upon this increased population the increased mortality does not appear so excessive. It amounts to 21 deaths to 1000 of population, per annum, to be compared with 20 to 1000 for the like quarter of 1856. Pursuing the analysis into the Causes of Death, positive grounds for congratulation will be made manifest. Thus, whilst the gross mortality is somewhat greater, the mortality from Epidemic diseases,

which test most obviously the salubrity of a district, is relatively and absolutely less.

This is clearly seen in the following summary.

Comparison of Deaths from Epidemics in Shoreditch in the spring quarters of 1856 and 1857:—

Six Epidemics.		Small Pox		Measles		Scarlatina	
1856	1857	1856	1857	1856	1857	1856	1857
158	140	6	1	16	18	28	21

Hooping Cough		Diarrhœa		Typhus,	
1856	1857	1856	1857	1856	1857
39	49	6	20	63	31

From this comparison, it will be seen that Small-pox, Scarlatina, and Fever, have been considerably less fatal during the last quarter than in the corresponding quarter of 1856—the fever mortality having diminished one-half.

A diminution of fever mortality has taken place also throughout all London. Thus 444 deaths occurred from this cause against 742 in the corresponding quarter of 1856. This comparison shews that the diminution of Fever has been proportionally much

greater in Shoreditch than in London generally. All the Registration Sub-Districts, except that of St. Leonard's, have participated in this improvement. The Workhouse has consequently been much less oppressed by Fever-cases.

It is desirable to shew how the mortality-tables are affected by the deaths in the two Workhouses of Shoreditch and St. Luke's. I have therefore drawn up the following Summary :

*Causes of Deaths in the Shoreditch and St. Luke's
Workhouses, during the 13 weeks ending
27th June, 1857.*

	Hooping Cough	Diarrhoea.	Fever	Puerperal Fever	Lung Inflam- mations	Insanity.	Brain Diseases	Phthisis	Age.	All other Diseases	Totals
Shoreditch	1	7	6	2	16	1	9	2	2	28	74
St. Luke's			9				4	9		10	32

From this Table we learn that 9 of our Fever-deaths in strictness belong to St. Luke's. This deduction may fairly be made, since, from the fact of a Fever-hospital at the Shoreditch Workhouse being open for the reception of Shoreditch cases, it is probable that almost every case of Fever that arises in the parish terminates within its limits. Nine deducted from 31 leaves 22 as the real

Fever-loss of Shoreditch. In the first quarter of the present year, the Fever-loss was 26, after deducting 13 cases belonging to St. Luke's.

The total deaths in St. Luke's Workhouse, 32, may be returned in the aggregate mortality of Shoreditch, to compensate for the twentieth part which Shoreditch may be presumed to own of the deaths in the General Hospitals and Prisons of London.

One case only of Small-pox has been sent to the Small-Pox Hospital during the quarter.

The only Epidemic from which the increase is remarkable is Diarrhœa. This disease is known to be intimately dependent upon temperature. On comparing the prevailing temperature of the two periods under comparison, it is accordingly seen that the average temperature week by week, of the 13 weeks of 1857, has been almost uniformly higher than that of the 13 weeks of 1856. The average for the whole period gives an excess of 2° . Throughout all London a similar early rise in the mortality from Diarrhœa is observed. The numbers are 243 for 1857, to 177 for 1856.

In connexion with this early seasonal appearance of Diarrhœa there is, however, a consideration especially worthy of attention, because it is deducted from long and accurate observations by men of the greatest

authority upon subjects of this kind. It was stated by Dr. Farr, in the Cholera Report of 1848-9, "That after the temperature of the Thames has risen above 60°, summer cholera and dysentery become prevalent, and disappear as the temperature subsides." Now, it is a remarkable circumstance, that although the temperature of the Thames, as ascertained for me by the Physicians' Assistant to the Dreadnought, was at 60° on the 18th of May, and has never since been below that temperature, the usual prevalence of diarrhœa did not occur until the middle of June, when the temperature had reached to 65°. Mr. Glaisher has recently expressed his opinion that this postponement of diarrhœa until the Thames had reached the temperature of 65°, which has now happened for the first time within the period of observation, is owing to the improvement of the sanitary state of the Metropolis, effected by the New Sanitary Administration.

Hitherto the disease has told exclusively upon infants and aged persons. By referring to Table I. it will be seen that 14 deaths occurred amongst children under 5 years old and the remaining 6 in persons over 60.

One case of Cholera, which recovered under the care of Mr. Roper, has occurred. It is in the highest degree probable that the severity of this case was caused by the fermentation of fœcal matter. It arose at the entrance of Motley Court, a spot unprovided with Sewerage, where

the soil is sodden with excrement, and where the want of ventilation maintains the malaria evolved in a constant state of concentration. Other cases of Diarrhœa have occurred in this locality. The fundamental remedy, the relieving the soil of the sewage-matter, has already received the sanction of the Vestry. The greatest benefit may be confidently anticipated from the construction of new Sewers which the Vestry have determined upon. But this cannot supersede the necessity for other means, which will be submitted to the Vestry, for mitigating the inherent evils of this place.

By referring to Table I., it will be seen that, of the 691 deaths, 196 or 2 in 7 took place under the age of 1 year, and 340, or nearly one-half under 5 years. A similar high rate of infantile mortality was noticed in my Annual Report. In healthy districts, the average annual rate of infant mortality is considerably less. These facts prove that infants afford the most delicate test of the presence of unhealthy local conditions. Not only are they more sensitive in this respect, but their constant confinement within the sphere where these conditions are most concentrated, namely in narrow courts, and crowded dwellings, render them the most ready victims.

The 32 deaths classed as "Not Specified," consist, almost entirely, of the returns of Coroners' Inquests. Such terms as "Found dead," "Found dead, without marks," "Died by the visitation of God," as they convey no

information of the cause of death, do not, it appears to me, admit of any other classification.

In the East Division, New Drainage has been provided for 106 houses. Orders have been issued for the filling-up of 69 cesspools; for the construction of 22 water-closets; for cleansing 33 drains; and for the construction of 16 dust-bins. In the Western Division, orders have been issued for the construction of 157 water-closets; for the filling-up of 118 cesspools; and for the cleansing of 26 drains.

Orders for improvement in Ventilation have been issued referring to 54 houses.

Three cases of alleged nuisance from trades have been examined.

1. A complaint that the burning mahogany saw-dust in a shed for curing fish caused the penetration of smoke into an adjoining house, against which the shed is erected.

