

# APPENDIX A.

## *On the Social and Sanitary Condition of Oxford during the Years 1849, '50.*

ALTHOUGH these Reports only profess to relate to the "*Mortality and Public Health of Oxford*," it can hardly be considered out of place to prefix a few remarks on two subjects so intimately connected with the well-being of the people as the *Marriages* and *Births* registered during the two years under consideration.

MARRIAGES.—In the 8th and 9th Annual Reports of the Registrar-General it was shewn that the Marriage returns serve as a sort of barometer of the prosperity of the country, and that the fluctuation expresses the views which the great body of the people take of their prospects in the world (*Quart. Return*, i. p. 2. New Series). It is believed that further investigation has only served to confirm this rule, but perhaps it would be hardly safe to apply it to each individual town throughout the kingdom. If however we apply the marriage test to Oxford in the years 1849, 50, the result is highly satisfactory<sup>a</sup>: in the 4 years '41, 2, 3, 4 the number of marriages was above the average; in '45 it declined slightly, and in '46, 7, 8 much more; but in '49 it rose considerably above the average, and in '50 it was greater than in any previous year, at least since '41. These numbers do not exactly agree with the Marriage returns made during these years throughout all England, but perhaps an intimate acquaintance with the local history of Oxford during this period might afford a satisfactory explanation of the differences. In the two years '49, '50 the proportion of Marriages in Oxford was somewhat lower than in Southampton, but high when compared with all England, London, Cambridge, and Canterbury<sup>b</sup>.

The marriages throughout the kingdom are unequally distributed over the year; they are generally least numerous in the first, and most numerous in the last quarter, "which follows harvest, includes Christmas, and is the marrying season in England." In London however they are most numerous in the quarter ending Sept., "after the metropolitan harvest" (*ibid.* pp. 2, 3). In Oxford the marriages in the four quarters agree with the rest of England, rather than with the metropolis; but with this difference, that, whereas throughout England they are generally less numerous in the 3rd

<sup>a</sup> Marriages returned in Oxford in the years '41—'50:—

'41	'42	'43	'44	'45	'46	'47	'48	'49	'50	Average.
270	275	278	269	261	246	250	244	276	282	265.1

These numbers (and also the others relating to the Marriages) are procured by adding to the numbers given in the Annual Reports of the Registrar-General the marriages celebrated in the parish-churches of St. Giles, St. Paul, St. John, and St. Clement, and in the Office of the Superintendent-Registrar of the Headington District.

<sup>b</sup> Comparative proportion of Marriages in different places in '49, 50:—

	England	London	Cam-bridge	Canter-bury	Oxford	South-ampton
Population, 1851,	17,927,609	2,362,236	27,815	14,100	26,480	34,098
Average Marriages	147,310	23,236	191	124	270	362
Rate per 1000	8.22	9.84	6.87	8.79	10.54	10.61

quarter than in the 2nd, in Oxford the reverse is the case, owing no doubt to the Long Vacation<sup>c</sup>.

Another point of interest connected with the marriages is the large proportion in the Oxford *District* that is celebrated *not* according to the rites of the English Church, and especially in the Office of the Superintendent Registrar. The proportion of these last in '49 amounted to 23.97 per cent. of the whole number of marriages, which is probably higher than in any other district except Neath in Glamorganshire, those most nearly approaching to Oxford in this respect being Carlisle, Norwich, and Auckland<sup>d</sup>. As connected with this subject it may be mentioned that during the 9 years '41—'49 the

<sup>c</sup> Marriages returned in Oxford in each of the quarters of the years '44—'50 :—

	'44	'45	'46	'47	'48	'49	'50	Average.
First . .	55	54	55	50	43	57	49	51.9
Second	56	64	55	62	60	74	70	63.0
Third	75	68	70	63	67	62	70	67.9
Fourth	80	70	64	72	70	82	91	75.6

In the 7 years '44—'50 twenty marriages were celebrated in the Office of the Superintendent Registrar of the Headington District; but, as it is not known in which quarters these took place, they are omitted in the above table. Some of the numbers therefore are slightly incorrect, but not so much so as to affect the statement in the text.

