

## **[Report of the Medical Officer of Health for Islington, Parish of St Mary].**

### **Contributors**

Islington (London, England). Parish. Vestry.

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REPORT  
ON  
THE SANITARY CONDITION  
OF THE  
*Parish of St. Mary, Islington,*  
DURING THE YEARS  
1876 & 1877.

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BY  
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TO THE  
VESTRY OF ST. MARY, ISLINGTON.

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GENTLEMEN,

I have the honor to lay before you the records of birth and mortality for the years 1876 and 1877, and I purpose considering the statistics of both these years in one report. On this point a word of explanation is called for, and may be permitted. We have, as you know, had a serious outbreak of small-pox. At the end of last October, and after it had been amongst us for a year, the whole facts respecting its origin and the history of 1,000 cases, were very carefully collated. These I placed before you in a somewhat lengthy report, which was submitted to the Vestry, and ordered to be printed and circulated. This report, together with that of the Sanitary Committee presented at the same time, I now incorporate. This constituted, of course, the chief sanitary question of the year, the rest being little else than matters of detail. I have, therefore, placed the few tables relating to that year in the report which I have now the pleasure of submitting to you.

I lay before you in the following tables the number of marriages, births and deaths recorded for the years 1876 and 1877.

MARRIAGES, 1876.—TABLE NO. I.

	No. of Marriages.
In quarter ending March ... ..	425
"    "    June ... ..	541
"    "    September ... ..	588
"    "    December .. ..	633
	2,187
Total for year ... ..	

## MARRIAGES, 1877.—TABLE NO. II.

			No. of Marriages.	
In quarter ending March	...	...	...	427
"	"	June	...	496
"	"	September	...	623
"	"	December	...	642
Total for year			...	2,188

The marriage rate in Islington, therefore, was 17·2 per 1000 of the population for 1876, and for 1877 it was 16·76 per 1,000.

The marriage rate for the United Kingdom for 1876 was 16·7 per 1,000. In France it was 15·85, and in Spain 15·1 per 1,000.

It will be remarked that the number of marriages in Islington is as nearly as possible the same for the years 1876 and 1877. In each case it will be noticed that there were fewer marriages in the first quarter of the year, the number gradually increasing until the December quarter, when it was about one-half as many again as in the March quarter.

In 1876, 201,874 marriages took place in England and Wales. This was a somewhat smaller number than usual; but the depressed state of trade is sufficient to explain the fall. I may mention, however, that the marriage rate was by no means injuriously affected by Islington, but the reverse.

## BIRTHS, 1876.—TABLE NO. III.

	West District.			Eastern District.			Whole Parish.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1st Qtr.	546	537	1,083	670	598	1,267	1,216	1,135	2,351
2nd "	498	479	977	654	618	1,272	1,152	1,097	2,249
3rd "	536	494	1,030	624	614	1,238	1,160	1,108	2,268
4th "	542	474	1,016	665	637	1,302	1,207	1,111	2,318
Total	2,122	1,984	4,106	2,613	2,467	5,079	4,735	4,451	9,186

## BIRTHS, 1877.—TABLE No. IV.

	Western District.			Eastern District.			Whole Parish.		
	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1st Qtr.	558	495	1,053	692	583	1,275	1,250	1,078	2,328
2nd „	517	481	998	660	647	1,307	1,177	1,128	2,305
3rd „	522	524	1,046	677	636	1,313	1,199	1,160	2,359
4th „	524	488	1,012	657	649	1,306	1,181	1,137	2,318
Total	2,121	1,988	4,109	2,686	2,515	5,201	4,807	4,503	9,310

Thus the birth rate in Islington for 1876 was 36·3 per 1,000 of the population, and for 1877 it was 35·6 per 1,000.

The birth rate for all England was 36·6 per 1,000 for 1876, this being the highest birth rate on record, and 34·5 for 1877.

For 1877 the birth rate in France was 25·6 per 1,000, whilst in Austria it was between 39 and 40, or more than one-half greater than in France.

I append a table giving certain details since 1856 of the birth rate in our parish, and its relationship to the death rate as illustrated by the excess of births over registered deaths.

TABLE NO. V.

Showing Births, Birth Rate, &c., in Islington for the past Twenty Years.

	Total Births.	Birth-rate per 1,000 of the Population.	Males.	Females.	Excess of Registered Births over Registered Deaths.	Proportion of Females to every 100 Males.
1856	4309	34·3	*	*	2015	*
1857	4591	34·9	2391	2200	2181	92·0
1858	4413	32·1	*	*	1771	*
1859	4997	34·8	2595	2402	2327	92·5
1860	5184	34·7	2655	2529	2339	95·2
1861	5526	35·5	2891	2635	2585	91·1
1862	5580	34·5	2773	2807	2570	101·2
1863	6164	36·9	3073	3091	2310	100·5
1864	6317	36·6	3211	3106	2474	96·7
1865	6747	37·9	3409	3338	2934	97·9
1866	6908	37·0	*	*	2736	*
1867	7374	39·0	3831	3543	3614	92·5
1868	7718	39·3	3974	3744	3508	94·2
1869	7483	37·0	3820	3663	3218	95·8
1870	7616	36·4	3881	3735	3246	97·5
1871	7655	35·6	3824	3831	3026	100·1
1872	8000	36·2	4051	3949	3970	97·4
1873	8522	38·5	4364	4158	4129	95·2
1874	8669	36·5	4316	4353	3989	100·85
1875	9032	36·9	4657	4375	4376	93·9
1876	9186	36·3	4735	4451	4397	94·0
1877	9310	35·6	4807	4503	4472	92·59

## DEATHS.

In 1876, 4,789 deaths were registered in the parish of Islington. Our death rate, therefore, for the year was 18.9 per 1,000; the death rate of the United Kingdom being 21.0 per 1,000.

In 1877, 4,838 deaths were recorded, making our death rate for the year 18.5 per 1,000, the death rate of the United Kingdom being 19.97 per 1,000.

Of the 4,789 deaths in 1876, 2,440 were males and 2,349 were females; 2,080 of the deaths occurred in the western district (of which 1,075 were males,) and 2,709 in the eastern (of which number 1,365 were males.)

Of the 4,838 deaths in 1877, 2,395 were males, and 2,443 were females; 2,105 of the deaths occurred in the western district (of which number 1,128 were males,) and 2,733 in the eastern, 1,267 being males.

## MORTALITY AT DIFFERENT AGES.

In the following table I have arranged according to the ages the number of deaths that have taken place in Islington during the years 1876 and 1877.

	1876.	1877.
Under 1 year old ... ..	1,397	1,302
From 1 to 2 years ... ..	459	500
„ 2 to 3 ... ..	199	199
„ 3 to 4 ... ..	132	131
„ 4 to 5 ... ..	77	86
„ 5 to 10 ... ..	141	210
„ 10 to 15 ... ..	66	77
„ 15 to 20 ... ..	73	64
„ 20 to 40 ... ..	580	563
„ 40 to 60 ... ..	705	718
„ 60 to 80 ... ..	778	811
„ 80 and upwards ... ..	182	177

## CAUSES OF DEATH.

These are set forth in detail in Tables Nos. VIII. and XI., to which I refer you. I have already given in full the history of the small-pox epidemic for 59 weeks up to the end of October, 1877 with tables and diagram relating to 1,000 cases of sickness and to **181** deaths. This is inserted at the end of this Report, and I need not do more than take up the story where I left it.

In continuation, I append the following table, showing the additional 653 cases of small-pox (including 115 deaths), as recorded week by week from the beginning of November 1877, to the end of the second week in September 1878, a period of 46 weeks.



The gradual decline which had taken place in the epidemic during August, September, and October 1877, did not fulfil its hopeful promises, for in November the lull unhappily came to an end. During December and the two following months the number of cases rose rapidly, until in March, April and May of the present year the scourge had reached in respect of numbers a height which it did not attain during any other period of its course of more than two years.

The disease was during this period much less concentrated as regards locality than at its commencement. The area of its influence being largely extended, the cases were more sparsely spread, so that its virulence and intensity were decidedly less noticeable during this second period of the epidemic. The removal of a larger proportion of the patients to Hospitals (for it will be observed that out of the 653 cases 414 were so removed), would also tend to produce this effect, as well as to prevent the spread of the infection.

Upwards of 1,200 rooms or passages were thoroughly disinfected consequent upon these further cases. The sum of £50 9s. 6d. was paid by the Vestry for carrying out work where the owners failed to comply with the usual notices.

The total amount thus expended during the entire period of the epidemic was £124 15s. 7d., the whole of which sum has been repaid to the Vestry by the owners of the property.

Having given in my first report particulars relating to the destruction, to the cost of replacement, and to the purification of infected beds and bedding, it is desirable to add here the following summaries in respect to this latter period of the small-pox visitation:—

Summary of Infected Beds and Bedding destroyed		
(chiefly on account of Small-Pox) between November		
1877, and September 1878, and replaced for poor		
persons by new, at a cost to the Vestry of ... .. £95 0 0		
82 Beds	6 Blankets	
47 Mattrasses	4 Sheets	
36 Bolsters	6 Rugs	
68 Pillows	7 Articles of Clothing, &c.	
<hr/>		
256 Total.		

Summary of Articles disinfected and returned to poor owners, during the same period, at a cost to the Vestry of...		34	5	2
Disinfected.	Disinfected and Re-covered.			
31 Beds	21 Beds			
24 Bolsters	6 Bolsters			
62 Pillows	15 Pillows			
10 Mattrasses				
<hr/> 127 Total	<hr/> 42 Total			
Total 169				
Total cost of 425 Articles replaced or disinfected, &c., as above	...	129	5	2
Add total cost of 807 Articles replaced or disinfected, as stated in first report, for which see Appendix	...	262	14	11
Total cost to the Vestry of the 1,232 Articles	...	<u>£392</u>	0	1

Of the general conclusions to be drawn, and the lessons to be learnt from this small-pox outbreak, the remarks I have already made in the report referred to, must suffice. One thing is certain, that as sanitarians we must be constantly insisting on the necessity of vaccination, urging it on the people by word and by example, holding it up as the grand sheet anchor against the ravages of the disease in the future. Moreover, it must not be vaccination simply, as some would have it, that we must insist upon—that is, a single prick and a single vesicle—but it must be *efficient* vaccination, as explained by those who by the most elaborate enquiries have determined what constitutes efficiency. Conscious that what I am writing may possibly be read by those outside our profession, more even than by those within it, let me urge on parents that they should allow no mistaken feelings of kindness for their children, or dread of their suffering pain, to tempt them to urge their professional advisers to do less than what they know to be necessary for the good of the children. Such appeals cannot always be resisted; but they should not be made. Four or five vesicles may seem a cruel torture for a baby to endure. I admit it involves a week or so of pain to the child, and perhaps a week or so of trouble to the mother. The true thought that should be ever present in the parent's mind, however, is not that, but how many weeks and months of trouble and pain may it save. The slight annoyance of a fortnight may save weeks of

pain and sickness, may save a disfigured face, may save what is even more important—life itself. These statements are no mere sensational stories. Statistics indisputably prove that they are facts. Of course we cannot convince those who absolutely refuse to be convinced, nor indeed is it worth trying to do so. Fortunately, the law is clear, and the legislature have been convinced of the necessity of vaccination ; all that we can do therefore in the case of the obstinate is to put the law in operation. This is to be done, however, by no means as a punishment on the parents, but as a duty to the infant, remembering that every child that is born is under the protection of the Government, the infant being, as it were, a child of the State, the success of which depends in no slight degree on the health of the community. To use the words of a well-known writer, "A Nation's Health is a Nation's Wealth."

In 1876, 1,034 of the total deaths were due to the diseases classified by the Registrar-General under the head of zymotic. Of these 1,034, 46 were due to small-pox against 3 of the year before, 97 to measles against 78 the year before, and 34 to diphtheria against 26 the year before ; whilst on the other hand 125 deaths only are recorded from scarlet fever in 1876, against 222 in 1875. Sixty-four deaths are recorded as having occurred from typhoid.

During the year 1877 we have had recorded 157 deaths from measles, 74 from small-pox, 67 from typhoid, and 200 from scarlet fever. I should wish especially to refer to one point, to which I drew your attention in my report of 1874, viz. : the deaths from puerperal fever. I did so from a sense of duty, and very much against my own inclination, lest I should be regarded (as afterwards, I regret to say, proved to be the case), as the accuser of my brethren. In 1874, 26 deaths were recorded from puerperal fever ; in 1875, 19 deaths ; in 1876, 16 deaths, whilst I am happy to state that during 1877 only 8 deaths have been recorded as occurring from this cause. I most certainly did feel the need in 1874 of a word of caution. I gladly take this opportunity (whilst expressing my belief that none are more alive than medical men to the necessity of care), of adding a word of congratulation that the number of recorded deaths from puerperal fever in 1877 are less than one-third what they were in 1874.

The following table gives some interesting details of mortality in the parish of Islington for the past ten years :—

TABLE No. VII.

Shewing the deaths during the past ten years from the several diseases specified, and the number of deaths before and after five years of age.