2. A complaint that the storing bones in a marine-store dealer's yard gave rise to offensive emanations.

3. A complaint that the accumulation of dung and grains in a cow-keeper's yard was a nuisance to the inhabitants of an adjoining house.

Means have been recommended for the abatement of these causes of complaint, and the places are under observation.

In one case, I have felt it necessary to recommend the entire closure of a house as unfit for human habitation, owing to the defective state of a drain running immediately under the flooring of the kitchen, until the proper repairs should be effected.

Table IV. gives a Summary View of the labours of the Poor-Law Medical-Officers during the quarter.

The following is a Summary of the cases admitted into the Workhouse.

	ADMISSIONS TO THE WORKHOUSE					
	FROM					
	SICKNESS.			ALL CAUSES.		
	M.	F.		M.	F.	
APRIL	35	39	74	97	101	198
MAY	21	21	42	71	74	145
JUNE	24	26	50	52	78	130
Totals	80	86	166	220	253	473

Thus it appears that 473 persons who sought admission to the Workhouse, 166, or one-third, were compelled

by sickness. Of these 17 were admitted with Fever, and 2 with Measles.

It was not ascertained whence 4 cases of Fever and 1 case of Measles were brought. The remaining cases were admitted from the following localities :

Mary Street 2	Dean's Yard 1
Ann's Place, Boundary Street 1	Charlotte Street 1
Land of Promise 2	James Street, City Saw-mills 2
Pearce's Court 1	Bath Street 1
Crooked Billet Court 1	Francis Street, Hoxton ... 1
New Court, Long Alley ... 1	Sun Street, Old Street Road 1

In the majority of these cases, as in others I have inquired into, the most efficient cause of disease was the want of a due supply of fresh air, and of means for diluting and carrying off the air empoisoned by the noxious emanations from sewage and animal life.

The evidence I have acquired of defective ventilation as a cause of Fever, is so great and unequivocal, that I have felt it my duty to urge, in almost every Weekly Report the issue of orders to remedy this evil in places where it seemed to operate. In those cases, where the necessary remedy has been applied, the result has been most satisfactory. The providing due aeration is, in my opinion the most effectual remedy against overcrowding. It is extremely difficult, with the powers

vested in the Medical Officer of Health and Inspectors, to obtain clear evidence of the over-crowding of a particular room. But it is quite possible, by providing the means for due ventilation, so to mitigate one great mischief of overcrowding, the befoulment of the air, as to obviate greatly the rise and spread of sickness. Few families of the very poor class can afford to occupy more than one room. A vast number of the rooms inhabited by this class do not exceed 600 cubic feet in capacity. The average number of occupants of such a room is five, giving 120 cubic feet to each person; whereas the whole 600 would be barely enough. Such a defect can only be compensated for by a free current of fresh air.

But the supply is frequently limited to what can enter by one window looking into a narrow confined court; up a stair-case, which serves as a shaft to carry up the foul air from a back yard, and a lower room, also crowded with inhabitants; and the accidental down-draft from a chimney. Such dwellings seem to have been constructed on the theory that poor people require less air than others. At any rate, not a few owners of such dwellings adhere very pertinaciously to the assumption that increased ventilation is not necessary.

It may be useful to state, that it is a law in medicine that poisons do not act unless in a certain degree of concentration. Aerial poisons, such as animal miasmata which result from the decomposition of sewage-matters, and the exhalations from respiration and transpiration

kill directly if very concentrated. In a less degree of concentration these poisons frequently produce fever, diarrhœa, scrofula. If still further diluted, they may become innocuous, or, at least, their effects may escape detection. Now dilution depends on two processes: first, the carrying off a portion of the poison into the general body of the atmosphere; secondly, the mixing what remains with as large a quantity of fresh air as possible. Both these processes are effected by providing windows in two aspects of a house, so that from whichever side the wind may blow, a current shall be established. Whilst upon this subject, I wish to urge a consideration very much overlooked by hyper-scientific ventilaters. Along with fresh air, it is of vital importance to afford access for *light*. The chemical action of light is a most essential means of purification. I have, therefore, in every case that admitted it, recommended the piercing a window of sufficient size at the highest point of the stair-case, or in the back wall of the upper room. By this means we attain the greatest amount of benefit, by supplying air of the purest quality, because it is drawn from strata more removed from the terrestrial sources of contamination, and more exposed to the purifying influences of currents, light, and heat.

I have the honour to be,

GENTLEMEN,

Your faithful Servant,

ROBERT BARNES, M.D.

13, *Devonshire Square*,

18th July, 1857.

TABLE I.
Deaths Registered in the Parish of Saint Leonard, Shoreditch, in the
13 Weeks ending June 27th, 1857.

Causes of Death.		Under 1 year	Under 5	Under 20	20 and under 40	40 and under 60	60 and under 80	80 and above	Total
	ALL CAUSES	196	144	50	67	108	111	15	691
	I. ZYMOTIC CLASS.								
161	Small-pox		1						1
	Measles	4	12	2					18
	Scarlatina	6	9	6					21
	Whooping Cough	31	18						49
	Croup	1	6						7
	Thrush	3							3
	Diarrhœa	6	8				5	1	20
	Dysentery								
	Cholera								
	Influenza								
	Purpura; Scurvy								
	Ague								
	Remittent Fever								2
	Infantile Fever		2						2
	Typhus		5	9	2	10	5		31
	Metria (Child bed fever)				3				3
	Rheumatic Fever			2	1				3
	Erysipelas	3							3
	Syphilis								
	Noma								
	Hydrophobia								
	II. DROPSY: &c.								
19	Hæmorrhage								
	Dropsy	1	1		1	1	2		6
	Abscess	1				1	2		4
	Ulcer								
	Fistula								
	Mortification								
	Cancer				1	7	1		9
	Gout								
	III. TUBERCULAR CLASS								
119	Scrofula	2	1	1	1				5
	Tabes Mesenterica	10	9	2		1			22
	Phthisis (Lung - Con- sumption)	6	3	10	30	24	4		78
	Hydrocephalus (Water on the Brain)	2	12						14
	IV. BRAIN, NERVES, &c.								
87	Cephalitis								
	Apoplexy	3	3	2	1	1		1	11
	Paralysis	1				4	7		12
	Delirium Tremens				1	4	9		14
	Chorea								
	Epilepsy				2	1	1		4
	Tetanus	1					1		2
	Insanity				1	4	1		5
	Convulsions	29		1	2				32
	Disease of Brain &c.	3		3	1				7
23	V. DISEASE OF HEART AND BLOOD VESSELS		3	1	3	7	8	1	23
	VI. RESPIRATORY ORGANS								
112	Laryngitis		1						1
	Bronchitis	6	10		1	10	20	2	49
	Pleurisy	1							1
	Pneumonia	22	25	3		3	2		55
	Asthma					2	4		6
	Disease of Lungs, &c.								

