[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 31st December, 1856.

QUARTERLY REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

For the Quarter ending 28th March, 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.

METROPOLIS LOCAL MANAGEMENT ACT.

THE VESTRY OF

Saint Leonard, Shoreditch.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH.

To the Vestry of St. Leonard, Shoreditch.

GENTLEMEN,

A Bye-Law of the Vestry requires the Medical Officer of Health to submit an Annual Report, embracing the year as terminating in April. This termination of the year seemed to be necessarily selected because it marked the completion of the first year of sanitary administration. A practical inconvenience however results. The Mortality-returns of the Registrar-General, are made up to the ordinary civil

year. It is by statistical comparison of the local with the general mortality-returns, that we are enabled to discover some of the most valuable facts concerning the sanitary condition of given sections of the community. But no useful comparison is possible, except between like periods. It is therefore important to place the death-returns of Shoreditch for the whole year 1856, in juxtaposition with those for all London, during the same period. To do this, it will be necessary to carry back our enquiry so as to include the first quarter of 1856. In order to trace still more accurately the course of sanitary movement, I have further included the death-returns of 1855, which have been kindly placed at my disposal by the Registrar-General's department.

These returns, together with those for the first quarter of 1857, have enabled me to classify and analyse upwards of 6000 deaths.

A Report for the year as terminating with the first quarter of 1857, strictly complying with the terms of the bye-law referred to, will be formed by adding the annexed Quarterly report to the three Quarterly reports which I have previously had the honour to submit.

Table I. of the appendix, exhibits side by side, the mortality from different diseases, during the two years 1855, 1856; it shews at a glance the relative mortality from each disease.

Table II. of the appendix exhibits the number of

deaths of each sex at different periods of life; and the total number of births, during 1855 and 1856.

An inspection of these tables will make us acquainted with some remarkable facts. The mortality from Small-pox, fell from 53 in 1855, to 13 in1856; and it is gratifying to find that this decrease is still progressive, since only two deaths were registered from this disease, in the first quarter of the present year. Whether this be altogether attributed to the extension of Vaccination, is to me a matter of doubt. Some share at least must be assigned to a temporary lull in the variolous epidemic force. Judging from the apathy and want of correct information upon this subject that still prevail among certain classes, and other facts, it is certain that there must be a large store of unprotected persons, ready to take the variolous poison whensoever the necessary conditions of epidemic influence and exposure to contagion shall present themselves. The present Vaccination-Act, does not work efficiently; it chafes unnecessarily against the prejudices of the poor; it is not adapted to engage the active co-operation of the entire body of the medical profession; it is obvious that without this latter condition it is impossible to bring the entire body of the population within the sphere of medical assistance. Mr. Edwards has favoured me with the following return of successful vaccinations, as registered during the two years ending on the 29th September, 1855 and 1856. These periods do not quite correspond with the statistical years I have adopted, but they exhibit with sufficient accuracy the proportion of registered vaccinations.

Number of cases of successful vaccination:

From Sept. 29th, 1854, to Sept. 29th,	1855	2812
From Sept. 29th, 1855, to	1856	3094
		5906

For the purpose of comparison, we may use the total vaccinations of the two years, 5906. Now during the two years the total births were 9350.

It is true that the registered vaccinations do not represent the actual vaccinations, or the non-successful vaccinations; and that allowance must be made for 1000 infants who died under 3 months old, that is within the time specified for vaccination by the Act. But if 1000 be added to 5902, there still remains a considerable number of children unaccounted for, many of whom there is reason to believe are unprotected. If only one-tenth of the population neglect this prophylactic remedy sufficient material will always remain for the spreading of this most loathsome and destructive disease.

Whilst Vaccination is the acknowledged great preservative against this disease, which in former times destroyed more lives and left more victims with shattered health, than any epidemic with which we are now acquainted, we hold another check against its ravages in those sanitary measures which the Act under which you are constituted empowers you to carry out.

The deaths from Measles were very nearly the same in the two years.

The mortality from Scarlatina diminished from 138 in 1855 to 111 in 1856.

Hooping-cough, Croup, Thrush, Diarrhœa, Dysentery, Cholera maintained nearly the same influence.

The deaths from Fever increased from 153 in 1855 to 225 in 1856.

This great difference in the Fever mortality of 1856 suggests a further analysis. The following Table shews the Fever-deaths that occurred in each quarter. It will be seen that the excess of mortality in 1856 took place in the three first quarters, and especially in the second or spring-quarter. This Table further shews that the fatality of Fever was not increased by hot weather. It may be inferred that the local determining causes may be not less active in winter than in summer. Diarrhœa, the other great test or touchstone of unhealthy local conditions can only be applied during the summer and autumn months. In Fever we possess a constant index.