	Estimated Population.		Deaths from the principal diseases of a Zymotic nature.*		Deaths from Tubercular Diseases.		Deaths from Diseases of the Respiratory Organs.		Deaths from Diarrhoea.		Deaths from Diseases of the Digestive Organs.		Deaths from Violence.	
			before 5 years after 5 "	Total.	Total.	Total.	Total.	Total.	Total.	Total.	Total.			
1868	195,802	before 5 years after 5 "	472 } 160 }	632	204 } 437 }	641	365 } 372 }	737	256 } 18 }	274	33 } 166 }	199	35 } 23 }	58
1869	202,152	before 5 years after 5 "	624 } 204 }	828	190 } 416 }	606	393 } 403 }	796	201 } 22 }	223	27 } 138 }	165	42 } 28 }	70
1870	209,057	before 5 years after 5 "	532 } 336 }	868	214 } 454 }	668	871 } 447 }	818	218 } 23 }	241	29 } 157 }	186	27 } 18 }	45
1871	214,932	before 5 years after 5 "	530 } 413 }	943	199 } 466 }	665	384 } 488 }	872	210 } 25 }	235	20 } 177 }	197	41 } 21 }	62
1872	221,902	before 5 years after 5 "	457 } 113 }	570	210 } 455 }	665	413 } 378 }	791	204 } 18 }	222	27 } 141 }	168	33 } 28 }	59
1873	229,071	before 5 years after 5 "	377 } 53 }	430	233 } 467 }	700	484 } 499 }	983	258 } 15 }	273	32 } 182 }	215	46 } 18 }	64
1874	236,899	before 5 years after 5 "	384 } 117 }	501	257 } 471 }	728	503 } 519 }	1022	185 } 17 }	202	27 } 189 }	216	48 } 33 }	81
1875	244,680	before 5 years after 5 "	413 } 140 }	553	305 } 466 }	771	459 } 519 }	978	197 } 17 }	214	33 } 188 }	221	53 } 22 }	75
1876	252,790	before 5 years after 5 "	405 } 142 }	547	292 } 532 }	824	490 } 438 }	928	259 } 26 }	285	35 } 188 }	223	42 } 28 }	70
1877	260,900	before 5 years after 5 "	468 } 216 }	684	200 } 605 }	805	514 } 470 }	984	139 } 10 }	149	38 } 176 }	214	36 } 24 }	60

\* This includes Small-Pox, Measles, Scarlatina, Typhoid Fever, Diphtheria, and Whooping Cough.

This then is my story of the births, marriages and deaths that have occurred in Islington during the years 1876 and 1877. Two facts are perfectly patent: *first*, that the number of boys born is greater than the number of girls; and *secondly*, that women generally attain a greater age than men. Nature seldom indulges in extremes; and to equalize births and deaths, considering the greater risks run by men than by women, the number of boys born is in excess of the girls. But England is a very little place compared with the rest of the world, and it is worth while now and then to consider not the statistics merely of our little island, but statistics of far greater extent. It is a curious fact, that taking the whole range of birth and death statistics, not of Great Britain, but all that can be obtained, the number of males born is as nearly as possible the same as the number of females. It would thus seem that nature has fixed the law that a man should be the husband of but one wife. Vastly different, however, is the ratio in different countries; and this would indicate that though the man is to be the husband of one wife, the intermarriage of nations is in accordance with nature's plans. Thus the absolute balance of the sexes is as nearly as possible attained in France, a boy being born for each girl. To speak accurately, there are in France 1,000 men to every 1,007 women. I will not here discuss a question which certainly does not belong to this report; but the exact effect of this almost perfect equality of numbers on French life is a tempting subject. Or take some other facts. Northern countries we speak of as rude and martial, when we compare them with southern countries, which we should perhaps describe (and not incorrectly) as lazy and effeminate. And yet, strange as it may seem, and contrary to all preconceived notions, we find that in Sweden there are 1,000 men to 1,064 women, whilst in the more southerly Greece there are 1,000 men to only 933 Greek women. I need not stay to point out the enormous influence of the female population in England, but it by no means stands at the head, and very far from alone, in the larger ratio of women over men. In some parts of America the disproportion is remarkable. Thus in Paraguay there are 2,080 women to 1,000 men; but this most anomalous state of things is a pure accident, and may be accounted for by the ravages of the Brazilian war, which almost

annihilated the males of the conquered country. The chief places where marked disproportion occurs are islands ; but what the law is governing which sex shall preponderate is curiously difficult to determine. Inland places for some reason or another shew generally a much greater uniformity. There is a marked female preponderance in the Canary Islands, and a marked male preponderance in Tasmania and New Zealand. In a French colony called Reunion there are said to be 1,000 negroes to 600 creoles and mulatto women. This subject is an interesting one, and I make these few remarks with the intention of returning to it again another time.

#### WATER SUPPLY.

I place before you, in a table, the analysis of the water of the New River Company, month by month, for the year 1876 and 1877. The whole of Islington is supplied by this Company, and I deem it a matter of the greatest importance to watch carefully and constantly the purity of the water as delivered by the Company to the consumers. To do this, I have myself taken a sample for analysis every month from the mains of the Company, either from the Cab Rank at Islington Green, or from the supply at the Vestry Hall, the Company's officers having no knowledge, either of the day or of the time, when the sample is so taken. This, I consider, may be regarded as a genuine test of the quality generally, of the water supplied. There could be, in fact, no better test, unless it was a daily analysis, which, I need not say, would be next to a practical impossibility. Excepting in January 1877, in no case was the water found, when drawn, to be in the slightest degree turbid, showing the efficient filtration to which the water is subjected before delivery. Indeed, I may say, from a knowledge both of the sources from which the New River Company derive their supply, and also of the works belonging to the Company, that the water is unimpeachable. The New River Company derive their water partly from the River Lea, at a point just below the confluence of the River Rib, and partly from the beautiful chalk springs near Ware. The water of the River Lea, at the point of the Company's intake, is exceedingly pure and excellent in every respect. The mixed river and spring water flows down a conduit, called "The New River," the length of which is about 28

miles, having been reduced in length since the time of Sir Hugh Myddelton by an alteration of its original winding course, by about  $10\frac{3}{4}$  miles. I know the New River perfectly from one end to the other, and have been down it in a boat; and it gives me pleasure to speak of its excellent state of preservation, a preservation which reflects the highest credit on the Company.

Analysis of the New River Water, as taken from the Mains of the Company, during 1876 and 1877.

1876.	Appear- ance.	Ammonia,		Nitrogen as Nitrates, &c.	Oxygen required to Oxidize Organic Matter, &c.	TOTAL SOLIDS.	Lime, (CaO).	Magnesia, (MgO).	Chlorine, (Cl).	Sulphuric Anhydride, (SO <sub>3</sub> ).	Hardness on Clark's Scale.	
		Free and Saline.	Organic								Before Boiling.	After Boiling.
		grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	degs.	degs.
January.....	c.	0'000	0'004	0'168	0'033	22'17	—	—	0'924	—	15'8	3'8
February...	c.	0'000	0'006	0'184	0'045	21'53	—	—	0'924	—	15'4	3'8
March .....	—	—	—	—	—	—	—	—	—	—	—	—
April.....	—	—	—	—	—	—	—	—	—	—	—	—
May.....	—	—	—	—	—	—	—	—	—	—	—	—
June.....	c.	0'000	0'004	0'135	0'008	17'98	—	—	0'862	—	13'2	2'8
July .....	c.	0'000	0'004	0'105	0'020	18'40	—	—	0'795	—	14'3	2'6
August.....	c.	0'000	0'003	0'090	0'017	16'60	—	—	0'795	—	13'0	2'4
September..	c.	0'000	0'003	0'090	0'017	16'61	7'392	0'504	0'795	0'754	12'7	3'3
October.....	c.	0'000	0'004	0'120	0'023	19'60	7'952	0'468	0'795	0'733	13'8	3'3
November..	c.	0'001	0'003	0'120	0'014	19'07	7'840	0'464	1'050	1'060	13'2	2'8
December..	c.	0'000	0'004	0'160	0'096	19'20	7'462	0'431	0'860	1'560	14'6	4'4
Average....	.....	0'000	0'004	0'130	0'030	19'01	7'661	0'466	0'866	1'026	14'0	3'2

  

1877.	Appear- ance.	Ammonia.		Nitrogen as Nitrates, &c.	Oxygen required to Oxidize Organic Matter, &c.	TOTAL SOLIDS.	Lime, (CaO).	Magnesia, (MgO).	Chlorine, (Cl).	Sulphuric Anhydride, (SO <sub>3</sub> ).	Hardness on Clark's Scale.	
		Free and Saline.	Organic								Before Boiling.	After Boiling.
		grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	grs.	degs.	degs.
January.....	s. t.	0'000	0'004	0'203	0'098	20'00	8'680	0'432	0'87	1'860	14'9	5'1
February...	c.	0'001	0'007	0'120	0'045	18'60	7'840	0'432	0'79	1'330	12'1	3'3
March .....	c.	0'000	0'005	0'195	0'055	21'70	9'184	0'504	0'87	1'334	14'3	3'7
April.....	c.	0'000	0'006	0'090	0'060	19'00	8'560	0'360	0'87	1'200	13'2	4'2
May.....	c.	0'000	0'006	0'135	0'042	18'40	7'160	0'360	0'94	1'260	11'0	2'8
June.....	c.	0'000	0'007	0'150	0'057	17'80	7'280	0'324	0'94	1'260	12'6	2'8
July.. .....	c.	0'000	0'006	0'090	0'029	18'90	7'952	0'360	0'94	1'066	12'1	2'4
August .....	c.	0'000	0'007	0'105	0'031	16'40	5'600	0'216	0'94	1'000	9'5	3'3
September.	c.	0'000	0'005	0'099	0'020	17'40	7'616	0'288	0'94	1'100	12'6	2'4
October.....	c.	0'000	0'006	0'120	0'018	18'30	7'896	0'180	0'87	1'066	13'2	3'3
November.	c.	0'001	0'006	0'100	0'017	19'00	8'232	0'360	0'87	0'700	13'7	3'0
December.	c.	0'001	0'006	0'180	0'040	21'00	9'246	0'360	0'87	1'166	14'3	4'2
Average....	.....	0'000	0'006	0'132	0'042	18'87	7'937	0'348	0'89	1'195	12'7	3'3

I now place before you the quantity of water supplied by the New River Company, month by month, during 1876 and 1877, the number of inhabited houses to which it was delivered, with a calculation in the third column of the number of gallons daily supplied to each home.

1876.	Nos. of Houses.	No. of Gallons daily.	Gallons of Water to each House.
January ... ..	124,056	26,089,000	210'3
February ... ..	124,051	24,672,000	198'8
March ... ..	123,992	24,699,000	199'1
April ... ..	124,135	24,963,000	201'0
May ... ..	124,182	26,629,000	214'4
June ... ..	124,323	26,653,000	214'3
July ... ..	124,553	31,547,000	253'2
August ... ..	124,652	29,274,000	234'8
September ... ..	124,785	25,138,000	201'4
October ... ..	124,922	25,271,000	202'2
November ... ..	125,015	24,701,000	197'5
December ... ..	125,011	24,132,000	193'0

1877.			Nos. of Houses.	No. of Gallons daily.	Gallons of Water to each House.
January	...	..	125,100	25,192,000	201'3
February	...	...	125,061	24,299,000	194.2
March	...	...	125,070	24,564,000	196.4
April	...	...	125,219	24,368,000	194.6
May	...	...	125,180	25,973,000	207.4
June	...	...	125,261	29,254,000	233.5
July	...	...	125,585	29,104,000	231.7
August	...	...	125,749	29,515,000	234.7
September	...	...	125,897	28,153,000	223.6
October	...	...	126,144	26,919,000	213.3
November	...	...	126,027	26,363,000	209.1
December	...	...	126,071	26,073,000	206.8

Lastly, I think it may be interesting to state in a tabular form, the number of gallons of water supplied daily by the eight Metropolitan Water Companies, month by month, and also the number of houses and the gallons supplied per head of the population.

1876.	Gallons per diem.	Houses Supplied.	Gallons per Head of the Population.
January .. ...	112,034,444	523,487	32·5
February ... ..	110,394,788	523,801	32·4
March ... ..	110,441,128	524,183	29·4
April ... ..	114,316,265	524,669	30·4
May ... ..	121,146,297	525,183	32·3
June ... ..	123,192,994	525,841	32·8
July ... ..	137,135,102	526,577	36·3
August ... ..	134,139,552	527,321	35·7
September ... ..	121,622,500	527,949	32·3
October ... ..	117,228,394	529,022	31·2
November .. ..	112,638,531	530,030	30·0
December ... ..	110,454,197	530,299	29·4
Mean ... ..	118,728,681	526,530	32·0

1877.	Gallons per diem.	Houses Supplied.	Gallons per head of the population.
January ... ..	112,206,296	527,690	29·9
February ... ..	110,670,434	530,474	29·5
March ... ..	111,349,139	530,932	29·7
April ... ..	113,059,473	531,070	30·1
May ... ..	127,627,550	531,427	33·6
June ... ..	132,579,962	532,254	34·8
July ... ..	133,642,090	533,067	35·1
August ... ..	134,067,457	533,772	35·5
September ... ..	128,090,869	534,628	33·7
October ... ..	122,683,744	535,492	33·0
November ... ..	118,048,106	535,733	31·2
December ... ..	116,033,974	537,118	30·9
Mean ... ..	121,679,176	532,805	32·25

The attention of the public has been drawn of late very much to this question of Water Supply: the Metropolitan Board of Works having applied, as you are aware, to Parliament last year for power to buy up the Companies, and to supply London with Chalk Water in the place of River Water. It seems never to have occurred to the authorities that whilst a river water may be impure, it is by no means certain that chalk water must be pure.