TABLE I.—Continued.
Deaths Registered in the Parish of Saint Leonard, Shoreditch, in the
13 Weeks ending June 27th, 1857.

Causes of Death		AGES.							Total
		Under 1 year	Under 5	Under 20	20 and under 40	40 and under 60	60 and under 80	80 and above	
VII. DIGESTIVE ORGANS:									
37	Teething	4	7						11
	Quinsy				1				1
	Gastritis				1	1			2
	Enteritis				1				1
	Peritonitis					2			2
	Ascites					1			1
	Ulceration of Intestines .					1			1
	Hernia (Rupture)								
	Ileus								
	Intussusception								
	Stricture of Intestinal Canal								
	Disease of Stomach, &c..				1	1	1		3
	Disease of Pancreas ...								
Hepatitis				1	2			3	
Jaundice					1	2		3	
Disease of Liver	1		1	3	3	1		9	
Disease of Spleen									
VIII. KIDNEYS, &c.:									
7	Nephritis			1	1				2
	Nephrea (Brights disease)					1			1
	Ischuria								
	Diabetes					1			1
	Stone								
	Cystitis								
	Stricture of Urethra						1		1
Disease of Kidneys, &c....				1		1		2	
IX. CHILDBIRTH:									
7	Paramenia								
	Ovarian Dropsy								
	Childbirth			1	4				5
	Disease of Uterus, &c....					2			2
X. JOINTS, BONES, &c.:									
	Arthritis								
	Rheumatism								
	Disease of Joints, &c....								
XI. SKIN, CELLULAR TISSUE									
1	Carbuncle					1			1
	Phlegmon								
2	Disease of Skin, &c.								
	XII. MALFORMATIONS	2							2
27	XIII. PREMATURE BIRTH	27							27
	DEBILITY								
7	XIV. ATROPHY	4	2	1					7
37	XV. AGE					4	23	10	37
XVII. VIOLENCE, PRIVA- TION:									
13	Intemperance								
	Privation of Food ..						1		1
	Want of Breast Milk								
	Neglect								
	Cold								
	Poison								
	Burns and Scalds ..								
	Hanging	1	1						2
	Suffocation					2			2
	Drowning			1	1				2
	Fractures and Contusions					1			1
	Wounds					1			1
	Other Violence								
32	NOT SPECIFIED	15	3	1	3	5	1		4
					2		6		32

List of names		List of names	
1	John Smith	101	John Smith
2	John Smith	102	John Smith
3	John Smith	103	John Smith
4	John Smith	104	John Smith
5	John Smith	105	John Smith
6	John Smith	106	John Smith
7	John Smith	107	John Smith
8	John Smith	108	John Smith
9	John Smith	109	John Smith
10	John Smith	110	John Smith
11	John Smith	111	John Smith
12	John Smith	112	John Smith
13	John Smith	113	John Smith
14	John Smith	114	John Smith
15	John Smith	115	John Smith
16	John Smith	116	John Smith
17	John Smith	117	John Smith
18	John Smith	118	John Smith
19	John Smith	119	John Smith
20	John Smith	120	John Smith
21	John Smith	121	John Smith
22	John Smith	122	John Smith
23	John Smith	123	John Smith
24	John Smith	124	John Smith
25	John Smith	125	John Smith
26	John Smith	126	John Smith
27	John Smith	127	John Smith
28	John Smith	128	John Smith
29	John Smith	129	John Smith
30	John Smith	130	John Smith
31	John Smith	131	John Smith
32	John Smith	132	John Smith
33	John Smith	133	John Smith
34	John Smith	134	John Smith
35	John Smith	135	John Smith
36	John Smith	136	John Smith
37	John Smith	137	John Smith
38	John Smith	138	John Smith
39	John Smith	139	John Smith
40	John Smith	140	John Smith
41	John Smith	141	John Smith
42	John Smith	142	John Smith
43	John Smith	143	John Smith
44	John Smith	144	John Smith
45	John Smith	145	John Smith
46	John Smith	146	John Smith
47	John Smith	147	John Smith
48	John Smith	148	John Smith
49	John Smith	149	John Smith
50	John Smith	150	John Smith
51	John Smith	151	John Smith
52	John Smith	152	John Smith
53	John Smith	153	John Smith
54	John Smith	154	John Smith
55	John Smith	155	John Smith
56	John Smith	156	John Smith
57	John Smith	157	John Smith
58	John Smith	158	John Smith
59	John Smith	159	John Smith
60	John Smith	160	John Smith
61	John Smith	161	John Smith
62	John Smith	162	John Smith
63	John Smith	163	John Smith
64	John Smith	164	John Smith
65	John Smith	165	John Smith
66	John Smith	166	John Smith
67	John Smith	167	John Smith
68	John Smith	168	John Smith
69	John Smith	169	John Smith
70	John Smith	170	John Smith
71	John Smith	171	John Smith
72	John Smith	172	John Smith
73	John Smith	173	John Smith
74	John Smith	174	John Smith
75	John Smith	175	John Smith
76	John Smith	176	John Smith
77	John Smith	177	John Smith
78	John Smith	178	John Smith
79	John Smith	179	John Smith
80	John Smith	180	John Smith
81	John Smith	181	John Smith
82	John Smith	182	John Smith
83	John Smith	183	John Smith
84	John Smith	184	John Smith
85	John Smith	185	John Smith
86	John Smith	186	John Smith
87	John Smith	187	John Smith
88	John Smith	188	John Smith
89	John Smith	189	John Smith
90	John Smith	190	John Smith
91	John Smith	191	John Smith
92	John Smith	192	John Smith
93	John Smith	193	John Smith
94	John Smith	194	John Smith
95	John Smith	195	John Smith
96	John Smith	196	John Smith
97	John Smith	197	John Smith
98	John Smith	198	John Smith
99	John Smith	199	John Smith
100	John Smith	200	John Smith

TABLE II,
Total Deaths and Total Births, in Districts, in 13 weeks,
ending 27th June, 1857.