The deaths from Diarrhœa are distributed in quarters for the year 1856 to shew how differently Fever and Diarrhœa are affected by the same meteorological conditions. Whilst 80 deaths were caused in the autumn or hot quarter, only 27 occurred during the remaining three quarters.

TABLE SHEWING THE DEATHS FROM FEVER AND DIARRHŒA, AND THE TOTAL DEATHS IN 1855 AND 1856, DISTRIBUTED IN QUARTERS.

	1st Quarter.			2nd Quarter.			3rd Quarter.			4th Quarter.		
	Fever.	Diarrhœa.	Total.	Fever.	Diarrhœa.	Total.	Fever.	Diarrhœa.	Total.	Fever.	Diarrhœa.	Total.
1855	40	...	915	33	...	682	38	...	699	41	...	702
1856	62	15	711	67	6	637	53	80	580	41	6	691

Phthisis or Consumption destroyed 392 persons in 1855 and 334 in 1856. In reference to this and the other diseases such as Scrofula, and Hydrocephalus, (the "water-on-the-brain" of infants), I wish to point to a fact not generally recognised and certainly imperfectly appreciated by the public, namely, that they are far more intimately associated with defective general sanitary conditions and the neglect of personal hygienic care than is commonly supposed. The origin of Scrofula and Lung-consumption is frequently traced to an attack of Hooping-cough, Measles, Scarlatina, or Fever. There is the same association between Insanity and Epidemic diseases. I entertain a firm conviction that if we are to indulge a hope of diminishing Consumption, the disease which numbers more victims than any other; and Insanity, that terrible affliction, which carries desolation and ruin into individual homes, and which already constitutes an appalling burden on the community; that hope can only be justified by the steady prosecution of sanitary improvements.

Inflammatory diseases of the lungs added to the mortality about the same numbers in each year.

The other diseases offer no occasion for comment.

There is however one class of causes of deaths that must not be passed over without notice. Eighty persons perished in 1855 from violent deaths, and seventy-nine in 1856. Seventy-eight other deaths in 1855 and fifty-two in 1856 are recorded under the vague denomination "sudden." Many of these deaths, besides others, were the subject of investigation by Coroners' inquests. The object of a Coroner's inquest is of course to ascertain the cause of death. But the practice of finding such indefinite verdicts as "found dead"; "died by the visitation of God", effectually defeats that object. It even serves to enshroud cases already obscure in thicker mystery. Thus it is, that the very class of deaths for the elucidation of which a special organisation is provided, and which it is of paramount importance to society to clear up, remain the most doubtful and unsatisfactory of all.

Table II. (Appendix) exhibits some remarkable facts. It shews in the first place that the aggregate mortality was considerably less in 1856 than in 1855. The total deaths in the latter year were 2719, in the former 2998. This diminution is the more striking when we reflect that there is abundant evidence of an increased population in 1856. The rapid extension of building strikes every eye. The increase in the number

of births recorded in the same table bears further testimony. Assuming the population to be the same during the two years, that is, 125,000, we find that in 1855 one person in every 41 died, whilst in 1856 only one person in 45 died. Expressed in other terms the mortality in 1855 amounted to 24 per 1000, and in 1856 to 21 per 1000. The value of this term will be more exactly appreciated by recalling to mind that Dr. Farr has shewn the natural death-rate to be 17 per 1000. The death-rate for all London during 1855 was about 24 per 1000, so that Shoreditch in that year reached the full metropolitan average. In 1856, the London rate was about 23 per 1000, so that in this year, the Shoreditch-rate was below the metropolitan average. It is still however greatly in excess of the normal standard.

The figures in the Tables include the deaths in St. Luke's Workhouse. These it may be urged ought to be eliminated. I find however for the two years under consideration, that their retention conduces practically to statistical accuracy. Shoreditch does not comprise within its Registration Sub-districts a single General Hospital or Prison. It cannot be doubted however that it furnishes an average contingent to the institutions of this nature situated in other parts of the metropolis. Taking the population of Shoreditch to be one-twentieth that of the metropolis, an equal proportion of the deaths in the Hospitals and Prisons must be assigned to Shoreditch. Thus in 1856:—

The deaths in St. Luke's Workhouse were 180.

Deaths in Hospitals and Prisons $^{3}\frac{5}{2}\frac{5}{0}{}^{2} = 177$.

the Shoreditch contingent-numbers sufficiently similar to allow us to reckon the deaths in St. Luke's Workhouse without danger of material statistical error.

The same Table further shews the great mortality of infantile life, another crucial test of unhealthy local conditions. In 1855, out of 2998 deaths 714 died under the age of one year, and 1389 under *five years*, a proportion little short of *one-half*. In 1856 there was some improvement in this respect. 1232 children under five years died out of a total mortality of 2719.