—There is good and bad river water I know full well,—but I know equally for certain that there is good and bad chalk water—and the change from river to well or to spring, does not necessarily

mean change from impurity to purity, or from worse to better, but may mean change from better to worse. Of course it is easy enough to draw frightful word-pictures of the noxious matters that are permitted to be discharged into a river, the water of which, after a certain time, has to be delivered to the public and used by them for drinking purposes. Alarming such statements no doubt can be made easily enough—sensational in the extreme they have been rendered over and over again,—but, nevertheless, such statements are as unphilosophical as they are sensational. They seem to overlook, or at any rate to distrust, all those powers of nature which are continually being exerted to bring about a change of matter, to bring purity out of impurity, thereby destroying what is harmful and even rendering it wholesome. For instance, every human being, with every breath he breathes, discharges into the atmosphere a vast quantity of decaying and of dead epithelial scales, and possibly, also, dead particles of tissue. We cannot prevent this never-ceasing discharge, for it is a law of our existence that death is only another word for life, and that to live we must perpetually die. “That which thou sowest is not quickened” (*i.e.*, does not live) “except it die.” A tissue is formed one day, the next it dies or is burnt up. Some of the *débris* finds its way into the air; this dead material, however, from our lungs, becomes in a very short time changed and rendered harmless by atmospheric influences. Because of this constant passage from life to death it is true that we insist on efficient ventilation; and that we hold that close courts and *cul-de-sacs* are improper places for human habitation: but given the free ventilation of our homes and of our towns, we trust to the atmosphere to act, not simply *mechanically* (for that is only one of its influences), but *chemically* too, in converting what was loathsome and disease-producing into products that are harmless, and which may be re-breathed without fear or danger. Or again, consider the food of animals: would anyone for a moment eat pork if they thought of the food of the pigs whilst doing so? Disgusting that food often is,—“To wallow in the mire” scarcely expresses all,—and yet that loathsome food of the pig is converted into flesh by what is called ‘a vital agency,’ but which we know to be a chemical agency, until there is produced a delicious food fit for the use of man and the sustenance of his

life. This is the work of nature : and why should water be the one exception to the rule? Is it the only thing in the world which cannot be purified by nature's agencies? Some, it would seem, would almost tell you so ; but for myself, regarding the subject from a strictly scientific view-point, I am convinced otherwise. Regard it, however, for a moment, not from the scientific point of view, but from the practical point of view. Is there any real case against River Water? I answer unhesitatingly, No. Is London an unhealthy City? On the contrary, it is the healthiest large City in the world. Given a district supplied by Chalk Water, do statistics show that the people in that district are healthier, less susceptible to typhoid and other diseases, and live longer than the people in a district supplied by River Water? We have such a district in that supplied by the Kent Water Company, the water of which Company is distributed to an area extending from Camberwell to Dartford in one direction, and from the Thames to Chislehurst and Bromley in the other. This Company derive their water entirely from deep wells in the chalk; and magnificent water it undoubtedly is. No finer water can be conceived, but for all this whatever differences exist in the death rate and in the sickness rate, these differences are in favor of River over that of Spring Water.

But it may be said, if you have such faith in River Water for a town supply, why are you always examining it? Of course I admit the possibility of a certain risk, but I affirm that the risk in the case of River Water is not one whit greater, provided the water be kept free from contamination for some miles above the intake (and Acts of Parliament enable this now-a-days to be done), than in the case of a well or of a spring. It would, of course, be folly to say there is *absolutely* no risk; but it is to my mind certain that *practically* there is no risk. You may in taking a walk breathe the 'materies morbi', that will set up and develop scarlet fever in your system, or you may fall down and break your leg. I mean these as illustrations of a certain risk that occurs in every step we take and in every breath we breathe, but which it would be absurd to affirm are to be regarded as arguments against breathing or walking. At any rate, the risk is no greater at the present time with Thames or Lea water, as now collected by the Companies from those rivers, than it

is if London had chalk water ; and further, what risk there is, is merely that risk which is a necessary accompaniment of everything we do and of everything we eat or drink.

I have deemed it my duty to make these few remarks on one of the great subjects of the day. They have not been on my part merely adopted for the occasion, but they have been the results of long, patient investigation. I have already in a monograph on the subject, published at the beginning of this year, dealt with the matter in detail, and I content myself now, with the further discussion of this subject looming in the distance, to ask your careful consideration to the view I have put before you in this report. As regards questions of taxation, vested interests, and the like, these as a sanitarian do not concern me, but I may venture to impress upon you that before you sanction the enormous outlay (and what the cost will really be it is impossible even to conjecture, for you know the value to be attached to estimates) you should have some definite notion of what the evil is that is complained of, and which it is proposed to remedy, and what are the facts upon which the authorities believe, or have been made to believe, that such evil or evils exists.

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“ THE SALE OF FOOD AND DRUGS ACT, 1875,” FOR  
YEAR 1876-7.

During the year ending June, 1877, I examined thirty-eight samples of food which were submitted to me for analysis by your Inspectors. These consisted of—

10 Arrowroot	4 Tea
5 Cocoa	4 Moist Sugar
5 Mustard	2 Coffee
8 White Pepper.	

In addition to these, the Islington Guardians sent me a sample of the milk delivered at the Workhouse, and a sample of butter was submitted by a resident of the parish. This makes in all 478 samples I have examined for Islington since my appointment. In no case during this year was any adulteration detected, except as regards the milk supplied to the Guardians, in which instance I gave a

certificate, but no proceedings were taken, owing to some informality which had attended the taking of the sample. The butter submitted was genuine, though charged with rather more than the ordinary amount of moisture.

#### FOR YEAR 1877-8.

During the nine months ending Lady Day, 1878, I examined one hundred and thirteen samples of food, which were submitted to me for analysis by your Inspectors.

These consisted of—

8 Coffee	12 Colored Sweets
9 Moist Sugar	27 Porter
12 Milk	27 Ale
18 Gin.	

No samples were received by me from the public during this period. This makes in all 591 samples examined for Islington since my appointment.

Of the eight samples of coffee submitted to me for analysis, seven were genuine, whilst one contained a notable quantity of chicory. No action was taken in this case, as its admixture was notified on the external wrapper of paper in which the coffee was sold.

In all the nine samples of *moist sugar* examined by me, I found varying proportions of grape sugar, but in no case to any large extent. In several I found particles of the sugar-cane, and also some Acari. In no case did I detect the admixture of sand with the sugar.

Of the twelve samples of milk submitted to me, none fell below the standard that I have fixed on which to prosecute. Three, however, were very inferior samples, whilst three others were very little better, whilst only two of the twelve samples could be regarded as of really good quality. I am aware that the standard I have fixed is a somewhat low one. I think it right to add that although I did not see my way to prosecute in any one of these cases, I consider that it is very necessary to watch the milk trade in the parish. The milk sellers have raised the price, but have not very materially improved the article.

Twelve samples of coloured sweets were submitted to me, purchased under my direction. For certain reasons I limited my analysis to those coloured red and yellow. In no case did I find that injurious colouring matters had been employed, the materials used for the purpose being entirely of vegetable origin.

In accordance with the suggestions of the Sanitary Committee, I have examined with great care and detail certain articles sold by the publicans, viz., porter, ale, and gin. Fifty-four samples of beer were submitted to analysis. In each case I estimated the common salt present, and also carefully searched for *Cocculus Indicus*, and other injurious drugs. As regards the common salt (the quantity of which was deduced from the chlorine, and which may therefore have been present in forms other than chloride of sodium) I would notice that 10 samples contained over 60 grains per gallon, 8 between 50 and 60 grains, 15 between 40 and 50 grains, and the rest under 40 grains. I confess to thinking that over 60 grains of common salt (or its equivalent) per gallon of beer is excessive; nevertheless I was of opinion (and recent events have proved that I was right) that it would be unadvisable to take proceedings in the matter.

Further than this, I have only to add that although I made a most rigid search for *Cocculus*, I was in no case able to detect a trace of the poisonous drug.

Of the 18 samples of gin, 3 were about 40° under proof. This I consider too much for bottled gin, and although in the state of the law at the time the analyses were made, I deemed it unwise to take any action (a course in the advisability of which I consulted with the Sanitary Committee), I shall in future undoubtedly in such cases advise a prosecution.

In some few cases I detected traces of fusel oil in the gin, but I am of opinion that water constitutes the chief, if not the only, adulterant of the publican worth noticing.

#### THE MORTUARY, 1876-77.

From the 1st July, 1876 to the 30th June, 1877, 453 bodies have been received at the mortuary: 210 inquests have been held in the coroner's room during the same period, the sum of £35 7s. 6d. having been paid to the Vestry for the accommodation thus afforded to the coroner. Since, however, the number of inquests has been

increasing, and the place become better known, an increase in the number of persons attending the inquests has also taken place. The space appropriated for the purpose thus became much too limited, more especially of course upon exceptional occasions.

An extension of the accommodation was, therefore, authorised by the Vestry, and has now been provided by the erection of an additional room where inquests may in future be held, while the room formerly used will be left at liberty for other purposes. The total number of inquests from the 9th of December, 1874 (the date of the first being held) to the 30th of June, 1877, (a period of nearly two years and seven months) was 420, the amount received for the accommodation by the Vestry being £73, nearly one half of which (£35 7s. 6d.) was received during the twelve months ending 30th June, 1877; while 210 inquests, exactly one half of the total number (420) were held during the same period. The total number of bodies received from the opening in March, 1874, to the end of June, 1877, was 1,316. Up to the end of June, 1876, the average number received daily was 1.03, but during the last year the daily average rose to 1.23.

#### THE MORTUARY, 1877-78.

From the 1st of July, 1877, to 31st of March, 1878, 362 bodies have been received at the mortuary, the daily average being 1.32 as against 1.23 in the previous year.

186 inquests have been held during the same period (nine months), the sum of £29 17s. 6d. having been paid to the Vestry for the accommodation which has been so greatly improved by the addition of the Coroner's New Court Room, where inquests are now held.

#### SANITARY WORK OF THE YEAR 1876-77.

##### TABLE No. IX.

This table of our sanitary work has been prepared in the usual manner, showing in the upper portions the number and variety of the inspections, re-inspections, and calls made by the District Inspectors during the year, and in the second part are set forth the amendments which have been effected.

In addition to these improvements, the three District Inspectors reported that dust was required to be removed from 1,862 houses, this number not being included in the removals ordered as the result of the work of the Inspector of Dust, which is stated in the note at the bottom of the table.

I find that the work shown in the table generally contrasts favourably with the work of former years, more particularly when we remember the immense amount of extra work entailed by the severe epidemic of small-pox, which so suddenly appeared amongst us about the middle of September, 1876.

The number of disinfections, 939, were three times more numerous than those of the previous year, and four times more than those of the year before; but the examination and destruction of infected beds and bedding also involved work which not only is not tabulated here, but which necessarily tended to diminish rather than to increase the work usually enumerated in both portions of this table.

By the authority of the Sanitary Committee, carbolic acid was again used as in previous years in the watering of some of the streets during the summer. A much greater quantity of carbolic acid was however necessary, its use being extended over a much larger area. Upon the appearance of the small-pox the streets which were most seriously affected in the Thornhill Ward were watered constantly with the solution, and this was continued daily for some time after the usual termination of the watering season; in fact, until the abatement of the disease in that particular locality.

M'Dougall's powder was also used in the hottest and driest part of the season in the courts, and two bags of 1 cwt. each were supplied every week for use in connection with the Sunday morning cleansing of the channels of the Essex, Caledonian, and Holloway Roads, where these thoroughfares are occupied as market-places until very late on Saturday night.

#### SUMMONSES, 1876-77.

During the year ending 25th March, 1877, thirteen summonses were issued by direction of the Sanitary Committee. In one of the

cases a baker was fined 40s. and costs for the offence of not keeping his bakehouse in a cleanly state, in accordance with the 4th Section of "The Bakehouses' Regulation Act, 1863." In three other cases orders with costs were made by the magistrate, prohibiting the recurrence of nuisances connected with the common privies of three of the High Street courts (now I trust soon to be removed) and the owners have since been more careful to ascertain that these places are not so much neglected by the people they ostensibly employ to look after them.

Orders were made in two cases for the payment of the expenses which had been incurred by the Vestry in carrying out disinfection works, in default of the owners complying with the usual notice under the 22nd Section of "The Sanitary Act, 1866," and the sums due have since been paid with costs.

In a third case of a similar kind, the amount claimed was paid into court before the hearing.

The remaining summonses were in respect to six houses belonging to the same owner, upon whom an order was made for certain works to be carried out; but having neglected to obey the orders, further summonses were issued, and the owner was fined £15 in respect to two of the houses, whilst the other summonses were allowed to stand adjourned from time to time pending the execution of the required works. The adoption of this course had the desired effect, and the orders were complied with, although somewhat slowly, and the £15 penalty referred to was, together with the costs, paid to the Vestry.

#### BELLE ISLE.

Owing to the action of the Sanitary Committee, Messrs. Harman & Price, and Mr. Naylor, the varnish makers of Belle Isle, have during the year discontinued the use of their premises for the making of varnish, under the provisions of the 54th Section of "The Building Act, 1844," which provides for the extinction of dangerous trades. In this place only one varnish maker now remains, whose premises are, however, so situated as to be in accordance with the requirements of this statute.

## THE SLAUGHTER-HOUSES AND COW-HOUSES IN ISLINGTON, 1876-7.

At the Annual Licensing of 1876, there were ninety-four applications for the renewal of licences to Slaughter-houses, and sixty-eight applications for the renewal of licences to Cow-houses.

Prior to this, I had in accordance with my usual custom, visited and carefully inspected the whole of the one hundred and sixty-two premises to which these applications had reference, and had laid before the Sanitary Committee my report in respect to them.

It was determined not to offer any opposition upon this occasion to the renewals applied for, and licences were therefore granted in due course to the ninety-four slaughter-houses and sixty-eight cow-houses.

Notice had, however, been received of the intention of a person to apply for a licence to keep cows upon certain premises, in respect to which a similar application had been refused by the Justices at the previous licensing, but having been informed that opposition would be again offered, the applicant did not attend, and the application was struck out.