DISTRICT.	Total Deaths.		Totals.	Totals	Total Births	
	M.	F.			M.	F.
Holywell	46	42	88	168	83	85
Saint Leonard's	61	57	118	179	83	96
Hoxton New Town	68	67	135	262	132	130
Hoxton Old Town	61	57	118	253	115	138
Haggerstone West	67	100	167	227	120	107
Haggerstone East	32	34	69	175	85	90
TOTALS	335	257	*692	1264	618	616

* Error of 1 in excess in District-Registrars' Returns.

TABLE II

Showing the amount of silver and gold coins in circulation in the United States, 1860-1890.

Year	Silver coins		Gold coins		Total	Notes
	No.	Value	No.	Value		
1860	1,000,000	\$1,000,000	1,000,000	\$1,000,000	2,000,000	1860-1869
1870	1,500,000	\$1,500,000	1,500,000	\$1,500,000	3,000,000	1870-1879
1880	2,000,000	\$2,000,000	2,000,000	\$2,000,000	4,000,000	1880-1889
1890	2,500,000	\$2,500,000	2,500,000	\$2,500,000	5,000,000	1890-1899
1900	3,000,000	\$3,000,000	3,000,000	\$3,000,000	6,000,000	1900-1909
1910	3,500,000	\$3,500,000	3,500,000	\$3,500,000	7,000,000	1910-1919
1920	4,000,000	\$4,000,000	4,000,000	\$4,000,000	8,000,000	1920-1929
1930	4,500,000	\$4,500,000	4,500,000	\$4,500,000	9,000,000	1930-1939
1940	5,000,000	\$5,000,000	5,000,000	\$5,000,000	10,000,000	1940-1949
1950	5,500,000	\$5,500,000	5,500,000	\$5,500,000	11,000,000	1950-1959
1960	6,000,000	\$6,000,000	6,000,000	\$6,000,000	12,000,000	1960-1969
1970	6,500,000	\$6,500,000	6,500,000	\$6,500,000	13,000,000	1970-1979
1980	7,000,000	\$7,000,000	7,000,000	\$7,000,000	14,000,000	1980-1989
1990	7,500,000	\$7,500,000	7,500,000	\$7,500,000	15,000,000	1990-1999
2000	8,000,000	\$8,000,000	8,000,000	\$8,000,000	16,000,000	2000-2009
2010	8,500,000	\$8,500,000	8,500,000	\$8,500,000	17,000,000	2010-2019
2020	9,000,000	\$9,000,000	9,000,000	\$9,000,000	18,000,000	2020-2029
2030	9,500,000	\$9,500,000	9,500,000	\$9,500,000	19,000,000	2030-2039
2040	10,000,000	\$10,000,000	10,000,000	\$10,000,000	20,000,000	2040-2049
2050	10,500,000	\$10,500,000	10,500,000	\$10,500,000	21,000,000	2050-2059
2060	11,000,000	\$11,000,000	11,000,000	\$11,000,000	22,000,000	2060-2069
2070	11,500,000	\$11,500,000	11,500,000	\$11,500,000	23,000,000	2070-2079
2080	12,000,000	\$12,000,000	12,000,000	\$12,000,000	24,000,000	2080-2089
2090	12,500,000	\$12,500,000	12,500,000	\$12,500,000	25,000,000	2090-2099
2100	13,000,000	\$13,000,000	13,000,000	\$13,000,000	26,000,000	2100-2109

TABLE III.

Shewing the Weekly Meteorological Phenomena, and the total Deaths in Shoreditch and all London; the Deaths from Epidemics in Shoreditch and all London, and the proportions borne by Shoreditch for 13 weeks ending June 27th, 1857.

1857 Week ending	Average Tempe- rature	Barometer in INCHES.	Difference between Dew-point Tempera- ture and Air-Tempe- rature	WIND.		Rain in Inches	TOTAL DEATHS.		Proportion of deaths from all causes in Shoreditch to all London	DEATHS FROM EPIDEMICS		Proportion of Deaths from Epidemics in Shoreditch to all London
				General Direction.	Amount of Horizontal Movement. MILES.		In Shore ditch	In all London.		In Shore ditch	In all London	
April 4...	47° 8	29.334	50.1	S. E.	730	0.45	47	1235	$\frac{1}{26}$	3	153	$\frac{1}{51}$
„ 11...	49.9	29.519	4.9	VARIABLE	505	0.53	45	1059	$\frac{1}{23}$	5	153	$\frac{1}{31}$
„ 18...	43.4	29.453	5.3	VARIABLE	875	0.38	64	1084	$\frac{1}{17}$	20	177	$\frac{1}{9}$
„ 25...	46.6	29.882	6.5	S.W. & N.E.	590	0.32	63	1065	$\frac{1}{17}$	11	156	$\frac{1}{11}$
May 2...	41.5	29.912	6.5	N. E.	395	0.00	57	1038	$\frac{1}{18}$	7	164	$\frac{1}{23}$
„ 9...	44.8	29.962	6.6	N. E.	400	0.00	47	1064	$\frac{1}{23}$	9	163	$\frac{1}{18}$
„ 16...	57.6	29.808	7.7	VARIABLE	400	0.08	55	1050	$\frac{1}{19}$	14	153	$\frac{1}{11}$
„ 23...	58.9	29.706	8.4	S. W.	550	0.35	48	948	$\frac{1}{19}$	11	141	$\frac{1}{13}$
„ 30...	56.9	29.597	8.7	VARIABLE	530	0.12	42	915	$\frac{1}{22}$	8	159	$\frac{1}{19}$
June 6...	60.6	29.887	9.7	S. W.	505	0.23	46	862	$\frac{1}{15}$	9	140	$\frac{1}{16}$
„ 13...	56.0	29.758	7.1	S.W. & S.E.	930	0.71	61	934	$\frac{1}{19}$	12	139	$\frac{1}{12}$
„ 20...	60.3	29.882	9.1	N. E.	1725	0.85	52	987	$\frac{1}{16}$	12	169	$\frac{1}{14}$
„ 27...	67.3	30.058	9.1	CALM.	180	0.21	64	1005	$\frac{1}{19}$	16	169	$\frac{1}{11}$
Mean ...	53.0	29.750	7.3	TOTALS...	8315	4.23	691	13246	$\frac{1}{19}$	137	2036	$\frac{1}{15}$
No. of Col.	1	2	3	4	5	6	7	8	9	10	11	12

TABLE IV.

Shewing New Cases of Disease coming under treatment of the Poor Law Medical Officers, during the quarter ending the 27th June, 1857.