To the Sanitary Physician these facts are eminently suggestive. If one-fourth of the children born *die* under one year old, and one-half under five years, mostly from original diseased organisms, from want of food, from exposure to cold, and malarious influences, it is certain that many of those who survive that age, survive with enfeebled health ill-fitted to wage the battle of life, falling early victims to subsequent disease, or after propagating new beings degenerate like themselves, maintain a parasitical life upon the vitals of the community. The next step in the Life-Table shews us that before attaining the age of fifteen years fully one-half of all the persons born had perished; that is, they had perished before they had been able to contribute anything by their labour towards the burden of their maintenance. In the next stage from fifteen to forty, including a large part of the most active period of life, 384 persons, or more than one-fourth of the survivors from adolescence died. Another step shews that those

who survived the age of forty barely numbered one-third of the total born; and that so many die within the next twenty years that barely one-fifth of the persons born survive the age of sixty.

These facts prove the intimate connection between an excessive infantile mortality and a low health-standard of the adult population. A disciple of Malthus or of Martineau, looking merely at the first term of the comparison, might rejoice to find that the "preventive check" against a redundant population was in full operation. But those for whom this inhuman philosophy has no attraction, who look with a clearer insight into the causes of the power and prosperity of this country, will reflect upon the full import of both terms in their connection with each other, and will perceive a powerful incentive to exertion to counteract those life-depressing influences which cannot destroy infant-life without impairing adult health, and thus reducing the productive power of the community.

I have the honour to be,

GENTLEMEN,

Your faithful Servant,

ROBERT BARNES, M.D.

13, *Devonshire Square*,
11*th April*, 1857.

TABLE I.

Deaths distributed according to Diseases.—for 1856 and 1857.

Causes of Death.	1855	1856
I. Zymotic:		
Small Pox	53	13
Measles	48	50
Scarlatina	138	111
Hooping Cough	131	129
Croup	35	34
Thrush	12	7
Diarrhœa	112	107
Dysentery	7	4
Cholera	6	8
Influenza	6	3
Scurvy and Purpura	...	...
Ague	4	1
Remittent Fever	2	...
Infantile Fever	...	2
Typhus Fever	153	225
Puerperal Fever (Metria)	13	11
Rheumatic Fever	6	9
Erysipelas	13	21
Syphilis	8	9
Noma (Canker)	4	1
Hydrophobia	...	...
II. Dropsy, &c.:		
Hæmorrhage	7	13
Dropsy	77	51
Abscess	5	2
Ulcer	5	3
Fistula	1	1
Mortification	1	9
Cancer	42	31
Gout	3	...
III. Tubercular:		
Scrofula	15	16
Tabes Mesenterica	55	50
Phthisis (Consumption)	392	334
Hydrocephalus	64	60
IV. Brain and Nerves:		
Cephalitis	31	27
Apoplexy	72	59
Palsy (Paralysis)	85	66
Delirium Tremens	7	4
Chorea	...	...
Epilepsy	22	15
Tetanus	1	...
Insanity	18	5
Convulsions	107	102
Disease of Brain, &c.	26	22
V. Heart and Blood Vessels:		
Pericarditis	3	4
Aneurism	2	...
Disease of Heart, &c.	70	77
VI. Lungs and Organs of Respiration:		
Laryngitis	16	14
Bronchitis	189	191
Pleurisy	7	4
Pneumonia	249	231
Asthma	39	41
Disease of Lungs	11	7
VII. Stomach and Digestive Organs:		
Teething	37	19
Quinsey	2	1
Gastritis	4	4
Enteritis	20	7
Peritonitis	10	4
Ascites	2	3
Ulceration of Intestines	5	3
Hernia (Rupture)	3	5
Ileus	6	5
Intussusception	2	5
Stricture of Intestinal Canal	2	...
Disease of Stomach, &c.	5	16
Disease of Pancreas	...	...
Inflammation of Liver (Hepatitis)	15	11
Jaundice	8	4
Disease of Liver	10	21
Disease of Spleen	1	...
VIII. Kidney, &c.		
Nephritis	...	2
Nephria (Bright's Dis.)	4	3
Ischuria	...	...
Diabetes	...	...
Stone	7	1
Cystitis	4	1
Stricture of Urethra	...	1
Disease of Bladder, &c.	...	...
Kidney	8	8
IX. Childbirth:		
Paramenia	...	...
Ovarian Dropsy	3	1
Childbirth (see Metria)	12	13
Disease of Uterns, &c	9	9
X. Joints, Bones, &c.:		
Rheumatism	5	6
Arthritis	...	...
Disease of Joints, &c.	10	3
XI. Skin, Cellular Tissue:		
Carbuncle	1	2
Phlegmon	1	2
Disease of Skin, &c.	...	2
XII. Malformations.		
Cyanosis	2	4
Spina Bifida	3	...
Other Malformations	5	...
XIII. Premature Birth and Debility	53	65
XIV. Atrophy	118	92
XV. Old Age	86	80
XVI. Sudden	78	52
XVII. Violent Death:		
Intemperance	3	4
Privation of Food	3	2
Want of Breast Milk	23	19
Neglect	...	...
Cold	1	...
Poison	3	4
Burns and Scalds	6	2
Hanging	6	8
Suffocation	14	13
Drowning	7	13
Fractures and Contusions	6	9
Wounds	4	1
Other Violence	4	4
Causes not specified	...	...