<sup>d</sup> Marriages in different places in '49, and how celebrated :—

	Eng-land	Lon-don	Auck-land	Cam-bridge	Canter-bury	Car-lisle	Neath	Nor-wich	Oxford	South-ampton
Total number of marriages in '49	141,833	21,119	226	194	123	234	362	660	196	333
Not according to the rites of the English Church	18,701	1553	60	23	26	90	130	200	59	83
Proportion of these per cent. of total number	13.18	7.02	26.56	11.85	21.13	38.46	35.91	30.31	30.10	24.93
Superintendent Registrar's Office	5558	393	52	6	13	56	100	155	47	59
Proportion of these per cent. of total number	3.92	1.78	23.01	3.09	10.57	23.93	27.63	23.48	23.97	17.72

<sup>e</sup> Marriages performed throughout all England, and in the Oxford District, (A.) according to the rites of the Church of England, (B.) not according to those rites, and (C.) in the Offices of the Superintendent Registrars :—

	ALL ENGLAND.			OXFORD DISTRICT.		
	A.	B.	C.	A.	B.	C.
'41 . . .	114,371	8,124	2,064	174	20	16
'42 . . .	110,047	8,778	2,357	170	39	35
'43 . . .	113,637	10,181	2,817	171	38	36
Average	112,685	9,028	2,413	172	32	29
'44 . . .	120,009	12,240	3,446	148	45	38
'45 . . .	129,515	14,228	3,977	143	51	40
'46 . . .	130,509	15,155	4,167	136	39	30
Average	126,676	13,874	3,863	142	45	36
'47 . . .	120,876	14,969	4,258	124	59	52
'48 . . .	121,469	16,761	4,790	123	47	41
'49 . . .	123,182	18,701	5,558	137	59	47
Average	121,842	16,810	4,569	128	55	47

average number of marriages celebrated in the parish churches of the Oxford District steadily diminished, while those performed elsewhere as steadily increased; agreeing in this respect with what took place throughout the whole of England, except that the parochial marriages throughout the kingdom did not decline so uniformly as in Oxford<sup>e</sup>.

**BIRTHS.**—The number of births registered in the two years '49, '50 was 1595, which is rather under the *corrected* average<sup>f</sup>. This number however does not represent the births that actually took place in Oxford, as no account is taken of still-born infants; nor does it even comprehend all the children who were born alive, as many are omitted altogether, there being no penalty to render the registration compulsory<sup>g</sup>. Notwithstanding these omissions, the civil registers of births are much more complete than the church registers of baptisms, thus confirming what was noticed by many clergymen very soon after the new civil Registry had been established, viz. "that not a few of their parishioners considered the legal act of registering to be intended as a substitute for the religious ceremony of baptism, and have, in consequence, omitted the latter altogether." (*Census Returns, 1841. Parish Register Abstract, p. vi.*) It was intended to have made a detailed comparison of the church and civil Registers (or in other words of the baptisms and births) of Oxford, not merely as a matter of curiosity or general interest, but as being a matter especially concerning the parochial clergy of the place. This cannot now be done, but perhaps in the absence of more precise information the following statements may not be unacceptable. In the years '39, '40 throughout all England rather more than one quarter of the children whose birth was registered (and of course a larger proportion of the total number born,) appear to have been unbaptized<sup>h</sup>. In Oxford during the 7 years '44—'50 in six parishes taken indiscriminately (and in fact merely intended as the commencement of the proposed examination above alluded to,) the registered births exceeded the registered baptisms by nearly 8 per cent. In only one parish (St. Mary Magdalene) were the baptisms more numerous than the births, which is to be attributed to an unusual number of adult baptisms having taken place during the incumbency of the present vicar<sup>i</sup>. Again, in one year (1846) the baptisms slightly exceeded the births, but in all the rest the excess of births over baptisms varied

<sup>f</sup> Births registered in Oxford in '49, '50, with the average number :—

'49			'50			Average of 7 years.		
Males	Females	Total	Males	Females	Total	Males	Females	Total
403	385	788	432	375	807	416	381	797

<sup>g</sup> In 1842 the Registrar-General estimated the omissions to amount to several thousands annually. (*Fourth Annual Report, p. 9.*) The number of unregistered Births is diminishing, but is still supposed to be considerable.

<sup>h</sup> Comparative annual average number of Baptisms and Births registered throughout England in the years '39, '40 :—

Births	Baptisms	Excess of Births	Ditto per cent.
497,438	366,251	131,187	26.37

(*Census Returns, 1841. Parish Register Abstract, p. xx.*) It must be borne in mind that the number of Baptisms here mentioned does not include those among the Dissenters.