## THE DUSTING OF THE PARISH, 1876-7.

The Dusting of a Metropolitan District is, in my opinion, a work of such paramount importance from a sanitary point of view, as to divest it, in the eyes of a Medical Officer of Health, of a great part of the prosaic and dusty character which it possesses, when viewed solely through the begrimed and cloudy atmosphere that usually surrounds it, and which is so peculiarly, if not exclusively, its own.

However common or unclean many things may be in themselves, they must, of course, be regarded with considerable interest whenever they assume an aspect which may render them likely to have a bearing upon the health of the community.

It is just so with Dusting: common and unclean though it be, it becomes both interesting and important when we consider that its neglect awakens alarm, vexation, and regret, and above all, creates a positive and wide-spread danger only to be estimated by the extent of the neglect.

On the other hand, the proper performance of this unsavoury task removes danger, allays apprehension, and produces satisfaction, quietness, and content, whilst it relieves the Local Authorities, who are responsible, from a constant source of irritation and anxiety.

Since my acquaintance with this subject, it has been my unpleasant task to be compelled to regard and review it from the darker side only of these two aspects, with feelings nearly akin to despondency; and under a continuance of the regime of the contractors, it is not too much to suppose that my experience would never have been enlarged, or extended to the brighter side, unless through the medium of the faintest gleams of hope.

Happily, the scene has been transformed, and it is rather in this latter aspect that I am now enabled to write upon the subject.

The contrast between the work carried out, as it has been with considerable efficiency, during the twelve months ending at Lady Day 1877, by the Vestry, through their Dusting and Slopping Committee, and the work as it was formerly performed by the contractors, more especially during the previous year, which was both their last and worst, was so great that I should think no vestige of doubt can remain as to the wisdom displayed by the Vestry in becoming their own contractors.

Something of this contrast may be traced in the Table No. X. presented in accordance with my usual custom, and containing a summary of the 22,671 applications for the removal of dust which were received during the year extending from Lady Day 1876, to Lady Day 1877, the number of applications received from the different Wards of the Parish, during each quarter, being specified therein.

Of these 22,671 "applications," or, as I have designated them elsewhere, "complaints" (for I regard these words as synonymous and interchangeable terms in connection with dusting), 16,095 were received by letter or postal card, and 6,576 were made personally or by message at the Vestry Hall.

During the previous year, when only a small portion of the work, about one-twelfth, was performed by the Vestry, and the remainder, or eleven-twelfths, was in the hands of Contractors, the number of the complaints was 36,867, being no less than 14,196, or rather more than three-fifths (.62 per cent.), in excess of the year under review.

This table compares favourably also in other respects with that of last year. Notwithstanding that the previous neglect of the Contractors and their consequent legacy very seriously affected the working of the first six months, the number of complaints amounted only to about two-thirds of the number received during the corresponding period of the previous year: whilst during the latter six months of this year, the complaints reached scarcely one-half of the number received during the latter half of the previous year.

Again, as regards these complaints, amounting to 22,671, it appears that they were equal to 71·7 per cent. only of the total number of inhabited houses in the parish, viz., 31,596, whereas in the previous year, under the contract system, they were equal to 116·6 per cent. During the last six months of each of these years, the contrast was much greater, the complaints being equal to 58·2 per cent. in 1875-6, whilst they were only 28·4 per cent. in 1876-7.

There is a further element, however, in connection with these statistics which should not be overlooked, and that is, that whenever the applications are most numerous, a large proportion of them are no longer ordinary complaints, but are generally aggravated by some particular neglect or continuous delay. These complaints which, under the generic term of "*second complaints*," were of very frequent occurrence and of so harassing a nature under the contractors, have now become comparatively few under the present system.

That much has been accomplished by the change is, therefore, as clear as the shining of the sun at noonday; but it should not be assumed, nor do I wish to convey such an impression, that perfection in dusting has been attained. The improvement is gradually becoming greater, and time is yet needed in order to effect changes in many attendant and untoward circumstances, which are themselves the natural and direct consequences of years of neglect, and which will while they remain injuriously affect our work. One of these circumstances is the fact that for years past the Vestry and Sanitary Committee have in every possible way invited complaints to be made to the Vestry, this practice having become absolutely necessary as a precaution against the inveterate and persistent indifference of the contractors.

The number of complaints cannot, therefore, be expected to diminish with any very great rapidity, as the inhabitants will have to unlearn the necessity of complaining to head-quarters under the present altered state of things, by which a frequent and efficient service offers facilities for removal which have not previously existed. The drawback referred to will probably be in time removed, and a more satisfactory condition in regard to the number of complaints will then be attained.

But even time will not cure everything, and drawbacks incidental and inherent to the work will remain, for the weak side of human nature in different classes of the community must continually militate against a complete efficiency.

The contractors have, it is true, departed from this work, and peace be to their manes; but dustmen are still necessary, who will naturally care first for themselves, by evincing assiduous attention in respect to those customers whose consideration in return is generally the most liberal.

"Sparrows," "pigeons" and "tots" will still constitute the most powerful attractions to the men who will never willingly forsake such irresistible charms for the "dead pieces" of the poorer neighbourhoods, where the people themselves are unfortunately the least self-helpful. Much supervision and control in such localities will therefore always be found to be absolutely indispensable.

Nor will householders and their servants become all at once entirely blameless or less negligent of their duty to themselves, for many will continue to be indifferent to the necessity of frequent and regular removal of all house refuse, irrespective of quantity. For some time they will not heed the long buried but now resuscitated cry of "Dust Oh!" until excited by the louder cries from the reeking dust-bin, when everyone will be freely censured except the culpable parties themselves.

But notwithstanding all such contingencies, an immense step in advance has undoubtedly been attained by the Vestry thus undertaking and successfully carrying out the dusting and slopping of the parish, and I believe that it is equally indubitable that this great work has been accomplished in so satisfactory a manner as to establish its permanency as an ordinary part of the direct administration of your Vestry.

## SANITARY WORK OF THE YEAR 1877-8.

## TABLE NO. XII.

The manner in which the table of our sanitary work is prepared I have already explained in this report, and I need only point out that both the number of the inspections and of the improvements of the year compare favourably with those of former years.

Owing to the continuance of the small-pox epidemic, the disinfections which were carried out, viz., 1,392, were nearly half as many again as the 939 of 1876-7, and six times more numerous than they usually are under ordinary circumstances.

This large amount of extra work, together with the examination and destruction of infected beds and bedding, of course occupied considerable time, and altogether it is a matter of satisfaction that our ordinary sanitary work has not suffered more than it has from the seriousness and extent of the additional labour which has been entailed upon us by the two years' epidemic.

The use of disinfectants in the manner already described was continued during the year, the epidemic also involving us in an increased outlay in this respect from the much larger quantity of disinfectants required.

The district inspectors, in addition to their other work, reported that it was requisite for the dust to be removed from 1,273 houses, a number quite independent of those premises which were visited and reported upon by the inspector of dust in the usual course of his duties, and who in carrying out this special branch of our sanitary work, visited during the year 19,612 premises, and found that dust was required to be removed from 7,350 of the houses inspected, so that dust was ordered to be removed from 8,623 houses in consequence of the work of the inspectors, whilst 13,858 removals were ordered owing to the complaints or applications which were received from the inhabitants.

## SUMMONSES, 1877-8.

During the year ending 25th March, 1878, four summonses only were necessary under "The Nuisances Removal Acts," and these were issued by the authority of the Sanitary Committee for

the abatement of nuisances arising from the foul condition of the drainage of four houses, and upon the magistrate's order the drains of each of the four houses in question were entirely reconstructed.

### THE SLAUGHTER HOUSES AND COW HOUSES IN ISLINGTON IN 1877-8.

At the Annual Licensing of 1877 there were 92 applications for the renewal of licences to slaughter houses, and 67 applications for licences to cow houses. The latter included one fresh application in respect to premises not previously licensed. This was opposed by the Vestry on the ground of the entire unsuitableness of the place, and the application was refused. The renewal of a licence was also refused in the case of a cowkeeper who had manifested during the year a great degree of negligence in the management of his premises, especially as regards the want of cleanliness, and which had provoked complaint and opposition from the neighbours.

Licences were therefore granted in respect to 92 slaughter houses and 65 cow houses.

The Justices having notified their intentions to fix at this licensing the number of cows they would allow to be kept upon each of the premises licensed, measurements of the sheds were taken by your officers and furnished to the magistrates, who adopted 800 cubic feet as the capacity they would in future require for each cow.

This requirement has, since the licensing, caused considerable alterations to be made by some of the cow-keepers, so as to enlarge their premises with a view to obtaining the sanction of the Magistrates to an increased number of cows being kept.

As, however, this year was rather regarded by the Justices as one of transition, during which they would allow the Cow-keepers an opportunity of gradually reducing any excess there might be in the number of their cows, it will be better that I should postpone, for a time, any remarks I may have to make with reference to this new regulation and its consequences.

At the ensuing licensing during this present year (1878), the number of cows allowed is to be fixed absolutely and upon the careful observance of the condition thus imposed, together with a

strict compliance in respect to certain other regulations as to cleanliness, the Cow-keepers have been informed by the Justices that the renewal or otherwise of their licences will in a great measure depend.

### THE DUSTING OF THE PARISH, 1877-8.

The further improvement in the Dusting, which I anticipated when my remarks having reference to the work of the previous year were written, has been realised, the number of applications being very considerably diminished, as will be seen on reference to Table No. XIII. In this table only 13,858 applications, or complaints, are tabulated as having been received between Lady Day, 1877, and Lady Day, 1878, as against 22,671 received in the previous year 1876-7, and 36,867 in the year before, 1875-6, the Contractors' year *par excellence* by its scandalous neglect.

The difference between these numbers is so strikingly great, as to be quite obvious from the merest cursory glance. The bare figures speak with an eloquence so trenchant and convincing, that they will need no strengthening by arithmetical arguments, but the following per centages may perhaps prove interesting.

In 1875-6 the applications were equal to 116.6 per cent. of the inhabited houses, in 1876-7 they were 71.7 per cent., and in the last year, 1877-8, they were equal only to 43.8 per cent.

Of the 13,858 applications tabulated during this year, 9,486 were received by letter or postal cards, and 4,372 were made personally or by message at the Vestry Hall, and although these numbers are very favourable when contrasted with those of former periods, I hope in course of time to see a still further very large reduction. Admitting that circumstances must always prevent their absolute extinction, there is certainly no reason, in my opinion, for so large a number continuing to be received as an inevitable adjunct of the work of Dusting.

It is, indeed, rather the necessity of this work that they should be found to be gradually diminishing, for it is by these figures "*en masse*" containing as they do the testimony of the many, that the efficient, or inefficient, performance of the work must be tested and

judged, and not by exceptional and isolated instances of either censure or commendation, perhaps, equally unmerited, as resulting from an individual experience, common only in either case to a very few.

Nor is it venturing too much to predict, knowing what we do of the past, that there is no disappointment in store for us in this respect. No one can doubt but that greater improvement may be confidently expected from the patient and constant efforts of those into whose able hands the great sanitary work of Dusting has so happily fallen, and who have already (as I have shown) done so much, in spite of the unfortunate circumstances which preceded and attended upon their succession to an executive inheritance of such evil repute, that years of successful labour may be necessary before this can be surmounted, and a thoroughly satisfactory reputation for efficiency be established.

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## CONCLUSION.

I have again to apologise for the somewhat light style I have adopted in writing this report. I confess it goes against the grain to do so, and nothing but the hope that I may gain a reader or two would tempt me from recording our Sanitary Work in strictly scientific phraseology, a course far more in accordance with my feelings, and less likely, I am aware, to lay me open to criticism. Sanitarians have to lament deeply the little interest that the public take in sanitary work. Many profess an interest, and their professions are real and honest, so long as our action, as a sanitary authority, has reference to their neighbour's dwelling, his water supply, his drains, and so forth. Up to this point, many a man is a good sanitarian, and would be very strict—perhaps too strict—in his demands; but touch him, or touch his home, complain of his own water-closets, drains or traps, and his earnest sanitarianism soon dwindles away into thin air before a possible plumber's bill of thirty shillings. Disinfection, in the eyes of such people (and they are by no means a small class), is an excellent thing, and so long as you do not ask them to carry it out, you are perfectly right, in their opinion, to insist

upon everybody else carrying it out. "No one lives for himself," is the principle which lies at the bottom of all sanitary work, and many men adopt it up to a point—that is, they recognise that their neighbour's life and habits closely concern their own comfort, and that for their neighbours to have broken traps and nuisance accumulations on their premises are grievous wrongs to them and to their families, inasmuch as they poison the air that they have to breathe. But such people do not quite see that they themselves live for their neighbours, and as a result of this blindness, they become singularly careless of sanitary principles, when circumstances compel us to serve them with an official notice to abate a nuisance. The fact is, the public are not downright awake to the importance of our work. They are not altogether asleep, it is true; nevertheless, they are not awake. We may teach,—but they refuse to learn. Medical officers of health write books and reports telling of sanitary laws and hygienic requirements; but how often do these remain unread or even uncut by those who receive them. Mines of practical truths relating to health these reports often are, and yet I fear their readers are comparatively few. A question of such miserable importance as a halfpenny rate seems to stir up fifty times the interest, and to be treated as of fifty times the importance that the sublime topics of health and disease—the preservation of the one, the prevention of the other, excite. It is the old story over again: "We have piped unto you, but ye have not danced." There is a fault somewhere. Does the fault consist in the circumstance (as some think) that our piping has been too classical to excite animation, or too scientific to be popular? It may be so, but whatever it is, this is certain, that the visit of a sanitary inspector is often regarded as an infinitely greater grievance than the nuisance he seeks to remedy, whilst your orders as a sanitary authority are deemed an infringement of the liberties of the people, although all we do is we believe for the benefit of the people themselves.