TABLE II.

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

	Under 1 Year.		From 1 to 5		From 5 to 15.		From 15 to 40		From 40 to 60		From 60. upwards.		Totals		Total Births.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1855	401	313	340	335	106	107	142	215	226	216	232	365	1447	1551	
	714		675		213		357		442		597		2998		4542
	1389														
1856	378	312	281	261	71	56	156	228	231	194	247	304	1364	1355	
	690		542		127		384		425		551		2719		4748
	1232														

METROPOLIS LOCAL MANAGEMENT ACT.

THE VESTRY OF

SAINT LEONARD, SHOREDITCH.

Fourth Quarterly Report

OF THE

MEDICAL OFFICER OF HEALTH.

To the Vestry of Saint Leonard, Shoreditch.

GENTLEMEN,

The Report now submitted to you embraces the quarter ending on the 28th March, 1857. If read in continuation of the three preceding quarterly Reports, it will complete the Annual Report for the First Sanitary Year.

The total deaths amounted to 706, whilst those of the corresponding quarter of 1856 numbered 711, and of 1855, 915. Taking into consideration the evidence given in the Annual Report of a continuous increase of population, this lesser mortality becomes the more marked. Table I in the Appendix exhibits the deaths distributed according to the principal causes. It is there shewn that 111 deaths or rather more than one-seventh of the whole were caused by the six principal zymotic diseases,—a proportion certainly far too great, but less than in previous years. The greater part of this zymotic mortality is due to Hooping-cough which destroyed 30, and to ordinary Fever which destroyed 37 persons. Scarlatina was fatal to 20 persons, mostly children; 12 died of Diarrhœa; and only two of Small-pox. The chief cause of mortality however, was the combined influence of cold, wet, insufficient food, and impure air, operating chiefly upon individuals whose vital powers were previously impaired by chronic disease, by feeble or degenerate organisation, destitution, or other causes. This influence is manifested in the large proportion of deaths from diseases of the respiratory organs. 170 persons were cut off by acute or subacute inflammations and congestions of the lungs; and 88 by Phthisis or Lung-consumption.

With reference to the means of lessening the mortality from zymotic diseases and of course the sickness of which the mortality is an exponent, I wish to observe that I deem it premature to construe the diminution of the number of deaths from the diseases of this class

which appears on the Mortality-Tables, as solely owing to the sanitary improvements which have been effected during the past year. The intensity, the virulence of the epidemic force certainly varies at different epochs. But some share in this amelioration of the Public Health must I think fairly be assigned to those improvements. The Registrar-General whose statistical survey embraces the whole metropolis and kingdom, says in his last Quarterly Report, "The temperature of the last winter quarter differed little from the average, and will not account for the low rate of mortality, which may be partly referred to improvements in the sanitary condition of the people." There is nothing, in my judgment, better established in medical science than the dependence of certain forms of Fever and Diarrhœa upon certain aerial poisons directly proceeding from the human body, or secondarily arising from the fermentation of human excrementitious matter. It may be stated as a rule that wheresoever Fever and Diarrhœa of certain forms arise, a skilful inquiry will rarely fail to detect some malarious influences originating in the manner described. Under the system now in operation I am kept regularly informed as to the movement of those diseases which are more especially the tests of unhealthy local conditions. The Registrar-General supplies the weekly-lists of deaths, which includes the cause of death and the locality. The nature of every case of sickness admitted into the Workhouse, and the place whence the sufferer was brought are entered and forwarded to me. The Sickness-registers of the Parish-Surgeons are also examined weekly. Aided by these official indications, by occasional private com-

munications, by the experience of the medical charities whose labours extend within the district, and by my own observations and those of the Inspectors, immediate attention is directed to the disease-producing localities, and fitting steps to remove the causes of insalubrity are ordered. By this course some abatement of evil has undoubtedly been effected. As an instance, I may mention that a court known as Pound's Buildings, had been noted as the constant habitation of Fever and sickness. Since sanitary alterations have been made—in this case chiefly consisting in the providing for adequate ventilation,—I have received no reports of zymotic sickness from the place. I trust in future reports to have a constantly increasing list of similar expurgations to record. A careful register is kept of the result of all domiciliary inspections, and of the sanitary alterations ordered; so that the date of these latter may be compared with that of the improvement in salubrity. It is however to be borne in mind that there is a constant tendency in localities occupied by the poorer classes, to relapse into unhealthiness. They require continuous observation, and the periodical application of measures of cleanliness.