District.	Medical Officer.	Small Pox.	Measles.	Scarlatina.	Whooping Cough.	Diarrhoea.	Continued Fever, Typhus & Typhoid	Acute Pulmonary Inflammations.	All Diseases.
Church End North	Mr. Greenwood	...	37	3	41	24	44	21	681
Church End South	Dr. Burchell ..	2	17	3	17	44	90	31	609
Hoxton	Mr. Coward ...	1	31	3	29	32	42	17	536
Workhouse	Mr. Clark* .....	...	4	...	3	59	39	14	375
Holywell and Moorfields.....	Mr. Collier† ...	...	7	3	17	27	80	7	406
TOTALS		3	96	12	107	186	295	90	2607

† Twelve weeks only.

* One case of Measles and 13 cases of Fever included in Out-Door patients have been Subtracted.

SHOR
Roy. Med. Physians.

METROPOLIS LOCAL MANAGEMENT ACT.

VESTRY OF
Saint Leonard's, Shoreditch.

QUARTERLY REPORT
OF THE
MEDICAL OFFICER OF HEALTH,

For the Quarter ending 26th September, 1857.

BY
ROBERT BARNES, M.D., F.S.S.,

MEDICAL OFFICER OF HEALTH FOR SHOREDITCH:

SENIOR PHYSICIAN TO THE DREADNOUGHT HOSPITAL.



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1857.

ST. LOUIS POLICE DEPARTMENT

REPORT OF

Saint Louis's, Missouri

QUARTERLY REPORT

OF THE
MEDICAL OFFICE OF HEALTH

FOR THE QUARTER ENDING SEPTEMBER 30, 1905

REPORT

ROBERT HARVEY, M.D., F.R.C.P.

REPORT OF THE MEDICAL OFFICE OF HEALTH
TO THE BOARD OF HEALTH

FOR THE QUARTER ENDING SEPTEMBER 30, 1905

METROPOLIS LOCAL MANAGEMENT ACT.

THE VESTRY OF
Saint Leonard, Shoreditch.

REPORT
OF THE
MEDICAL OFFICER OF HEALTH.

To the Vestry of St. Leonard, Shoreditch.

GENTLEMEN,

The Report now submitted to you, embraces the quarter ending on the 26th of September, 1857.

The Health-movement of the District, whose sanitary government you are charged with administering, may be clearly traced in the Tables that form the appendix. It will however be useful to set forth some of the chief deductions from these Tables in another form.

In Table I., 753 Deaths which were registered during the quarter, are classified according to ages and the causes of death. In the corresponding quarter of 1856, the deaths amounted to 677, shewing an excess of 87 deaths during the quarter just ended. Part of this excess may be accounted for by increase of population. Assuming that the population has increased at the rate of 3 per cent. per annum, an assumption which is warranted by the progress of Shoreditch during the last twenty years, this would still leave a large balance of loss to be accounted for by greater proportional sickness. If we compare the mortality-tables of the two quarters for an elucidation, we shall find that against 198 deaths from the six principal epidemics which occurred in 1856, there stand 238 deaths in 1857, a difference of 90. The individual epidemics bear the following relations:

	Small-Pox,		Measles.		Scarlatina.	
	1856	1857	1856	1857	1856	1857
Shoreditch.....	5	to 4	7	to 27	29	to 35
All London ...	108	to 41	393	to 269	433	to 349

	Hooping Cough		Diarrhœa		Fever.	
	1856	1857	1856	1857	1856	1857
Shoreditch	18	to 52	92	to 110	47	to 51
All London ...	382	to 458	1610	to 2343	573	to 572

From this comparison we find that the increase has been in Measles, Scarlatina, Hooping-Cough, and Diarrhœa. It is to be observed, that in London generally, Measles and Scarlatina had been less fatal, whilst Hooping-Cough and Diarrhœa had been greatly more fatal than last year. It results that Shoreditch suffered in a special manner from Measles and Scarlatina. It also appears that Shoreditch suffered comparatively more from Hooping-Cough; but considerably less from Diarrhœa, than all London. To compensate in some measure for this increase of mortality from particular epidemics, there has been a diminished mortality in other diseases.

The greater prevalence and severity of Diarrhœa is partly explained by the unusual heat of the quarter. In order to mark this higher temperature the more clearly, I have introduced a column into Table II. shewing the difference between the temperature, week by week, during the last quarter, and average temperature of the corresponding weeks of ten years. It will be seen that there was an excess of the mean temperature above its average in 12 weeks out of the 13. The mean temperature of the whole 13 weeks was 63.6° being 3.5° above the average. In the corresponding quarter of 1856, the temperature was in excess 6 weeks only, and in deficiency 7 weeks. The average for ten years for the 13 weeks is 60.8° , the average of 13 weeks in 1856 was 60.3° being on the whole $.5^{\circ}$ below the average. The average temperature of the summer quarter of 1857, was therefore 4° or 6.7 per cent. higher than in 1856.

This enormous excess of heat must have exercised a material influence upon the public health. It has accordingly been observed that Cholera, Dysentery, and Diseases of the Liver, affections characteristic of tropical climates, have been peculiarly rife.

It is a momentous question, involving perhaps some millions in taxation—to be either wasted or saved—whether the influence of the summer heat upon the waters of the Thames be such as to empoison the atmosphere of London, and so to increase the mortality of the inhabitants? Never before have we enjoyed equal facilities for observing the influence of sewage and of high temperature on the Thames as a cause of disease. The temperature of the Thames has rarely been so high. The quantity of sewage was never so great. The population has vastly increased; and the excreta of many thousands which were formerly received into cesspools, have been within the last eighteen months added to the sewage flowing into the river. The eminent Engineers appointed by Sir Benjamin Hall, to report upon the Main Drainage of the Metropolis, lay it down as an axiom, as the unquestioned justification for gigantic works, and commensurate expenditure, having for their object the “dispollution of the Thames.”—

“That the influence of the sewage upon the river is pernicious.”

In what way the influence of the sewage is pernicious

to the river, it would be foreign to my duty to inquire. I presume it to be meant "that the influence of the sewage poured into the river is pernicious to the health of the inhabitants of London." I will not assert that this influence, if any, is not pernicious to health, but I do most emphatically deny that any definite proof that it is pernicious has been produced. The question and the consequences are too weighty to be decided by declamation or by prejudice. It must be decided by facts. Where are those facts? If the theory be true, we ought to trace the deadly influence of the river,—1st. and in the severest degree amongst those who live on its waters. 2nd. in those who dwell near its shores—3rd. we ought to find comparative immunity from Fever and Diarrhœa amongst those who live at a distance from the river. These are points that admit of being determined by observation; by the comparison of the Returns of the Registrar-General, and of the weekly register of new cases of sickness, compiled by the association of Medical Officers of Health. Chemistry and Microscopy may indeed prove the existence of a small proportion of living and dead organic matter in Thames water. This kind of proof is all that has been advanced in the elaborate mass of documents that form the appendix to the Report of the Referees on the Main-Drainage of the Metropolis. But to prove the actual presence of this organic matter, is a different thing from proving that it acts perniciously upon the health of the population. The effect of the Thames upon the Public Health is not to be decided by chemical or engineering science.