I have a more serious charge to make, and I make it advisedly. It certainly appears to me that those who ought to be foremost in helping our sanitary work, who should constitute themselves the source of our information on general sanitary questions, a centre where sanitary officers may obtain details of what others are doing what hygienic, precautions and systems they have found to answer,

and what they have found to fail, so that we need not be always experimenting, but profit by others' failures or successes, are in a degree that to my mind is perfectly preposterous doing all in their power to limit their sphere of usefulness, and to hinder the spread of sanitary science. I am aware that these are strong terms to use in speaking of the Local Government Board, and I am anxious that it should be at once understood that I am not referring to the medical inspectors connected with the Board (who, I am bound to say, I have always found to be ready and willing to assist at all times, by their advice, those who apply to them) but I am speaking of the general course adopted by the Board. Let me give an illustration. Every year the Local Government Board issue a report. These reports I have no hesitation in saying are, for the most part of great value: the information they contain has been collected at a great cost, and, I need not say, that to print volumes of three or four hundred pages full of plates and photographs, also involves considerable outlay. This cost is paid for by the public. It might surely be expected that the information, got together and printed *at their cost*, should be in the hands of the public, or, at any rate, in the hands of those entrusted with the health of the public. The last report of the Local Government Board contained a paper on trade nuisances of enormous value, and I shall be pardoned referring to it inasmuch as it was the work of my predecessor, Dr. Ballard. Although I am not prepared to accept all it contains, I am bound to say I regard it as one of the most valuable papers on the subject that has ever appeared. The subject is one of great importance to health officers, yet strange to say, not a copy was sent out by the Board to the various medical officers of health, or to the officers of the sanitary authorities for their use; whilst so few copies were printed, that within three weeks of its issue I myself paid half as much again (15s.) for a copy (and thought myself fortunate even to get it for that), as the price at which the report was originally issued. Moreover, it was by mere accident that I heard of the report at all; and, what is worse still, this report can never be re-issued. Surely the work done at the head office, and recorded in the report of the Board, should be sent far and wide, indeed to every sanitary authority throughout the kingdom, so that health officers may profit

by the labours of those who devote their whole time to these matters. The authorities of the Local Government Board should remember that these reports are not issued for the satisfaction of the inspectors who make the investigations on which the report is based; they are not issued to swell that long line of blue books, by which authorities would seemingly wish us to measure their energies; they are not issued for the purpose of conveying information to a chosen few who live within the charmed circle of Whitehall: much alone, they are certainly not ordered and paid for by the public, so that a few speculative booksellers, by procuring and keeping back a certain number of copies, may make exorbitant profits. They are issued, if I mistake not, for the good of the people, and for imparting information to those to whom the health of the people is entrusted. Let these reports be issued by all means. Let no money be spared in collecting the information or in printing it when collected; but having done this, let a large number of copies be printed and circulated far and wide (for the difference of printing 10,000 over 1,000 copies is simply the question of paper), so that the public generally may be benefitted by the work. This system of hoarding up information has been going on too long. I feel that, as a health officer, it is time to speak plainly. I therefore venture, after due consideration, to say that the course adopted at the present time in these matters by the Local Government Board is, in my opinion, most unfair to medical officers of health generally, and calculated to interfere with, or at any rate in no way to assist the progress of sanitary science.

To you, gentlemen, I must express my sincere thanks for the kind consideration you have at all times given to any suggestions I have had to offer, whilst the cordial co-operation of the Sanitary Committee is a matter for which I return them my sincere thanks. Our work to be successful should be quiet and noiseless. We prefer not to have a trumpet blown before us on our sanitary inspections. The parish neither see nor know the work of your Sanitary Committee or of your sanitary officers. We issue no flaming bills. We publish our names as seldom as possible; indeed, the more we can keep them in the background the better for our work. We know that "in quietness must be our strength." We desire no police court advertisement. We prefer to convince rather than to summons.

These, I know, are the views of your Sanitary Committee, and they are the principles upon which I have always acted, since you appointed me your officer. Moreover, Mr. Collingwood and your sanitary inspectors have always acted on the principle to get the necessary works done without the aid of law, no matter what number of letters have to be written or calls to be made—letters and calls for which we get very few thanks. Law is simply called in as a last resource, and as a proof how very seldom that last resource is required, I point you with some pride to the very few summonses that have to be taken out under the auspices of the Sanitary Department.

Expressing to Mr. Collingwood and to all the sanitary inspectors my sense of the value of the services they have rendered the parish, services which are no less real and arduous because they are quiet and unobtrusive,

I have the honour to remain, Gentlemen,

Your obedient servant,

C. MEYMOTT TIDY.

*Sanitary Department.*

*Vestry Offices, Upper Street, N.*

*October, 1878.*

THE YEAR 1876.

TABLE No. VIII.

DEATHS REGISTERED IN ISLINGTON DURING

[Deaths of Non-Residents

West.	East.	Causes of Death.	All Ages.	AGES.												
				Un-1-	1-	2-	3-	4-	Under 5 yrs.	5-	10-	15-	20-	40-	60-	80-up.
2080	2709	All Causes.....	4789	1397	459	199	132	77	2264	141	66	73	580	705	778	182
		(Classes.)														
486	548	I. ZYMOVIC DIS. ..	1034	415	156	89	67	40	767	70	27	7	80	41	37	5
391	586	II. CONSTITUTL. ..	977	159	87	29	13	14	302	26	16	40	301	206	77	9
930	1241	III. LOCAL.....	2171	486	201	9	49	19	834	42	23	24	170	439	560	79
230	289	IV. DEVELOPMNL	519	301	9	1	1	...	312	...	...	...	18	8	93	88
43	45	V. VIOLENT DTHS.	88	36	6	1	2	4	49	3	...	2	11	11	11	1
...	...	Not Specified .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		(Orders.)														
472	507	I. 1. Miasmatic Dis.	979	377	153	89	67	40	726	70	27	7	75	34	35	5
38	8	Small Pox .....	46	10	4	4	3	...	21	4	3	1	14	3	...	...
53	44	Measles .....	97	20	37	22	10	6	95	2	...	...	...	...	...	...
53	72	Scarlatina .....	125	8	19	19	24	18	88	26	3	1	7	...	...	...
17	17	Diphtheria.....	34	1	1	7	6	4	19	8	1	1	2	2	1	...
...	...	Quinsey .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	23	Croup .....	42	4	12	9	6	4	35	7	...	...	...	...	...	...
97	84	Whooping Cough ...	181	70	66	21	12	6	175	5	...	...	1	...	...	...
27	37	Typhus & Typhoid	64	2	...	1	2	2	7	13	14	3	16	9	2	...
9	10	Erysipelas .....	19	10	...	...	...	...	10	...	...	...	2	2	5	...
4	3	Pyemia .....	7	2	...	...	...	...	2	...	1	...	3	...	1	...
7	9	Puerperal Fever ...	16	...	...	...	...	...	...	...	...	...	16	...	...	...
...	2	Carbuncle .....	2	...	...	...	...	...	...	...	...	...	...	...	2	...
...	1	Influenza .....	1	...	...	...	1	...	1	...	...	...	...	...	...	...
1	3	Dysentery .....	4	1	...	...	...	...	1	...	...	...	...	...	2	1
128	157	Diarrhoea .....	285	238	14	6	1	...	259	2	1	...	2	4	13	4
2	17	Cholera .....	19	10	...	...	2	...	12	1	...	...	1	2	3	...
...	...	Ague .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	20	Rheumatism .....	37	1	...	...	...	...	1	2	4	1	11	12	6	...
3	12	2. Euthetic.....	15	11	2	...	...	...	13	...	...	...	...	1	1	...
2	12	Syphilis .....	14	11	2	...	...	...	13	...	...	...	...	1	...	...
1	...	Stricture of Urethra	1	...	...	...	...	...	...	...	...	...	...	...	1	...
...	...	Hydrophobia .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	Glanders .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	23	3. Dietic .....	31	19	...	...	...	...	19	...	...	...	5	6	1	...
...	...	Privation .....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	14	Want of Br. Milk..	19	19	...	...	...	...	19	...	...	...	...	...	...	...
...	...	Purpura and Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	9	Alcoholism.....	12	...	...	...	...	...	...	...	...	...	5	6	1	...
3	6	4. Parasitic.....	9	8	1	...	...	...	9	...	...	...	...	...	...	...
3	6	Thrush .....	9	8	1	...	...	...	9	...	...	...	...	...	...	...
...	...	Worms.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
59	94	II. 1. Diathetic.....	153	8	2	...	...	...	10	2	1	...	15	68	51	8
3	3	Gout.....	6	...	...	...	...	...	...	...	...	...	...	4	2	...
4	10	Dropsy.....	14	2	1	...	...	...	3	...	...	...	...	6	4	1
4	6	Hæmorrhage.....	10	2	...	...	...	...	2	...	1	...	3	3	1	...
38	59	Cancer.....	97	...	1	...	...	...	1	...	...	...	11	50	35	...
...	...	Cancerum Oris(Noma)	...	...	...	...	...	...	...	...	...	...	...	...	...	...
...	...	Mortification .....	26	4	...	...	...	...	4	3	...	...	1	3	9	7
10	16	2. Tubercular .....	824	151	85	29	13	14	292	24	15	40	286	140	26	1
332	492	Scrofula .....	62	23	9	10	3	2	47	5	2	2	5	1	...	...
20	42	Tabes Mesenterica	112	75	22	5	2	1	103	3	2	1	1	...	...	...
45	67	Phthisis .....	528	10	11	3	2	3	29	7	10	36	280	139	26	1
202	326	Hydrocephalus.....	122	43	43	11	6	8	111	9	1	1	...	...	...	...
65	57	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
237	384	III. 1. Nervous Syst.	621	190	60	20	14	5	289	10	6	4	38	98	155	21
41	47	Cephalitis .....	88	25	22	12	6	4	63	6	4	1	4	3	1	...
47	70	Apoplexy .....	117	2	2	...	...	...	4	2	...	...	9	43	47	12
28	52	Paralysis .....	80	1	...	...	...	...	1	...	...	...	6	14	53	6
3	11	Insanity .....	14	...	...	...	...	...	...	...	...	...	4	1	9	...
...	...	Chorea.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	15	Epilepsy .....	22	1	1	1	...	...	3	1	1	1	5	7	4	...
93	111	Convulsions .....	204	157	32	6	6	1	202	1	1	...	...	...	...	...
18	78	Brain Diseases, &c.	96	4	3	1	2	...	10	...	...	2	10	30	41	3
97	174	2. Organs of Circ...	271	2	5	1	...	1	9	4	8	6	37	86	111	10
1	3	Pericarditis .....	4	...	...	...	...	...	...	...	1	...	...	1	2	...
2	2	Aneurism .....	4	...	...	...	...	...	...	...	...	...	3	1	...	...
94	169	Heart Disease .....	263	2	5	1	...	1	9	4	7	6	34	84	109	10



**TABLE No. IX.**  
**HOUSES INSPECTED AND SANITARY IMPROVEMENTS EFFECTED,**  
 From March 27th, 1876, to March 25th, 1877.

	South East District.	South West District.	North District.	Total.	
Number of Houses inspected .....	1,110	1,350	951	3,411	
Re-inspections, Calls made, &c.....	2,994	2,877	2,919	8,790	
Visits to 211 Bakehouses.....	337	321	265	923	
Do. 68 Cowhouses .....	117	154	158	429	
Do. 94 Slaughter-houses .....	164	153	126	443	
Do. Stables and yards .....	43	17	14	74	
Do. Factories and Workshops.....	10	...	3	13	
Do. Fields, Lanes, &c. ....	54	21	147	222	
Do. 32 Factories, Horse Slaughter-houses, Piggeries, } &c., Belle Isle .....	1	165	...	166	
Total Inspections, &c.....	4,830	5,058	4,583	14,471	
<b>IMPROVEMENTS.</b>					
Drains.....	{ Constructed .....	34	39	15	88
	{ Improved or repaired .....	115	84	76	275
	{ Traps fixed .....	168	234	128	530
Cesspools .....	{ Abolished .....	2	3	4	9
	{ Cleansed or disinfected .....	...	...	...	...
Privies and Water Closets .....	{ Pan, Trap and water supply furnished .....	...	5	4	9
	{ Pan and trap only furnished.....	14	10	13	37
	{ Water supply furnished .....	9	15	2	26
Dust Bins .....	{ Constructed .....	5	10	14	29
	{ Repaired and covers adapted .....	...	3	8	11
Surface Drains and Pavements of Yards. { Constructed .....	...	14	1	15	
	{ Relaid .....	155	125	79	359
General Water Supply.....	{ New receptacles provided .....	6	3	4	13
	{ Receptacles repaired and cleansed... ..	7	15	11	33
	{ Water supply provided .....	13	...	3	16
Other Improve-ments .....	{ Houses generally repaired .....	123	28	36	187
	{ „ &c., cleansed or limewashed .....	228	157	213	598
	{ „ ventilated .....	...	...	...	...
Overcrowding abated .....	10	16	6	32	
Illegal use of underground Rooms for sleeping discontinued	12	6	1	19	
Other Amendments, or Nuisances abated.....	41	52	121	214	
Houses or Rooms Disinfected .....	165	523	251	939	
Total Improvements.....	1,107	1,342	990	3,439	
Total Premises Improved „.....	586	629	568	1,783	

N.B.—From the 27th March, 1876, to the 25th March, 1877, the Inspector of Dust visited 14,499 houses, and found that Dust was required to be removed from 5,270 of these houses.