In perusing the Table of causes of deaths and that which records the mortality at different ages, and the gross mortality in the several sub-districts, it is necessary to bear in mind that the Hoxton New Town sub-district includes the Workhouse of St. Luke's; and that the Haggerstone West sub-district includes the Shoreditch Workhouse. In order to arrive at greater statistical accuracy, it will be necessary to distribute the deaths

in Shoreditch Workhouse over all the sub-districts of the Parish, since each contributes its quota to that asylum.

The improvement in the general health, indicated by the diminution of the aggregate deaths, is further manifested by a corresponding diminution in the proportion of infantile mortality. During the quarter 294 children died under the age of five years: this is nearly $\frac{3}{7}$; a large proportion it is true; but it is less than obtained in the previous year.

The births amounted to 1266, a number approaching double that of the deaths.

In Table III, 3271 cases of sickness which have come under the care of the Poor-Law Medical Officers, have been classified according to diseases. This table should be compared with that of deaths. A fact of immediate importance which cannot be shewn here, but which is indicated by the comparison of the weekly returns is, that there is already manifest a disposition to an increase of Diarrhœa.

The following Table exhibits the total admissions into the Workhouse (exclusive of casuals) and the number of admissions on account of sickness for each month.

	ADMISSIONS from Sickness.			All Causes.		
	M	F		M	F	
Jan.	10	33	43	79	115	194
Feb.	30	31	61	65	54	149
Mar.	26	22	48	61	63	124
Totals	66	96	152	205	262	467

Thus it appears that 152 persons out of 467, who sought an asylum in the Workhouse were compelled by sickness.

The Table IV. in the appendix, is one in continuation of similar tables in previous quarterly reports. It shows the mortality, gross, and from epidemics, week by week, together with the proportion contributed by Shoreditch to the rates of all London. This relation gives perhaps the most useful practical standard whereby to measure the health-movement of Shoreditch. It will be seen that, without making any deductions on account of the deaths in St. Luke's Workhouse, the gross weekly mortalities generally ruled below those of all London: the aggregate of the quarter being $\frac{1}{22}$ instead of $\frac{1}{20}$. The zymotic mortality on the other hand, was somewhat above the metropolitan rate, being $\frac{1}{19}$. This excess is chiefly owing to fever. The same relations have been observed in former Reports.

In reading the Table which gives a summary analysis of the cases coming under the care of the Poor-Law Medical Officers, you may be struck with the large

number of cases entered as continued Fever. It must not be concluded that these are all cases of severe typhus or typhoid fever. It is impossible to avoid the use of some general term which shall include many slight, and perhaps some doubtful cases of fever. It is however certain, that a case of fever of little severity, often furnishes as true an indication of the existence of unhealthy local conditions, as does a case of the most malignant character. The susceptibility of individuals varies infinitely.

The board of Trustees having kindly authorised me to inspect the Sickness-Registers periodically, the incompleteness hitherto observeable in my analysis of the cases of Pauper-sickness will not recur.

Upwards of 200 houses have been specially examined on account of presumed insalubrity.

In the West Division 111 notices have been issued for the abolition of cesspools; 130 for the erection of proper water-closets; 44 for the cleansing of drains; 65 for the erection of dust-bins. In the East Division 38 notices have been issued for the abolition of cesspools; 29 for the erection of proper water-closets; 72 for the cleansing of drains; 30 for the erection of dust-bins; numerous other works have been effected in both divisions without the necessity of issuing notices. Mr. Kirkham and Mr. Ditchman have also completed the first periodical inspection of the slaughter-houses since the licensing of these places; they report them as all being in a satisfactory condition.

I am at last enabled to record the final discontinuance of the mistaken practice of burying the dead in the midst of the living: last year the Church-yard of Haggerstone Church which had been used as a burial place for the parish poor was closed. During the quarter just expired, the last church in the parish, in which the practice had lingered, has been closed against vault-interments, under an order from the Secretary of State. For an indefinite time to come, the slow decomposition of the bodies already deposited in our intramural grave-yards and under our churches, must continue to give forth miasmata more or less prejudicial. It is at least satisfactory to know that no fresh material being added the evil may be expected gradually to decline.

I regret to say that the water supplied by the New River Company has not yet attained that degree of purity which is essential to health, and which alone ought to satisfy the public. It is largely contaminated with organic matter. The water of the East London Company is comparatively pure. The restrictions in the mode of supply persisted in by the Companies operate as a serious impediment to sanitary progress.