<sup>i</sup> Comparative number of Baptisms and Births registered in six parishes of Oxford in 7 years :—

	St. Giles	St. Paul	St. Thomas.	St. Martin	St. Mary Magd.	St. Mary the Virg.	Total.
Births . . . . .	507	638	592	68	422	55	2282
Baptisms . . . . .	494	511	546	65	430	54	2100
Excess of births . . . .	13	127	46	3	..	1	182
Ditto per cent. . . . .	2.56	19.91	7.77	4.41	..	1.82	7.98

The large proportion of unbaptized children in St. Paul's parish, compared with those of St. Giles and St. Thomas, arises probably from many persons taking their infants to the *parent* churches in preference to the *new* Church.

from 5 to 17 per cent.<sup>j</sup> In the two years '49, '50 the proportion of registered Births in Oxford was higher than in Cambridge and Canterbury, but lower than in London, Southampton, and all England<sup>k</sup>.

Another interesting point is the number of illegitimate children, which in '49, '50 slightly exceeded the average. "As it is not stated on the face of the Register of Births whether the children registered are or are not born in wedlock, the attempt to determine this point cannot always be successful" (*Sixth Annual Report*, p. xxxi); but as in every doubtful case the child has been classed as *legitimate*, the numbers mentioned are rather below than above the truth. The average number of illegitimate births registered in Oxford during the 7 years '44—'50 amounted to rather more than 5 per cent. of the total number of registered births: a proportion which appears to be rather small when compared with the whole of England<sup>l</sup>. The parishes in which the proportion was higher than this were St. Thomas, St. Clement, and St. Ebbe: almost all the children born in the Workhouse appear to be illegitimate. In '49 the proportion of illegitimate births registered in Oxford was rather above the average, and higher than in London or Southampton, but it was low when compared with all England, with Canterbury, and with Cambridge<sup>m</sup>.

j Comparative number of Baptisms and Births registered in six parishes of Oxford in 7 years:—

	'44	'45	'46	'47	'48	'49	'50
Births . . . . .	322	348	332	332	293	343	312
Baptisms . . . . .	300	312	333	275	276	307	297
Excess of Births . . . . .	22	36	..	57	17	36	15
Ditto per cent. . . . .	6.83	10.35	..	17.17	5.80	10.50	4.81

k Comparative proportion of Births in different places in '49, '50:—

	England	London	Cambridge	Canterbury	Oxford	Southampton
Population, 1851, . . . . .	17,927,609	2,362,236	27,815	14,100	26,480	34,098
Average Births . . . . .	585,790	73,588	814	384	797	1108
Rate per 1000 . . . . .	32.68	31.16	29.26	27.24	30.10	32.48

l The proportion of illegitimate Births registered throughout England in '42 was 6.7 per cent., in '45 it was 7.0, and in '46 it was 6.7 (*Ninth Annual Report*, p. 20).

m Illegitimate Births in different places in '49:—

	England	London	Cambridge	Canterbury	Oxford	Southampton
Total Births . . . . .	578,159	72,612	800	376	802	1084
Illegitimate Births . . . . .	39,334	2828	67	29	45	40
Proportion per cent. . . . .	6.80	3.89	8.38	7.71	5.61	3.69

The average proportion of illegitimate Births in Cambridge in the 3 years '47—'49 amounted to 8.49 per cent., in '42 it was 7.1 per cent. (*Sixth, Tenth, Eleventh, and Twelfth Annual Reports*.) This is so much higher than the proportion in Oxford, that one is naturally tempted to try to assign some reason for so great a difference in two places apparently so similarly situated. After reading the Reports recently issued by the University Commissioners, it is impossible to avoid attributing this difference in a great measure to the practice of allowing the students at Cambridge to reside in lodgings in the town so much more freely than at Oxford. At any rate the fact mentioned above tends to confirm the opinion expressed by several gentlemen in their Evidence: "The somewhat similar practice at Cambridge of allowing undergraduates to reside in the town is said to produce a great deal of such immorality (particularly among female servants), which is believed not to exist to nearly the same extent in Oxford." (*Oxford Report*, Mr. Lake's Evidence, p. 171.) "Rules as stringent as possible may be made for the masters of licensed lodging-houses, but such do not bind the *domestics*; and it would be discovered, as at Cambridge, that the rules were ineffectual." (*ibid.* Mr. Barth. Price's Evidence, p. 67.) The same opinion is expressed in several other places in the Oxford Report (*Evidence*, pp. 26, 94, 111, 126, 224), and may be found (though not so distinctly stated) even in the Evidence given to the Cambridge Commissioners (*Cambridge Report*, pp. 164, 5, 168, 185, 216. See also pp. 158, 177, 192, 196, 203.)