**TABLE No. X.**  
Summary of Applications for Removal of Dust from 25th March, 1876, to 25th March, 1877.

CONTRACTORS.	Ward.	Three Months ending 24th June, 1876.	Three Months ending 23rd Sept., 1876.	Three Months ending 23rd Dec., 1876.	Three Months ending 24th Mar., 1877.	Total during Twelve Months.	Number of Inhabited Houses, 1875-6.	Number of Applications to every 100 Houses.	Applications in previous Twelve Months chiefly under Contracts.	Applications to every 100 Houses during same period.	Applications to every 100 Houses during the last three months of same period under Contracts.
The Vestry.	1	1,772	1,480	651	846	4,749	6,885	68·9	8,174	118·7	40·4
Do.	2	898	967	513	565	2,943	3,836	76·7	4,616	120·3	44·6
Do.	3	1,308	1,521	680	911	4,520	6,155	73·4	5,199	84·9	28·2
Do.	4	464	874	548	620	2,506	3,338	75·0	4,623	138·4	58·3
Do.	5	600	693	371	484	2,148	2,523	85·1	5,043	199·8	68·2
Do.	6	373	849	448	503	2,173	2,144	101·3	2,556	119·2	By Vestry.
Do.	7	330	380	319	623	1,652	3,208	51·4	3,766	117·3	33·4
Do.	8	314	745	313	608	1,980	3,507	56·4	2,890	82·4	By Vestry.
Totals.	...	6,159	7,509	3,843	5,160	22,671	31,596	71·7	36,867	116·6	42·3
Removals ordered from Reports of the Inspector of Dust and other Inspectors.....	...	1,415	1,340	2,209	2,174	7,138					
Total Removals...	...	7,574	8,849	6,052	7,334	29,809					





TABLE No. XII.  
HOUSES INSPECTED AND SANITARY IMPROVEMENTS EFFECTED,  
From March 26th, 1877, to March 23rd, 1878.

	South East District.	South West District.	North District.	Total.	
Number of Houses inspected .....	1,197	988	902	3,087	
Re-inspections, Calls made, &c.....	2,973	3,334	3,128	9,435	
Visits to 212 Bakehouses.....	229	197	184	610	
Do. 65 Cowhouses .....	117	127	127	371	
Do. 92 Slaughter-houses .....	143	116	104	363	
Do. Stables and yards .....	52	17	37	106	
Do. Factories and Workshops.....	6	...	4	10	
Do. Fields, Lanes, &c. ....	43	22	112	177	
Do. 32 Factories, Horse Slaughter-houses, Piggeries, } &c., Belle Isle .....	...	109	...	109	
Total Inspections, &c.....	4,760	4,910	4,598	14,268	
IMPROVEMENTS.					
Drains.....	{ Constructed .....	37	43	16	96
	{ Improved or repaired .....	120	69	103	292
	{ Traps fixed .....	146	191	102	439
Cesspools .....	{ Abolished .....	1	4	1	6
	{ Cleansed or disinfected .....	...	...	...	...
Privies and Water Closets .....	{ Pan, Trap and water supply furnished	1	19	22	42
	{ Pan and trap only furnished.....	17	14	4	35
	{ Water supply furnished .....	12	14	20	46
Dust Bins .....	{ Constructed .....	4	4	23	31
	{ Repaired and covers adapted .....	5	15	6	26
Surface Drains and Pavements of Yards. {	Constructed .....	...	8	12	20
	Relaid .....	177	137	103	417
General Water Supply.....	{ New receptacles provided .....	...	6	6	12
	{ Receptacles repaired and cleansed...	9	5	24	38
	{ Water supply provided .....	8	1	3	12
Other Improve-ments .....	{ Houses generally repaired .....	102	36	34	172
	{ „ &c., cleansed or limewashed	185	139	112	436
	{ „ ventilated .....	...	3	...	3
Overcrowding abated .....	18	8	8	34	
Illegal use of underground Rooms for sleeping discontinued	...	1	1	2	
Other Amendments, or Nuisances abated.....	57	61	149	267	
Houses or Rooms Disinfected .....	241	584	567	1,392	
Total Improvements.....	1,140	1,362	1,316	3,818	
Total Premises Improved.....	567	559	540	1,666	

N.B.—From the 26th March, 1877, to the 23rd March, 1878, the Inspector of Dust visited 19,612 houses, and found that Dust was required to be removed from 7,350 of these houses.

TABLE No. XIII.

Summary of Applications for Removal of Dust from 25th March 1877, to 25th March 1878.

CONTRACTORS.	Ward.	Three Months ending 23rd June, 1877.	Three Months ending 22nd Sep., 1877.	Three Months ending 22nd Dec., 1877.	Three Months ending 23rd Mar., 1878.	Total during Twelve Months.	Number of Inhabited Houses, 1875-6.	Number of Applications to every 100 Houses.	Applications during previous Twelve Months.	Applications to every 100 Houses during same period.
The Vestry.	1	727	426	428	752	2,333	6,885	33·8	4,749	68·9
Do.	2	484	239	264	487	1,474	3,836	38·4	2,943	76·7
Do.	3	1,016	439	288	605	2,348	6,155	38·1	4,520	73·4
Do.	4	535	231	153	497	1,411	3,338	42·4	2,506	75·0
Do.	5	568	274	273	354	1,469	2,523	58·2	2,148	85·1
Do.	6	490	372	353	543	1,758	2,144	81·9	2,173	101·3
Do.	7	502	253	358	531	1,644	3,208	51·2	1,652	51·4
Do.	8	565	203	170	478	1,416	3,507	40·3	1,980	56·4
Totals.	...	4,887	2,437	2,287	4,247	13,858	31,596	43·8	22,671	71·7
Removals ordered from Reports of the Inspector of Dust and other Inspectors .....	...	2,215	1,615	1,831	2,962	8,623				
Total Removals...	...	7,102	4,052	4,118	7,209	22,481				

TO THE  
VESTRY OF ST. MARY, ISLINGTON.

**APPENDIX.**

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**REPORT OF THE MEDICAL OFFICER OF HEALTH  
AND OF THE  
SANITARY COMMITTEE  
ON THE  
SMALL-POX EPIDEMIC  
OF  
1876-1877.**

TO THE  
VESTRY OF ST. MARY, ISLINGTON.

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GENTLEMEN,

Your Sanitary Committee report that, having now received from the Medical Officer of Health his Report upon the severe epidemic of Small-Pox, which for more than twelve months has been amongst us, they deem it desirable to submit the same to the Vestry, together with the following report of their proceedings and directions in relation to this event, more especially as some of these measures have caused them to incur, on behalf of the Vestry, considerable and unusual expenditure.

The epidemic having become apparent during the vacation of the Vestry in September, 1876, a meeting of your Committee was immediately called by their Chairman, at which they took counsel with the Medical Officer of Health and your Vestry Clerk, as to the best means which could be adopted for arresting the progress of the epidemic, which had suddenly broken out with such great severity in the Bemerton District of the Thornhill Ward.

Your Committee directed that every case should be visited and that the speedy removal of patients to the Hospital should be urged upon every possible occasion. In the event of any technical difficulty arising, your Sanitary Officers were instructed to provide immediately for the removal of the patient, at the expense and risk of the Vestry, and in several instances such removals were effected; the general instruction of the Committee being also fully carried out.

In addition, every house in the District was visited with a view to preventing accumulations of Dust, and of ascertaining the existence of other nuisances.

A circular letter was addressed to all the Medical Practitioners in the Parish, inviting their co-operation, and requesting them to furnish early information to the Medical Officer of Health of all

cases of Small-Pox, or other infectious disease, occurring in their practice, and informing them of the ample provision made under the 42nd section of "The Poor Law Amendment Act, 1876," for the removal of all such cases to Hospital.

The subsequent controversy with the Local Government Board as to the distinction which it was sought to establish between a pauper and non-pauper patient, in the matter of Hospital accommodation, having already been the subject of an exhaustive report from your Committee, and of discussion in the Vestry, needs no further reference, except that the fact may be mentioned of 34 Islington patients having been, within the knowledge of the Sanitary Department, removed to the Highgate Small-Pox Hospital, upon the payment of the fee of £4 4s. each, while 460 were removed to the Hospitals of the Metropolitan District Asylum Board. Of the 34 thus sent to Highgate, 14 were servants whose reception fees were paid by their employers, and as none were heard of as having been refused admission, it may be assumed that the friends of 20 patients only could in any way manage to make the requisite payments.

The Committee further directed that the disinfection of infected premises should be carried out by the owners as usual, and that in all cases of their failure to comply with the notices issued, the works should be done by the Vestry, and the expenses subsequently recovered from the parties in default.

The money expended in this way, amounting to £67 12s. 6d., as well as a further sum of £6 13s. 7d., paid for the disinfection of articles from an infected Laundry, has all been recovered and paid to the Vestry.

The following additional directions, however, which were given, have involved an expenditure on behalf of the Vestry of £262 14s. 11d., no part of which will be recovered.

That infected Beds and Bedding whenever it was found to be necessary should be condemned and burned, and 579 articles having been thus destroyed, and mostly upon the infected premises, their replacement with new Beds, &c., by the Vestry, through the Guardians, at the wholesale cost prices, has caused an outlay of £213 11s. 10d.

In other cases, where destruction was not essential, but where a complete purification of feather beds or similar articles was desirable in order that they might be preserved for the use of the poor owners, it was directed that the articles should be removed and thoroughly cleansed and disinfected, and afterwards restored; 228 beds, or other articles, were thus dealt with, 84 of them being also newly covered, at a cost of £49 3s. 1d.

To this unusual outlay, therefore, of £262 14s. 11d., which has been incurred, as well as to that involved in the additional expenditure for disinfectants, amounting to another £100, your Committee consider it right to draw the attention of the Vestry.

With respect to the locality of the first outbreak of the disease, your Committee desire to remind the Vestry that considerable alarm was occasioned at the time, causing many statements to be circulated of such a nature as to render it imperatively necessary, in the opinion of the Committee, for them to make a full enquiry into the truth, or otherwise, of the allegations made.

Subsequently, a deputation of gentlemen residing in the Thornhill District attended your Committee, and requested their particular attention to the several subjects of complaint, which were then being generally discussed, and were as follows:—

1. Defective drainage.
2. The bad repair and condition of the houses.
3. Overcrowding.
4. Illegal use of underground rooms.

Having heard the statements of the Medical Officer of Health, and of the Sanitary Superintendent, upon these matters, at a special meeting, your Committee proceeded to carry out their intention of making a personal inspection of the locality, and on the 25th October, 1876, while the first burst of the epidemic was still raging, your Committee, accompanied by the Medical Officer of Health, the Sanitary Superintendent, and the Inspector of the district, Mr. Jordan, visited and inspected the 59 houses situated as under, at the majority of which Small Pox had recently occurred or then existed.

It may be remembered that Mason, the messenger of the

Vestry, who also attended the Committee, subsequently suffered severely from Small-Pox, contracted in the opinion of the Medical Officer of Health, upon this occasion.

					Nos. of Houses.
Pembroke Street	...	...	...	...	16
Bemerton Street	...	...	...	...	15
Freeling Street	...	...	...	...	8
Lyon Street	...	...	...	...	3
Story Street	...	...	...	...	8
Cardale Street	...	...	...	...	3
Clayton Street	...	...	...	...	6
					<hr/>
Total	...	...	...	...	59
					<hr/>

During this inspection the Committee observed with satisfaction that, in every instance where the Small-Pox had occurred but had ceased, the disinfection appeared to have been thoroughly carried out as reported by the Inspector, and that their directions to prevent accumulations of dust had been complied with. Particular notice was taken as regards the different subjects of complaint, and inquiries were made as to the number of occupants of the various rooms, most of the houses being either let in tenements by the owners, or in lodgings by the tenants.

The results of this investigation and the conclusion of the Committee are given below, but it was certainly unfortunate that the gentleman who had acted as spokesman for the deputation referred to, and to whom a message was sent by the Chairman inviting him to attend, should not have been able to be present at the inspection.

1. That as regards the defective drainage, nothing was found or heard of which could warrant the assertions which had been made, but that there was evidence to show that where complaint had arisen of any temporary nuisance connected with drainage, it had been promptly attended to and the nuisance abated.

2. As to the bad repair and condition of the houses, it was found that the repair of the houses was fairly good, and that their general condition was satisfactory. As regards some of the tenements which had been especially mentioned, it appeared to your

Committee that the fault lay rather in the negligence, want of cleanliness, and poverty of the occupiers, than with the owners.

3. The alleged overcrowding was not confirmed, no cases having been ascertained to exist. The population is undoubtedly dense,—a family generally occupying only one or two rooms, but having regard to the opinion of the Medical Officer of Health as to what should be deemed overcrowding, and considering the exigencies of the poor with large families, there was no reason to believe that any undue crowding existed in this district.

4. In respect to the illegal occupation of underground rooms, it was observed that in the locality these rooms had generally large open areas in front, and apparently conformed to the provisions of the 103rd section of "The Metropolis Local Management Act, 1855." In two cases, however, where some doubt existed, the District Surveyor, upon being referred to, found that they did not in one respect quite conform with the Act, as the level of the areas was not sufficiently below the level of the flooring of the rooms, but not being occupied separately as dwellings, your Vestry Clerk advised that no offence could be established. The slight defect was immediately remedied by the owner.

Your Committee are therefore of opinion that the statements which had been made were not in any way borne out by the Committee's investigations, and that there was certainly nothing in the condition of the houses which could have rendered them specially liable to a visitation of Small-Pox, but that its ready reception and rapid spread were due rather to the condition and habits of the occupants who have again suffered so severely from a recurring epidemic.

All which is submitted.

(Signed,) CORNELIUS WEST,

Chairman,

Sanitary Committee.

Vestry Offices,  
December 3rd, 1877.