Amongst the most important sanitary operations of the quarter, is the closure of Bull-court. The condition of this place as the constant nursery and abode of fever, and factory of pauperism, had early attracted my attention. It seemed incapable of material improvement. When the inhabitants were first enumerated in August last by Mr. Ditchman, they numbered 146, in

January last, they were 104. It is needless again to describe this place. Having referred the question as to its safety in a structural point of view to the District Surveyor, it was ordered to be closed by the Commissioners of Police, which order was carried out in the beginning of March. By this measure and the demolition of Parsons-square, the parish is relieved of two of the foulest dens, which had long served as centres for the harbouring and propagation of the most destructive physical and moral diseases.

Slaughter-houses and Cow-houses—Owing partly to the system of licensing the slaughter-houses and placing them under sanitary supervision, and partly, it ought to be said, to the intelligence of the butchers themselves, these establishments will, it is hoped, no longer operate as nuisances, or injuriously upon the health of the dwellers in their vicinity. I think it is much to be regretted that a similar controul is not given to the Vestry and Magistrates in the case of Cow-houses. If it were felt desirable to institute this controul over establishments for the slaughter of cattle and sheep, where it is the interest of the owner to observe the most scrupulous cleanliness, and where ventilation is comparatively less important, it is tenfold more necessary that an effective controul should exist over cow-yards, where a number of living animals requiring considerable space, free supply of air, adequate structural accommodation, and storeage for food, are huddled together. The statistics of our London cows, if they could be collected, would demonstrate in a manner even more striking than do

our human mortality returns, the deadly influence of over-crowding, defective ventilation, and the concentration of animal poisons. It is a source of astonishment how the trade of a dairyman, constantly suffering heavy losses from death amongst his cows, can possibly be profitable. It would be a source of astonishment no less great, were we to find the milk yielded by cows kept as too many of these wretched animals are, pure and fitted to serve as a staple article of food. It is no exaggeration to say, that much of the bone and sinew, the health and strength of the rising generation depends upon the supply of good milk. There is no other known article of food which is capable by itself of nourishing the human frame and maintaining it in health. Next to bread, there is no article which it is of equal importance to have pure. The prevalence of scrofula, rickets, consumption, is largely accounted for by the want of good milk in infancy. Whether milk containing all the elements of nourishment in the highest perfection, can be produced from cows confined in close stalls in towns, and fed on brewers grains, may reasonably be doubted. But if town-dairies are to be tolerated, it is clearly necessary to enforce all reasonable means to secure the health of the cows, and to prevent them from becoming a nuisance and an injury to the surrounding inhabitants.

Since I first adverted to the unequal pressure of pauperism in my preliminary report, an immense body of facts in illustration of this subject has been collected. The question has warmly engaged the attention of the public. The expediency of levying an uniform metro-

politan poor-rate has been closely discussed. Concerning the absolute justice of this principle, no doubt can exist. The difficulty is in its application to practice. The increasing pressure of the evil upon those districts which are least able to bear the burden, must certainly sooner or later enforce the solution of this difficulty. But there is one remedy which would operate largely in mitigation of the evil, and which admits of being immediately applied. Evidence enough has been laid before you in my reports, to shew that the main cause of pauperism is disease. The chief pauperising-diseases are those which result from the concentration of the poorer classes in localities, the sanitary condition of which is faulty. The amelioration of these localities would therefore be the first and most profitable of the preventive remedies against pauperism. For this end chiefly, the Metropolis Local Management Act has been adopted. It supplies exactly that kind of central power which can act with the least opposition, and with the greatest effect, since the Metropolitan Board consists of representatives from all the Districts of London. This Board might be empowered to levy a General Sanitary Rate; the funds proceeding from which should be applied to the payment of the sanitary staffs of the several districts, and the carrying out of the works strictly falling within the sanitary department.

Years ago, Dr. Farr, in the Fifth Annual Report of the Registrar-General, had stated this case with his accustomed force and precision: "Call the Poor-rate a tax, and its inequality in the metropolis is evident; call

it the regulated alms-giving of Christian charity, and it leaves the inhabitants of wealthy districts *a large arrear* to be made up by voluntary gifts.

"The inhabitants of the rich districts would have no right to complain, if in carrying out any important sanitary measures, the metropolis was regarded as one city, and the rates for the particular purpose were levied equally on the whole assessable property, to be applied principally to the improvement of the worst and poorest districts. *It would be some compensation for the inequality of the poor's-rate.*"

The machinery for applying this measure of strict justice and necessity now exists. It ought not to be longer postponed.

I cannot conclude this report, without expressing my gratification at seeing the realisation of a work of the highest importance to the public health, which I had proposed in September, 1855, before the appointment of the Medical Officers of Health. Through the combined labours of this body, a weekly register of the sickness occuring in the metropolis, as collected from the hospitals, dispensaries, workhouses, and the practice of the Poor-Law Surgeons, will be published. The sickness-returns of the Officers of Health, will complete what the admirable mortality-returns of the Registrar-General had left undone, in supplying a continuous index of the state of the public health. The rise and progress of epidemics, the increase of any particular form of disease,

will thus be immediately chronicled; and the information be turned to practical account. The experience of one district will be made available to all the other districts. The metropolis will enjoy the incalculable advantage of having its health guarded not only by the local information and exertions of each Officer of Health working in his proper district, but by the systematic co-operation of the entire body.