Nor ought it to be taken for granted. It is a question for medical observation and statistical analysis. The evidence of these has not been called.

From special opportunities of observing the forms and progress of disease prevalent on the Thames; from careful inquiry into the origin of those diseases; from a comparison of the sickness of the Thames with the sickness of Shoreditch; and from the periodical examination of the water of the Thames under the varying influences of tides, wind, rainfall, and temperature, in which I have been aided by Dr. Odling, the Medical Officer of Health for Lambeth, the conclusion has been forced upon my mind that great exaggeration, if not a total misapprehension, prevails upon the subject of the pernicious influence of the Thames upon the Public Health.

I call attention to one fact: since the replacement of the old "Dreadnought" by the present ship, now nine months ago, not a case of fever has originated on board this floating hospital.

To return to the causes of mortality in Shoreditch. The most fatal diseases are thus placed in the order of destructiveness: — 1, Diarrhœa, 110; 2, Phthisis, (Lung Consumption) 94; 3, Hooping Cough 52; 4, Typhus 51; 5, Tabes Mesenterica, (Scrofulous bowel Consumption) 36; 6, Scarlatina and Pneumonia (Inflammation of the Lungs) each 35.

Duration of Life. The season has been fatal to infant life. The total deaths admit of being divided into 15 parts; of these we find that there died:

Under 1 year. Under 5. Under 20. Under 40. Under 60. Above 60.

$$\frac{5}{15} \quad \frac{4}{15} \quad \frac{1}{15} \quad \frac{1}{15} \quad \frac{2}{15} \quad \frac{2}{15} = \frac{15}{15}$$

One-third thus died under the age of one year, and more than half under the age of five years.

The death-rate may be estimated at 24 for every thousand living annually. That of all London at 23 per 1000.

The following is a Summary of the cases admitted into the Workhouse.

	ADMISSIONS TO THE WORKHOUSE.					
	FROM SICKNESS.			ALL CAUSES,		
	M.	F.	Total	M.	F.	Total.
JULY.....	18	26	44	62	75	137
AUGUST..	36	34	70	93	75	168
SEPT.....	31	23	54	75	96	171
Totals ...	85	83	168	230	246	476

The health of the Workhouse-population has been generally good. But four cases of severe epidemic disease have originated within its walls. An outbreak of Diarrhœa, however, which attacked 15 persons, all in the men's surgery, occurred in the beginning of July. It was promptly met by Mr. Clark and arrested.

In Table III. the causes of Deaths in the Workhouses of Shoreditch and St. Luke's are set forth separately.

In Table IV. the total Deaths and Births are given for each of the six Registration Sub-Districts.

Table V. represents a summary of the new cases of Sickness coming under the care of the Poor-Law Medical Officers. It shows that these gentlemen have attended an aggregate of 3580 patients on orders from the Relieving Officers. Of these there were 1101 cases of Diarrhœa. But this does not include all that fell to their care. During the height of the epidemic several hundred patients were supplied with medicine without orders, by which means it is certain that many cases were prevented from passing into more serious forms, and entailing a greater burthen on the rates.

No case of Small-Pox has been forwarded to the Small Pox Hospital during the quarter. Nevertheless there have been indications of a tendency in this disease to spread. Mr. Collier called my attention to the prevalence

of Small-Pox in a limited space in Long Alley; and to the unusual proportion of failures attending Vaccination. I have on a former occasion shewed reason for believing that this preservative remedy is neglected in many instances. It is also certain that in many other instances the operation is ineffectual from being done by unskilful persons or with bad lymph. It is a duty incumbent upon every one who has influence with the poorer classes to urge them to lose no opportunity of taking their children to be vaccinated by qualified medical practitioners. They should also be urged to submit their children to inspection at the proper time after the operation, in order to afford the surgeon the means of verifying and registering its success. Under new sanitary regulations, the person who possesses a certificate of having been successfully vaccinated, will be armed with a document that will hereafter prove of practical value at many stages of his career in life.

Slaughter-Houses. The Inspectors have completed another visitation of all the Slaughter-houses in the parish. In the East Division applications have been made for the licensing of 41 places. Of these 10 are for the licensing of premises not licensed last year. In the West Division 44 applications have been made, including 1 only for new premises. The use of one place as a Slaughter-house has been discontinued.

In all cases, the Inspectors report adequate drainage, good supply of water, proper ventilation, and cleanliness.

No underground Slaughter-house is sanctioned.

The following is a summary of the Slaughter-houses with a view of the average number of animals of different kinds slaughtered weekly.

	No. of Slaughter Houses.	No. of Bullocks	No. of Calves.	No. of Sheep	No. of Pigs
East Division ..	41	100		724	63
West Division ...	44	54	5	579	38
Totals	85	154	5	1303	101

It is probable that these numbers are exceeded in practice; and that the greater portion of the animals are slaughtered in the summer months.

The following is a summary of the Sanitary works as applied to the improvement of dwellings, ordered and executed.

No. of Houses or Premises Visited	Cleaning and Lime-washing ordered. executed.		Paving Yards. ordered. executed.		Repairing and Trapping Drains ordered. executed.	
	890	19 19	273 146		82 18	
	Water to Privies. ordered. executed.		Windows for Ventilation ordered. executed.			
	288	161	56	46		

I have on several occasions found it desirable to certify to the Vestry that particular houses were injurious to health from defect of means of aeration, with a view to receiving their authority for instituting proceedings under the Nuisances Removal Act, to compel the owners to carry out the orders made on my recommendation. In no instance however has it as yet been found necessary to procure the interposition of the magistrate. Out of 56 orders for new windows issued 46 have been complied with, and the rest are reported as in progress of execution. I wish to state here, that there is no description of Sanitary works, excepting perhaps drainage, which has been attended with such marked improvement in salubrity, and which has given me so much satisfaction.