## TO THE SANITARY COMMITTEE.

GENTLEMEN,

The severe epidemic of Small-Pox through which we have been passing (and we trust have now, in the main, passed) in Islington since the month of September, 1876, has reached a point in its decline when, in my opinion, I may fitly place before you a short Report upon the subject, together with such tabulated information as may be calculated to prove of use in its relation to the remarks I have to make. The outbreak became apparent in our midst from the period of the registration of a death which occurred in Pembroke Street during the week ending the 9th of September, 1876. The disease instantly broke out with great severity in the Thornhill Ward, and "especially amongst the poorer population of the Bemerton District." It was in this Ward that it first prevailed extensively, following in this respect the course of former epidemics.

The shock was so intense, that out of 193 cases occurring in the whole parish, no less than 163 cases were recorded in this Ward alone during the first seven weeks of the epidemic, the 30 other cases being about equally distributed, with the exception of Highbury and Canonbury, amongst the remaining Wards. The disease subsequently, although somewhat abating but not leaving the Thornhill District, became more extended and attacked with considerable though with diminished intensity, parts of Lower Holloway, Upper Holloway, and Highbury; the cases in the latter Ward occurring chiefly, as usual, in the Queensland Road District.

Throughout the epidemic the different Wards suffered as shown by the following statement, the details of which will be found in Table I., attached hereunto.

		Cases of Sickness.	Deaths.	Per Cent.
1.	Thornhill ...	338	71	21.0
2.	Upper Holloway ...	227	45	19.8
3.	Highbury ...	157	23	14.6
4.	Lower Holloway ...	134	22	16.4
5.	St. Peter's ...	51	4	7.8
6.	Barnsbury ...	43	9	20.9
7.	St. Mary's ...	39	5	12.8
8.	Canonbury ...	11	2	18.0
		<hr/>	<hr/>	<hr/>
		1000	181	18.1
		<hr/>	<hr/>	<hr/>

The streets suffering most severely were as under:--

THORNHILL.

	Houses.	Cases.	Deaths.
Bemerton Street ... ..	28	43	10
Pembroke Street ... ..	26	49	13
Gifford Street ... ..	17	34	6
Story Street ... ..	18	29	10
Freeling Street ... ..	17	33	6

UPPER HOLLOWAY.

Cottenham Road ... ..	10	22	6
Andover Road ... ..	10	14	3
Campbell Road ... ..	9	21	4
Hampden Road ... ..	6	9	4
Rupert Road ... ..	6	10	2
Cromwell Road ... ..	5	7	2

HIGHBURY.

Queensland Road ... ..	30	53	10
Hornsey Road ... ..	6	6	0
Queen's Square ... ..	5	5	0
Victoria, Albert, and Emily Places together ... ..	9	14	3
Bryantwood Road ... ..	5	5	1
Mayton Street ... ..	4	6	1
Canterbury Place, Highbury Vale ... ..	3	12	3

LOWER HOLLOWAY.

Blundell Street ... ..	8	20	3
Frederick Street ... ..	6	7	1
Wellington Road ... ..	4	6	0
Vale Royal, Brandon Road...	4	5	0
Maude Terrace, ditto ... ..	3	10	2
St. James' Road ... ..	4	5	2
Liverpool Road ... ..	4	4	0
Barbara Street ... ..	4	4	0

## BARNSBURY.

		Houses.	Cases.	Deaths.
Half-Moon Crescent	...	5	8	2
Edward Street	... ..	3	4	2
Payne Street ...	... ..	3	5	1

## ST. MARY'S.

Halton Road ...	... ..	4	4	0
Florence Street	... ..	2	5	2
Upper Street ...	... ..	3	3	0

## ST. PETERS.

Packington Street	... ..	2	3	0
Popham Road	... ..	2	2	1
Hayes Place ...	... ..	2	2	0

In the Canonbury Ward single cases alone occurred.

I lay before you a Table (No. II.) of the 1000 cases of the disease which have come to my knowledge, and also a Table (No. III.) of the 181 deaths that occurred during the 59 weeks of the visitation.

These statistics show a general mortality of 18·1 per cent. : the mortality amongst our Hospital cases being 15·5 per cent., and amongst the cases treated at their own homes, 20·5 per cent.

This difference is somewhat remarkable; but if we exclude the deaths of infants under one year, which nearly all occurred at home, the latter per centage is reduced to 17·1 per cent.

Of the 1,000 persons attacked, as will be seen by the Table of Sickness, 106, or 10·6 per cent., were unvaccinated; and 894, or 89·4 per cent., were reported as vaccinated or doubtful.

Of the 181 persons who died, 59, or 32·5 per cent., were unvaccinated; and 122, or 67·4 per cent., were vaccinated.

The mortality amongst the unvaccinated persons attacked was 55·6 per cent.; and amongst the vaccinated or doubtful 13·6 per cent.; so that if the vaccinated had died in the same proportion as

the unvaccinated, no less than 556 persons, instead of 181, would have died out of the 1,000 attacked; the difference of 375 fairly representing the number of lives saved through previous vaccination amongst those alone who were actually attacked.

These proportions, however, vary considerably at different ages. The child under one year old, it would appear, the least seldom survives the disease, whether it has been vaccinated or not. When vaccinated it is much less liable to contract the disease, but, if attacked, it also stands a far less chance of recovery than vaccinated persons at other ages; whilst the chance of the survival of an infant, if unvaccinated, is still further diminished.

Thus of 39 children under one year old who were attacked with the disease, 24, or 61·5 per cent., died.

Of the 39 thus attacked, there were 25, or 64·1 per cent., unvaccinated; and 14, or 35·8 per cent., who had been vaccinated.

Of the 24 who died, 17, or 70·8 per cent., were unvaccinated; and 7, or 29·1 per cent., were vaccinated.

The mortality amongst the unvaccinated infants attacked therefore, was 68 per cent.; and amongst the vaccinated, 50 per cent.

A further study of these Tables would show many other interesting and instructive variations; but in whatever light they may be viewed, they could not fail, I think, to strengthen the opinion that the full value of the protective power bestowed by even primary vaccination, cannot be over estimated, either in regard to the comparative immunity afforded from attack, or in the resisting force which it exercises in modifying the baneful influences of the disease. The progress of the epidemic has been marked by considerable irregularity, as may be noted from the Table (No. IV.), and the Diagram which illustrates the Table. The fresh cases will be found traced in this diagram in black lines, week by week; and the deaths in red lines, month by month. The fluctuations in its course were frequent and erratic, a sudden fall in one locality being simultaneously accompanied by a severe outbreak in another. This may be seen from the Table (No. I.) showing the weekly number of cases occurring in each Ward.

It was not until the warm weather of the month of June of the

present year had passed, and July had commenced, that there were any real signs of a permanent decline in the epidemic—its greatest general force having been felt during the months of February and March.

The speedy removal of cases to the Hospital has been urged and assisted by your Officers of the Sanitary Department. It will be satisfactory to you to know that no less than 494 out of the 1,000 cases were removed, and the good that has resulted from this course is incalculable. It is not too much to say that where single cases only have occurred in one house, it can be invariably traced to the instant removal of that one case. Moreover, re-vaccination was the very point most strenuously urged upon every occasion by your officers.

In every instance, the thorough disinfection of the room or rooms where the disease has occurred, and which, with your approval, is usual in Islington, has been in every case strictly carried out, either by the owners, or by the Vestry at the expense of the owners. The complete disinfection of no less than upwards of 1,300 rooms or passages has been effected during the outbreak, the walls being stripped in every instance.

When the owners have neglected to comply with the notices issued, efficient workmen have been employed on behalf of the Vestry to do the works ordered. The sum of £67 12s. 6d. expended in this manner has been entirely recovered. In addition, the further sum of £6 13s. 7d., disbursed for the disinfection of linen from an infected laundry, has been repaid the Vestry by the owners of the property.

In obedience to the directions of the Committee, a considerable quantity of infected beds and bedding has been destroyed, and replaced with new, at a cost to the Vestry of £213 11s. 10d. Certain other beds and articles have also been disinfected and restored to their poor owners at a cost of £49 3s. 1d. In addition, therefore, to the cost of disinfectants, which have been very largely used, the unrecoverable outlay to the Vestry coincident on this outbreak, has been £262 14s. 11d.

The following summaries relate to these matters—

Summary of infected Beds and Bedding destroyed  
and replaced with new at a cost to the Vestry of £213 11 10

137 Beds	464 Brought forward
93 Mattresses	20 Blankets
55 Bolsters	26 Sheets
152 Pillows	28 Rugs
27 Ditto Covers	41 Articles of Clothing, &c.
<u>464</u> Carried forward	<u>579</u> Total.

Summary of Articles disinfected and returned to  
owners, at a cost to the Vestry of ... .. 49 3 1

Disinfected.	Disinfected and Re-covered.
38 Beds	31 Beds
18 Bolsters	15 Bolsters
65 Pillows	37 Pillows
9 Mattresses	1 Mattress
14 Other Articles	
<u>144</u> Total	<u>84</u> Total

Total 228

Total cost of 807 Articles replaced or disinfected, &c. £262 14 11

Whilst we remember the pecuniary cost to the Vestry of this terrible scourge, it should be remembered that the cost to the owners of property cannot have been less than £500 or £600, while the loss to the afflicted I will not attempt to estimate.

Having now drawn your attention to these dry facts of detail, I have a little, but not very much, to add on some few questions that are naturally suggested by their consideration.

1. *As to the commencement of the Outbreak.*

It will be within the memory of the Committee that on the first appearance of the disease, an outcry was raised that if only the Local Sanitary Authority and their officers had done their duty the epidemic would either have never occurred, or, at any rate, would have been stamped out as soon as it appeared. I confess I regard such reports and opinions about as unscientifically unsound, as they are

perplexing. I would remind you that no Sanitary authority has ever successfully resisted an invasion of Small Pox, nor has the intruder, when in possession, ever been more than partially amenable to control. "Thou canst not tell whence it cometh, or whither it goeth." This much I may venture to add, that if by any prophetic power I could prognosticate an outbreak of Small Pox this time next year, I have very little, though I have a little, to offer you by way of suggestion, as to any better means of organising our forces meantime, or as to any very different or more certain mode of attack when the enemy is actually in our midst. The members of the Sanitary Committee will bear me out, I am sure when I say that there is nothing easier than for those who have no responsibility, to criticise with unmeasured severity the work of those upon whom the responsibility rests. Even the appeal to print, although it may appear to some to be evidence of remarkable activity, may, and often does, interfere with the work of the real workers, and most certainly complicates the labours, both of yourselves as a Sanitary Committee, and of your officers, who are engaged in carrying out your orders.

The bad condition of the drainage and houses of the district, the alleged overcrowding, the occupation of underground rooms, were all, you will remember, cited against us as superinducing causes of the outbreak.

As most of these matters, however, were subsequently investigated by you personally, I do not propose making any comment upon them; my own conviction being that in the Streets on the Western side of the Caledonian Road in the Thornhill Ward, where a poor and negligent population are thickly located, nothing is absolutely required for the certain spread of the disease, except the presence of specific infection. The history of the epidemics of the past has only been repeated in this locality in the present instance, and is even now as I write, in the case of Scarlet Fever, being again repeated.

Respecting the origin of the disease on this particular occasion, I will only remind you that until the first death had been registered in the first week of September, 1876, no case had been heard of by your Sanitary Officers, although it was afterwards discovered that

the only person who ultimately recovered in the same house out of five who were attacked had been taken ill a month previously, in fact, before the middle of August. From this house the infection no doubt spread, but as some of the earlier cases were traceable to other sources of infection, and as it has since been rumoured that mild cases had occurred in the neighbourhood at an earlier date than that referred to, there is no need to indulge in any fanciful supposition as to its having arisen in any other way than by direct contagion ; moreover, the disease was already epidemic in South London.

## 2. *As to the Spread of the Disease.*

Many causes contribute to the *intensity* of an outbreak of Small-pox, and to its rapid spread. The *neglect of vaccination, or its inefficient performance, and especially the neglect of re-vaccination*, is the first and the most prominent cause that occurs to me. The immensity of harm done by a few noisy agitators is perfectly appalling. The detailed statistics of our own parish, that I have laid before you in this Report ; even yet more, the statistics, not of this Parish alone, but of all London ; and lastly, most important of all, the facts noted and tabulated by the Officers of the Metropolitan Asylums Board—each and all must carry with them absolute conviction on this point to those who are willing to be convinced. I will not enlarge on this point further. Again, the *concealment* of many cases of disease from the Sanitary Authority, and their *consequent non-removal to the Hospital* is a very serious evil. The history of many a case is something of this kind. A man has a slight attack of the disease. He may be ignorant of its nature or not, but at any rate he says nothing about it. He goes to his work in the morning as usual, to mix with his brother workmen, and returns home at night to mix with a house full of children and fellow lodgers. To go to the Hospital, or to stop at home, means “loss of pay.” Rather than this, he prefers to sow the seeds of the disease at the workshop and at his home, spreading broadcast the poison which in his case, perhaps, has only produced very slight effects, but which, nevertheless, in other constitutions may work with terrible and even deadly results. Or, again a child has a modified

attack of the disease, such as is most likely to occur if vaccination has been efficiently performed. The child is not well, but it is not ill enough to be kept at home, and so it goes to school, the mother not objecting to get rid of it for a time, for the sake of peace and quietness. It thus becomes the purveyor of disease to its school-fellows.

Or again, a laundry may be a serious means of spreading the disease. Clothes from an infected house, reeking with the poison, take their place in the wash-tub and in the laundry with other clothes from non-infected houses.

Consider these, and a hundred other means of diffusion. I marvel not that we have had so much Small Pox, but I marvel greatly that we have had so little,

What then I have to consider, lastly, are the practical points to be borne in mind in dealing with an outbreak of Small Pox, or other infectious disease.