Under this system, London with its two millions and a half of inhabitants, will exhibit a perfection of Hygienic administration, unapproached by any city in the world.

I have the honour to be,

GENTLEMEN,

Your faithful Servant,

ROBERT BARNES, M.D.

13, *Devonshire Square,*
27th April, 1857.

TABLE I.

Shewing the causes of Deaths during quarter ending 28th March, 1857.

DISTRICT.	Small Pox.	Measles.	Scarlatina.	Hooping Cough.	Diarrhœa.	Continued Fever. (Typhus and Typhoid.)	Erysipelas.	Puerperal Fever. (Child-bed Fever)	Acute Pulmonary Inflammations.	Phthisis.	Totals.
Holywell	2	2	3	3	1	3	1	. .	19	13	72
St. Leonard's.....	...	2	5	4	...	4	2	...	24	20	115
Hoxton New Town	...	2	1	5	...	16*	1	...	29	15	153†
Hoxton Old Town.....	...	3	5	5	...	6	...	1	29	13	96
Haggerstone West	...	1	4	11	4	5	2	2	47	18	177**
Haggerstone East	...	...	2	2	7	3	1	...	22	9	93
Totals.....	2	10	20	30	12	37	7	3	170	88	706

* 13 in St. Luke's Workhouse included. † 55 Deaths in St. Luke's Workhouse are included.