I feel confident that the owners themselves will be amply repaid for the trifling cost of this most essential improvement of their property,

Before concluding this Report, I feel it desirable to refer to a subject which has lately been brought under public attention, namely, the threatened return of Cholera. The indications of another invasion are at least ominous. The disease prevails in a severe form in several ports with which we keep up an active commercial intercourse. Several cases have been actually imported into the Thames. Should the disease at any time meet here with all those peculiar conditions which are favorable to its spread, it will

undoubtedly display that malignant power with which past experience has made us familiar. Some of those conditions are always present amongst us, and manifest their operation by occasionally giving rise to isolated or grouped cases of cholera. An unusual number of such cases have been observed during the summer. A remarkable outbreak occurred at West Ham, in which seven persons were destroyed. And even now although the summer heat has subsided, individual cases break out in various parts of the metropolis.

To what extent the district of Shoreditch has been placed in a position to resist the next invasion, by the considerable sanitary improvements effected within the last eighteen months, it would be presumptuous to speculate.

I have the honor to be,

GENTLEMEN,

Your faithful Servant,

ROBERT BARNES, M.D.

13, *Devonshire Square,*

21st *October, 1857.*

TABLE I.
Deaths Registered in the Parish of Saint Leonard, Shoreditch, in the
13 Weeks ending September 26th, 1857.

Causes of Death.		Under 1 year	Under 6	Under 20	20 and under 40	40 and under 60	60 and under 80	80 and above	Total.
ALL CAUSES		247	185	59	68	95	85	14	753
I. ZYMOTIC CLASS.									
309	Small-pox		2	2					4
	Chicken-pox		1						1
	Measles... ..	5	20	1	1				27
	Scarlatina	3	15	15	1	1			35
	Whooping Cough	15	35	2					52
	Croup	2	4	1					7
	Thrush	5							5
	Diarrhœa	67	26	1	3	6	7		110
	Dysentery	3	1	1					5
	Cholera	1				1	1		3
	Influenza								
	Ague			1					2
	Remittent Fever	1							
	Infantile Fever		7	13	7	11	11	1	51
	Typhus	1							
	Metria (Child bed fever)...			1			1		2
	Rheumatic Fever						2		3
	Erysipelas		1						2
	Syphilis	2							
	Noma								
	Hydrophobia								
II. DROPSY, &c.:									
27	Hæmorrhage					1			1
	Dropsy					6	3		9
	Abscess... ..						2		3
	Ulcer	1							
	Fistula							1	1
	Mortification				3	6	2	1	12
	Cancer						1		1
III. TUBERCULAR CLASS;									
157	Scrofula	1	4	1	1	1			8
	Tabes Mesenterica	16	17	3					36
	Phthisis (Lung Consump- tion)	11	8	10	34	22	9		94
	Hydrocephalus (Water on the Brain)	10	9						19
IV. BRAIN, NERVES, &c.:									
59	Cephalitis	4	1		1	1			7
	Apoplexy				1	3	4	1	9
	Paralysis				4	1	1	1	7
	Delirium Tremens								
	Chorea				1	2			3
	Epilepsy								
	Tetanus... ..					1	1		3
	Insanity			1					
	Convulsions	17	6						23
	Disease of Brain, &c.:	4	1			1	1		7
	V. DISEASE OF HEART AND BLOOD VESSELS	1			1	5	2		9
VI. RESPIRATORY ORGANS:									
66	Laryngitis		2	1					3
	Bronchitis	5	2	2	2	3	5	1	20
	Pleurisy				1				1
	Pneumonia	15	14		1	3	2		35
	Asthma					2	2		4
Disease of Lungs &c... ..						3			3

TABLE I.—*Continued.*
Deaths Registered in the Parish of Saint Leonard, Shoreditch, in the
13 weeks ending September 26th, 1857.

Causes of Death.		Under 1 year	Under 5	Under 20	20 and under 40	40 and under 60	60 and under 80	80 and above	Total
VII. DIGESTIVE ORGANS:									
28	Teething	2	4						6
	Quinsey								
	Gastritis					1			1
	Enteritis	1					1		2
	Peritonitis			2		2	2		6
	Ascites								
	Ulceration of Intestines .								
	Hernia (Rupture)								
	Ileus								
	Intussusception								
	Stricture of Intestinal Canal								
	Disease of Stomach, &c. ...			1		1	1		3
	Disease of Pancreas								
	Hepatitis					1	2		3
7	Jaundice	1				1	1		3
	Disease of Liver				2	1	1		4
	Disease of Spleen								
	Disease of Spleen								
VIII. KIDNEYS, &c.:									
7	Nephritis					1			1
	Nephria (Brights disease)				1	1			2
	Ischuria								
	Diabetes					1			1
	Stone								
	Cystitis								
	Stricture of Urethra								
IX.	Disease of Kidneys, &c ...				1	2			3
	Disease of Kidneys, &c ...								
IX. CHILDBIRTH:									
1	Paramenia								
	Ovarian Dropsy								
	Childbirth								
X.	Disease of Uterus, &c. ...						1		1
	Disease of Uterus, &c. ...								
X. JOINTS, BONES, &c.									
XI.	Arthritis								
	Rheumatism								
	Disease of Joints, &c. ...								
XI. SKIN, CELLULAR TISSUE									
1	Carbuncle								
	Phlegmon								
1	Disease of Skin, &c.	1							1
	Disease of Skin, &c.	1							1
XII. MALFORMATIONS									
XIII. PREMATURE BIRTH									
DEBILITY									
25	XIV. ATROPHY	24							24
25	XV. AGE	19	4			2			25
25	XV. AGE						17	8	25
XVI. VIOLENCE, PRIVATION.									
14	Intemperance				1				1
	Privation of Food								
	Want of Breast Milk	3							3
	Neglect								
	Cold								
	Poison								
	Burns and Scalds								
	Hanging								
	Suffocation								
	Drowning								
	Fractures and Contusions				1		1		2
	Found Dead	2	1						3
	Found Dead	2				1	1		4
	Sudden	1							1

TABLE II.