1. First of all, *never neglect a single case, but deal energetically with it.* The public are curiously forgetful of this great rule. A child is ill, you press the parents to send it to a Hospital; but they will not hear of it, and the only answer you can get is an expression of hope that none of the other children will catch it, with a half promise that, if a second case occurs, they will send it to the Hospital. But then comes the difficulty, the Sanitary authority is frequently ignorant of, and has only imperfect means of discovering, the existence of the case. To remedy this imperfection in our Sanitary Laws, has been a subject lately of serious thought among Sanitarians. I confess I was formerly of opinion that it would be advisable for the law to compel every medical man to give notice to the Sanitary authority immediately a case of infectious disease occurred in his practice. There are, however, serious difficulties in this method of obtaining information, and certainly not one of the least would be that it would render professional men too much like common informers or medical detectives, and so destroy that mutual confidence between the doctor and the family, which in our profession is very essential. I am now convinced that the better plan, and one which was laid before the President of the Local

Government Board at a deputation of the Medical Officers of Health, would be that legislation should require the *householder* to give notice to the Sanitary authority of any case of infectious disease occurring in the house under his control within twenty-four hours of being informed of the same by the Medical Attendant. Of necessity, the word householder would have to be accurately defined, and the definition must be broad. Such a system would recognize, *first*, that the Medical Attendant had a duty to his patient and to the friends of the patient, viz.: to inform them of the nature of the sickness; and, *secondly*, that the householder had a duty to the Local Authority, viz.: to inform them of the report they had received from their Medical man. I would even urge (so convinced am I of the paramount importance of early information of even an isolated case being in the hands of a Local Authority), that the neglect on the part of the householder of giving such notice, should be punishable by fine. The importance, however, of early removal to a Hospital, so essential for the purpose of as far as possible stamping out the disease, suggests another question. If the patient is not a pauper, where are we to send him? This difficulty, it is right to add, has been rendered as far as possible during the late epidemic, by the friendly action of the Metropolitan Asylums Board, who without, it would seem, being by law compelled, have, nevertheless (at any rate so far as Islington is concerned), refused no patients sent them by the order of the Sanitary authority. Nevertheless, on their part, we are informed it is an act of grace; and we may fairly ask, without the slightest want of good feeling on our part, that the act of grace should be made an act of right. The fact is, it is harder to deal with non-paupers than with paupers, and it is pre-eminently undesirable to make people paupers. Nor do I for a moment see the necessary connection between pauperism and Hospitals for infectious diseases, regarded in the light of a sanitary provision for the advantage of the general population. Such Hospitals are urgently required and might very fairly be placed under the management of a Central Board, although at the disposal of the Sanitary authorities; the former in no way interfering with the authority of the latter. I should wish not to be misunderstood in this matter. These Hospitals cannot be *self-supporting*. Of

course some patients will be able to pay their quota to the full, and if they can, they ought; others cannot pay the whole, and perhaps only a small part of the expenses incurred in their maintenance. Somebody must pay. And I, for one, do not consider any money thus spent, would be an unfair charge on a Metropolitan rate, considering that the public generally would benefit by the removal of such cases from their midst.

2. That after the case is well, the rooms should be efficiently disinfected. I say *after* the case is well, for that anything approaching the efficient disinfection of a room can be carried out whilst a patient is ill in bed, is to my mind absolutely impossible. In order to purify the air of a room, an aërial disinfectant is absolutely necessary. Chlorine and Sulphurous Acid are active aërial disinfectants, but the irritation they produce, even when present in the air in very small quantities, is so great, that their use, whilst the patient is in bed, may do more harm than good. It will be understood, therefore, that if a disinfectant does not get into actual contact with a polluted air its value is *nil*. A saucerful of "Condy," or of "Chloralum," therefore, stuck on the landing or in the corner of a sick room, and in which so many put their trust, are, as aërial disinfectants, about as absolutely valueless as the china saucer itself is in which the fluids are exposed. To my mind an occasional free current of air is the best of all disinfectants for a room where a patient is ill and in bed. After a patient gets well, no trouble should be spared in carrying out active disinfection by means of Chlorine or Sulphurous Acid, taking care that the walls of the room are entirely denuded of the layers of paper which very often, in course of time, have accumulated to an almost inconceivable extent. I should wish to add that insisting upon stripping the walls in every instance, was not my suggestion, but that of your late Medical Officer of Health, Dr. Ballard. And I would wish to add, as the effect of a rule which does not seem to meet with universal satisfaction, that nothing pleases me better than to find that no further paper hangings are employed to replace those we have compelled the owners to have removed from the walls previous to limewhiting and the action of Sulphurous Acid. If we

could only persuade people to give up papered walls, we should have effected a not unimportant step in household sanitary arrangements.

3. There is need of some more efficient legislation in the matter of Vaccination. "*Successful Vaccination*" is a very imperfect phrase. Is one mark on the arm to be called successful Vaccination? I think not; and nothing less than three marks, in my opinion, is. Further, that there is a necessity for re-vaccination at certain periods, at any rate after fifteen years of age, statistics abundantly prove, even although the person might have been successfully vaccinated as a child. I think, therefore, that greater facilities must be given, and greater powers extended to the authorities for the purpose of carrying out Vaccination, so that we should reap its full benefit. For instance, it would appear that 25 per cent. of the children attending the Board Schools are imperfectly vaccinated, that is, have not a sufficient number of vaccination marks. At the present time, Government refuses to pay out of the public funds for the re-vaccination of any children under twelve years old, who have been once certified as successfully vaccinated. Unfortunately *successful* vaccination does not necessarily mean *efficient* vaccination. I even urge more than this, viz.: that the Public Vaccinator ought to be allowed to go into any school he pleases and vaccinate any child, that, in his opinion, it is desirable should be vaccinated, without the consent of the parents. And, further, I think that the Public Registration of successful Vaccinations, and it being made a *sine quá non* in all Government and Public Offices that candidates for appointments should present a copy from the Public Register of having been successfully vaccinated, would go a long way to render the public less negligent of a simple operation, so powerfully protective against so hideous a disease.

4. I will merely venture to express a hope that your Committee will see your way now to consider, without delay, the desirability of erecting a proper and efficient disinfecting chamber, without which our sanitary machinery can scarcely be regarded as complete.

LASTLY.—The manner in which the arduous and extra services which devolved upon your Inspectors during the whole epidemic, but more particularly through the earlier months of the outbreak, have been carried out, cannot be too highly appreciated. Mr. Collingwood's services in attending to the numberless applications connected with almost every case of Small-pox, at the Vestry Offices, and the enormous amount of extra time he has devoted to the work consequent upon it, is beyond all praise. I may venture to express a hope that his services, and those of the Sanitary Inspectors, will receive a substantial recognition at your hands.

I have the honour, Gentlemen, to remain,

Your obedient Servant,

C. MEYMOTT TIDY,

*Medical Officer of Health.*

*Vestry Offices,  
3rd December, 1877.*

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TABLE I.

Table of 1000 Cases of Small Pox occurring in Islington during 59 weeks, and showing the Weekly and Monthly Distribution of the Cases in each of the Eight Wards.

Date	Whole Parish		Upper Holloway		Lower Holloway		Highbury		Thornhill		Barnsbury		St. Mary's		Canonbury		St. Peter's			
	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month	Cases in Week	Cases in Month		
1876.																				
Sep. 16	26		...		...		...		26		...		...		...		...		...	
" 23	23		...		...		...	...	22		1		...	...	...		...		...	
" 30	49	98	1	1	1	1	...	...	41	89	3	4	2	2	...	...	1	1	1	
Oct. 7	25		3		2		...	...	18		...		1		...	...	1		...	
" 14	32		...		...		...	...	27		...		2		...	...	3		...	
" 21	23		2		1		...	...	18		2		...	...	...	...	...		...	
" 28	15	95	1	6	1	4	1	1	11	74	...	2	1	4	...	...	...		4	
Nov. 4	26		...		1		3		21		1		...	...	...	...	...		...	
" 11	18		1		3		1		10		1		1	1	...	...	...		...	
" 18	9		2		1		...	...	4		1		...	...	...	...	1		1	
" 25	26	79	4	7	6	11	...	4	13	48	2	5	...	1	...	1	1	1	2	
Dec. 2	8		...		2		...	...	5		...		1	...	...	...	...		...	
" 9	23		...		18		...	...	2		1		...	...	...	...	...		2	
" 16	19		3		5		3		6		...		...	...	...	...	...		2	
" 23	24		8		3		1		1		6		...	1	...	...	4		4	
" 30	21	95	4	15	5	33	4	8	2	16	3	10	...	1	...	1	3	11	11	
1877.																				
Jan. 6	17		3		6		4		2		1		1	...	...	...	...		...	
" 13	20		10		4		2		3		1		...	...	...	...	...		...	
" 20	17		3		6		1		4		1		2	...	...	...	...		...	
" 27	19	73	1	17	9	25	6	13	1	10	...	3	...	3	1	1	1	1	1	
Feb. 3	29		5		5		6		6		...		4	1	1	1	2		2	
" 10	16		...		8		...	...	5		1		2	...	...	...	...		...	
" 17	38		7		10		19		1		...		...	...	...	...	1		1	
" 24	19	102	3	15	4	27	7	32	4	16	...	1	1	7	...	1	...	3	3	
Mar. 3	22		6		1		8		4		1		2	...	...	...	...		...	
" 10	21		11		1		6		...		...		2	1	...	...	...		...	
" 17	26		10		2		6		4		3		1	...	...	...	...		...	
" 24	29		3		2		15		5		...		...	...	...	...	4		4	
" 31	29	127	13	43	2	8	10	45	2	15	...	4	1	6	...	1	1	1	5	
Apr. 7	31		10		5		4		6		2		1	1	1	2	2		2	
" 14	30		12		4		4		3		2		2	...	...	...	3		3	
" 21	24		11		3		3		5		1		1	...	...	...	...		...	
" 28	17	102	6	39	1	13	3	14	3	17	...	5	...	4	1	2	3	8	8	
May 5	23		12		1		4		4		...		...	...	...	...	2		2	
" 12	22		9		1		4		1		2		3	...	...	...	2		2	
" 19	19		7		...		3		7		...		2	...	...	...	...		...	
" 26	32	96	11	39	2	4	1	12	12	24	...	2	2	1	1	1	3	7	7	
June 2	24		12		1		3		1		...		2	2	...	...	3		3	
" 9	7		4		...		1		1		1		...	...	...	...	...		...	
" 16	17		4		1		1		10		1		...	...	...	...	...		...	
" 23	16		4		...		8		...		2		...	...	...	...	2		2	
" 30	12	76	2	26	...	2	6	19	2	14	1	5	...	2	...	2	1	6	6	
July 7	10		4		1		2		1		1		...	...	...	...	1		1	
" 14	8		3		...		2		1		...		...	1	...	...	1		1	
" 21	10		4		...		2		3		1		...	...	...	...	...		...	
" 28	2	30	2	13	...	1	...	6	...	5	...	2	...	...	1	...	...	2	2	
Aug. 4	5		2		...		...	3	...	...	...		...	...	...	...	...		...	
" 11	2		...		...		2		...	...	...		...	...	...	...	...		...	
" 18	1		1		...		...	...	...	...	...		...	...	...	...	...		...	
" 25	3	11	2	5	...		...	2	...	3	...		...	...	...	...	1	1	1	
Sep. 1	2		...		...		...	...	2		...		...	...	...	...	...		...	
" 8	1		1		...		...	...	...	...	...		...	...	...	...	...		...	
" 15	1		...		...		1		...	...	...		...	...	...	...	...		...	
" 22	2		...		...		...	2	...	...	...		...	...	...	...	...		...	
" 29	2	8	...	1	...		...	1	1	5	...		1	1	...	...	...		...	
Oct. 6	1		...		...		...	...	1		...		...	...	...	...	...		...	
" 13	2		...		2		...	...	...	...	...		...	...	...	...	...		...	
" 20	1		...		...		...	...	1		...		...	...	...	...	...		...	
" 27	4	8	...		3	5	...	...	...	2	...		1	1	...	...	...		...	
Total Cases	1000		...	227	...	134	...	157	...	338	...	43	...	39	...	11	...	51	51	
Of which died	181		...	45	...	22	...	23	...	71	...	9	...	5	...	2	...	4	4	

TABLE II.

*Table of 1000 Cases of Small Pox occurring in Islington, during 59 weeks ending the 27th of October 1877, showing the various ages, the sex, and whether vaccinated or unvaccinated.*

	AGES.													
	All Ages	Und. 1	1	2	3	4	5	10	15	Und. 20	20	40	60	80
TOTAL CASES ...	1000	39	15	18	21	29	121	170	133	546	391	55	8	...
VACCINATED ...	894	14	8	14	12	22	102	155	130	457	376	53	8	...
UNVACCINATED	106	25	7	4	9	7	19	15	3	89	15	2	...	...
MALES .....	512	26	8	7	10	10	65	77	70	273	212	23	4	...
FEMALES .....	488	13	7	11	11	19	56	93	63	273	179	32	4	...

TABLE III.

*Table of 181 Deaths from Small Pox occurring in 1000 Cases of the disease recorded in Islington, during 59 weeks ending the 27th of October, 1877, showing the various ages, the sex, and whether vaccinated or unvaccinated.*

	AGES.													
	All Ages	Und. 1	1	2	3	4	5	10	15	Und. 20	20	40	60	80
TOTAL DEATHS.	181	24	7	8	9	5	22	15	7	97	66	15	3	...
VACCINATED ...	122	7	3	4	3	1	14	10	6	48	56	15	3	...
UNVACCINATED ..	59	17	4	4	6	4	8	5	1	49	10	...	...	...
MALES .....	102	17	5	5	2	2	12	9	5	57	36	8	1	...
FEMALES .....	79	7	2	3	7	3	10	6	2	40	30	7	2	...







DIAGRAM

Showing the variation of current in the secondary winding of a transformer