** 61 Deaths in Shoreditch Workhouse are included.

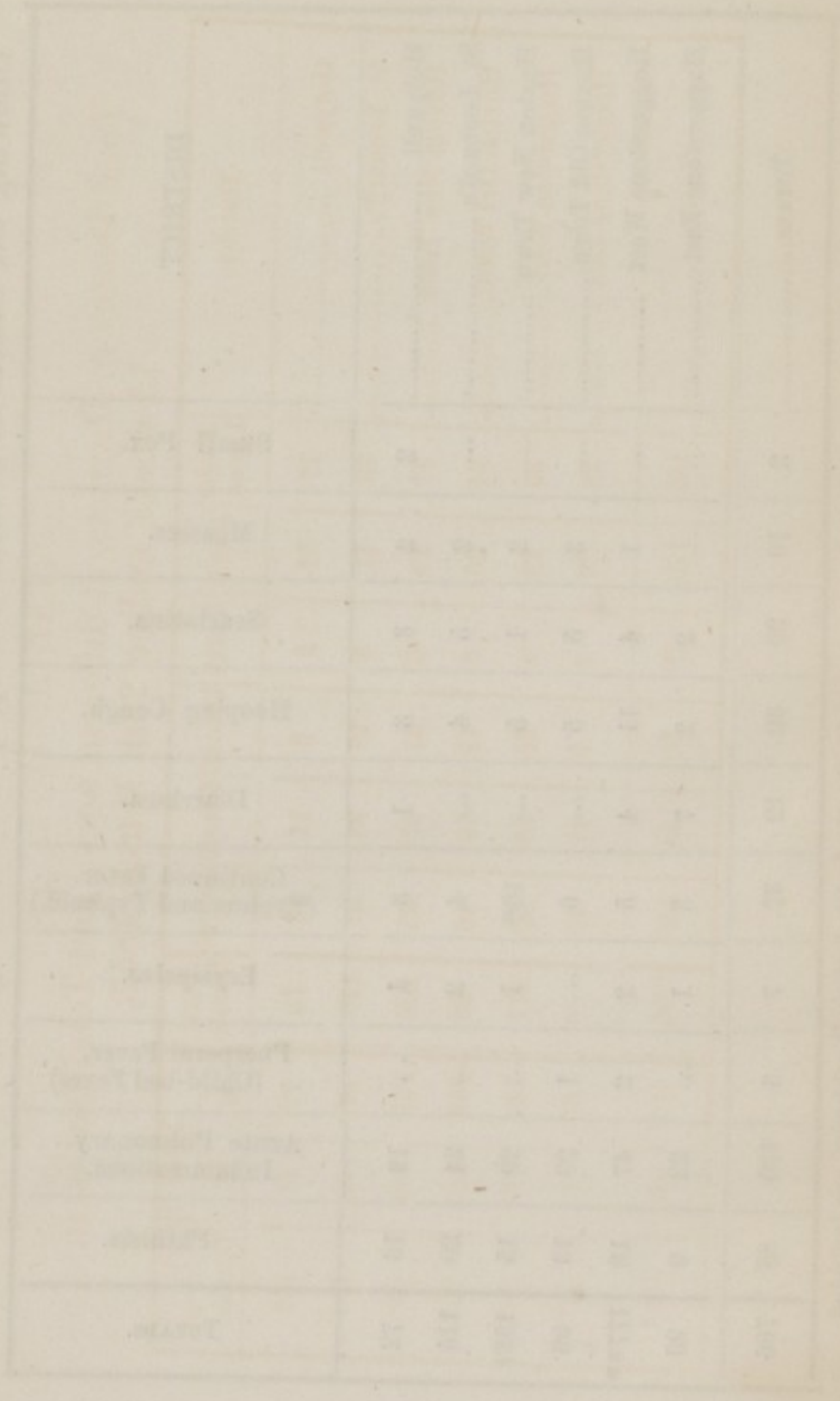

TABLE II.

Total Deaths in Districts, at different ages; and Total Births in 13 weeks, ending 28th March, 1857.

District.	Under 1 year.	1 to 5	5 to15	15 to40	40 to60	over 60	Total Deaths	Total Births.		
								M.	F.	Totals.
Holywell	17	21	2	5	14	13	72	72	83	155
St. Leonard's.....	30	17	8	16	23	21	115	95	99	194
Hoxton New Town	33	19	8	23	35	35	153	121	135	256
Hoxton Old Town.....	24	20	5	12	19	16	96	104	122	226
Haggerston West	35	29	2	25	36	50	177	146	119	265
Haggerstone East.....	26	23	3	9	17	15	93	81	89	170
Totals	165	129	28	90	144	150	706	619	647	1266

TABLE III.

Shewing New Cases of Disease coming under treatment of the Poor Law Medical Officers, during the quarter ending the 28th March, 1857.

District.	Medical Officer.	Small Pox.	Measles.	Scarlatina.	Hooping Cough	Diarrhœa.	Continued Fever, Typhus & Typhoid	Acute Pulmonary Inflammations.	All Diseases.
Church End North	Mr. Greenwood	...	2	1	6	16	97	26	642
Church End South	Dr. Burchell ...	1	10	13	6	32	133	73	583
Hoxton	Mr. Coward.....	2	...	1	3	6	26	16	628
Workhouse.....	Mr. Clark.....	...	...	...	2	33	33	45	800
Holywell and Moorfields	Mr. Collier*.....	1	4	5	5	18	85	38	618
TOTALS		4	16	20	22	105	374	198	3271

* The Returns for this District being imperfect, average numbers calculated from Sickness-returns of the other districts, have been substituted for the true numbers.

TABLE IV.

Shewing the Weekly Meteorlogical 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 Temperature.	Barometer	Difference between Dew-point Temperature and Air-Temperature,	WIND, General Direction.	WIND, Amount of Horizontal Movement. MILES.	Rain in Inches,	TOTAL DEATHS In Shoreditch	TOTAL DEATHS In all London.	Proportion of deaths from all causes in Shoreditch to all London	DEATHS From EPIDEMICS. In Shoreditch	DEATHS From EPIDEMICS. In all London	Proportion of Deaths from Epidemics in Shoreditch to all London.
Jan. 3...	40·6	29·746	3·5	W. S. W.	1365	0·23	62	1497	1/24	4	176	1/44
,, 10...	36·8	29·799	2·3	N.E.&S.W.	810	1·20	52	1135	1/22	13	184	1/18
,, 17 .	36·5	29·636	2 6	VARIABLE	485	0·39	48	1171	1/24	11	180	1/17
,, 24...	38·1	29·547	2·0	W.	775	0·41	62	1216	1/20	7	197	1/28
,, 31...	31·2	29·602	3·1	VARIABLE	385	0·44	56	1209	1/21	6	155	1/26
Feb. 7...	32·3	29·762	3·3	S. W.	428	0·08	68	1368	1/20	11	173	1/16
,, 14 ..	40·9	29·837	5·7	S. W.	715	0·09	57	1264	1/22	9	176	1/19
,, 21 ..	42·5	29·988	3·2	S. W.	280	0·00	73	1243	1/17	12	198	1/16
,, 28...	41·2	30·214	4·3	VARIABLE AND CALM.	205	0·00	64	1216	1/20	11	163	1/15
Mar. 7...	43·1	30·122	5·2	VARIABLE	490	0·00	34	1175	1/32	7	142	1/20
,, 14...	37·2	29·607	5·3	N.N.E.&S.W.	965	0·33	47	1156	1/24	7	176	1/25
,, 21...	45 1	29·719	5·4	S.W. & S.E.	690	0·33	52	1195	1/23	7	157	1/22
,, 28...	39·6	29·625	3·3	S. E.	280	0·07	45	1248	1/27	8	146	1/18
				TOTALS ...	7873	3·57	720	16093	1/22	113	2223	1/19
No. of Column	1	2	3	4	5	6	7	8	9	10	11	12