Shewing the Weekly Meteorological Phenomena, and the Total Deaths in Shoreditch and all London; the Deaths from Epidemics in Shoreditch and all London; and the proportions borne by Shoreditch,

1857. Week ending	Average Tempe- rature.	Difference of Temperature between ave- rage Tempe- rature of cor- responding week during 10 years	Barometer	Difference between Dew-point Tempera- ture and Air-Tempe- rature	WIND.		Rain in Inches.	TOTAL DEATHS		Proportion of deaths from all causes in Shoreditch to all London	DEATHS FROM EPIDEMICS		Proportion of Deaths from Epidemics in Shoreditch to all London
					General Direction	Amount of Horizontal Movement. MILES.		In Shore ditch	In all London		In Shore- ditch	In all London	
July 4...	62.4	+1.70	29.678	6.60	S. W.	645	0.28	47	1029	$\frac{1}{21}$	19	209	$\frac{1}{11}$
„ 11...	59.6	-3.3	29.745	8.1	S. W.	610	0.30	53	988	$\frac{1}{15}$	25	256	$\frac{1}{10}$
„ 18...	68.0	+5.4	29.998	11.0	S. W.	400	0.15	65	1061	$\frac{1}{16}$	27	263	$\frac{1}{10}$
„ 25...	68.3	+6.1	29.828	11.2	S. W.	1155	0.03	83	1209	$\frac{1}{15}$	43	393	$\frac{1}{9}$
Aug. 1...	65.6	+3.2	29.870	9.5	S. W.	660	0.60	64	1238	$\frac{1}{20}$	27	438	$\frac{1}{16}$
„ 8...	65.2	+2.3	29.704	9.0	S. W.	355	0.85	53	1224	$\frac{1}{23}$	25	420	$\frac{1}{17}$
„ 15...	63.7	+1.7	29.793	6.0	S. W.	270	1.52	59	1187	$\frac{1}{20}$	19	385	$\frac{1}{20}$
„ 22...	65.1	+4.5	29.887	7.8	N. E.	520	0.32	55	1091	$\frac{1}{20}$	18	356	$\frac{1}{20}$
„ 29...	66.9	+6.2	29.943	8.6	CALM	265	0.00	51	1177	$\frac{1}{21}$	21	362	$\frac{1}{18}$
Sep. 5...	60.4	+1.6	29.620	6.2	S. W.	490	0.84	57	1084	$\frac{1}{20}$	19	310	$\frac{1}{16}$
„ 12...	60.5	+3.6	29.542	4.1	S. W.	520	2.24	54	1023	$\frac{1}{20}$	21	272	$\frac{1}{13}$
„ 19...	62.1	+5.6	30.041	4.2	S.W. & N.E.	280	0.25	53	946	$\frac{1}{18}$	13	247	$\frac{1}{19}$
„ 26...	59.1	+4.6	29.935	5.7	VARIABLE	300	0.46	59	1002	$\frac{1}{17}$	11	217	$\frac{1}{22}$
Means 7.50					Totals ...	6470	7.84	753	14259	$\frac{1}{20}$	288	4128	$\frac{1}{14}$
No. of Column	1	2	3	4	5	6	7	8	9	10	11	12	13

No. of Columns	1	2	3	4	5	6	7	8	9	10	11	12	13
	Means ... 1-50				Totals ...		6410	1-04	129	14329	42	264	4132
"	20	60-1	+4-0	20-580	0-1	4212	300	0-03	69	1005	42	11	211
"	10	63-1	+0-0	20-641	4-2	220	330	0-22	63	640	42	18	261
"	15	60-6	+3-0	20-613	4-1	220	330	3-24	61	7032	42	21	252
"	20	60-1	+1-0	20-630	0-2	220	400	0-04	61	1004	42	19	310
"	20	60-0	+0-2	20-611	0-0	220	202	0-00	61	1113	42	21	205
"	20	60-1	+1-0	20-683	1-0	220	630	0-83	62	1001	42	18	320
"	18	60-1	+1-1	20-130	0-0	220	210	1-03	60	1181	42	19	382
"	8	60-2	+3-8	20-104	2-0	220	302	0-02	62	1204	42	20	420
"	1	60-0	+2-2	20-650	0-0	220	680	0-00	61	1182	42	21	408
"	20	60-8	+0-1	20-626	11-3	220	1132	0-08	68	1300	42	40	606
"	16	60-0	+2-1	20-602	11-0	220	400	0-12	60	1001	42	21	202
"	11	60-0	-0-3	20-142	8-1	220	610	0-30	60	686	42	22	210
"	4	60-4	+1-5	20-618	0-0	220	612	0-30	61	1053	42	19	210
No. of columns	Sample	Mean of sample	Difference of sample from mean	Sample variance	Sample standard deviation	Sample standard error	Sample standard error of the mean	Sample standard error of the mean of the sample	Sample standard error of the mean of the sample	Sample standard error of the mean of the sample	Sample standard error of the mean of the sample	Sample standard error of the mean of the sample	Sample standard error of the mean of the sample

TABLE II

Showing the Weekly Meteorological Elements and the Total Results in the month of January; the Results from the Station at Kilmarnock.

TABLE III.

Causes of Death in the Shoreditch and St. Luke's Workhouses.

	Scarlatina	Hooping-Cough	Diarrhea	Continued Fever, Typhus & Typhoid	Bronchitis and Catarrh	Insanity	Tubercular Disease	Brain Disease	All other Diseases	Totals
Shoreditch		1	6	7	1	2	6	1	15	39
St. Luke's	1	1		4			6	2	12	26

TABLE V.

Showing new cases of Disease coming under treatment of the Public Health Medical Officers, during the week ending 26th September, 1857.

TABLE IV.

Total Deaths and Total Births, in Districts, in 13 weeks, ending 26th September, 1857.

DISTRICT.	Population 1851	DEATHS		Totals	Totals	BIRTHS	
		M.	F.			M.	F.
Holywell	17245	44	37	81	144	78	66
Saint Leonard's	19449	60	74	134	163	90	73
Hoxton New Town	23505	91	75	166	248	128	120
Hoxton Old Town	17431	73	74	147	211	108	103
Haggerstone West	20276	81	81	162	217	118	99
Haggerstone East.....	11351	25	38	63	143	64	79
Totals	109257	374	379	753	1126	586	540

TABLE V.

Shewing new cases of Disease coming under treatment of the Poor-Law Medical Officers, during the quarter ended 26th September, 1857.

DISTRICT.	Medical Officer	Small-Pox.	Measles.	Scarlatina.	Whooping-Cough	Diarrhoea	Continued Fever Typhus & Typhoid	All Diseases
Church End North	Mr. Greenwood	...	8	14	15	311	85	855
Church End South	Dr. Burchell ...	...	24	12	10	305	204	1023
Hoxton	Mr. Coward.....	...	9	4	7	180	109	682
Workhouse*	Mr. Clark .....	...	...	...	4	105	56	426
Holywell & Moorfields	Mr. Collier	5	3	16	9	200	144	594
TOTALS		5	44	46	45	1101	598	3580

* There were admitted 11 cases of Insanity and 4 of Epilepsy.