DEATHS.—The deaths in '49 were considerably above the average, but not nearly so high as in '46, in which year scarlatina was much more fatal in Oxford than cholera in '49; in '50 the deaths were below the average: taking the two years together the mortality was somewhat higher than usual, and was low compared with Southampton or London, but high compared with Canterbury, Cambridge, or all England<sup>n</sup>. In the winter and spring of '49 the deaths were more numerous than usual, chiefly owing to the prevalence of hooping-cough and fever. In the summer they sank below the average, notwithstanding the prevalence of malignant cholera in the latter part of August. In the autumn the number was swelled very high by cholera and diarrhoea, but the season was not otherwise unhealthy. The winter and spring of '50 were unusually healthy. In the summer and autumn, though the deaths were swelled by scarlatina, which was unusually fatal during the months of Aug., Sept., Oct., and Nov., they did not altogether exceed the average number. The diseases from which the greatest number of deaths occurred in '49 were phthisis, cholera, fever, hooping-cough, pneumonia, bronchitis, disease of heart, and diarrhoea; those which were most fatal in '50 were phthisis, fever, scarlatina, bronchitis, convulsions, and disease of heart. In '49 the chief diseases which were unusually fatal were cholera, hooping-cough, and scrofula; in '50 they were scarlatina, bronchitis, erysipelas, and convulsions. Scarlatina, phthisis, and measles were less fatal than usual in '49; as were phthisis, pneumonia, measles, and small-pox in '50.

The Twelfth Annual Report of the Registrar-General contains an abstract of deaths from different causes registered in each of the Divisions and Counties of England in 1849; an examination of which shews that in this year the diseases of the nervous system were much less fatal in Oxford than elsewhere, while the deaths from zymotic diseases, from diseases of the respiratory organs, and especially from tubercular diseases, were more numerous in proportion than throughout all England. Compared with the metropolis in '49 the result is the same, except that Oxford did not suffer from zymotic diseases so severely as London; in '50 however the case was different, and the zymotic diseases were less fatal in London than in Oxford, and the other three classes of diseases (especially those of the Respiratory Organs,) were more so<sup>o</sup>.

In the case, however, of the zymotic class of diseases it is not only the absolute number of deaths that is important, but also the localities where they occur; and accordingly the accompanying Table will shew in what parts of Oxford these diseases chiefly prevailed in the two years '49 and '50.

n Comparative proportion of Deaths in different places in '49, '50:—

	England	London	Cambridge	Canterbury	Oxford	Southampton
Population, 1851, . . . . .	17,927,609	2,362,236	27,815	14,100	26,480	34,098
Average Deaths . . . . .	404,913	58,842	618	306	628	922
Rate per 1000 . . . . .	22.58	24.91	22.22	21.70	23.72	27.04

o Deaths from different causes in England, London, and Oxford in '49, '50:—

	1849.						1850.			
	ENGLAND.		LONDON.		OXFORD.		LONDON.		OXFORD.	
	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.	Number	Per cent.
All Causes . . . . .	440,639	....	68,755	....	663	....	48,579	....	601	....
Zymotic diseases . . . . .	137,769	31.25	28,337	41.22	223	33.38	9875	20.32	144	23.96
Tubercular diseases . . . . .	65,203	14.79	8987	12.48	121	18.11	8539	17.58	103	17.14
Diseases of the Nervous System	47,912	10.86	6264	9.11	38	5.69	5965	12.28	61	10.15
Dis. of the Respiratory Organs	44,543	10.10	8270	12.03	66	12.44	7822	16.10	57	9.48



	Sm.Pox.		Measles		Scarlat.		Hoop-C.		Diarrh.		Cholera		Influenz.		Fever		Erysipel.		Total		
	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	
<b>EASTERN PARISH.</b>																					
<i>St. Clement (continued).</i>																					
Brought up							2		1	1					4	3		1	7	5	
George Street															1	1			1	1	
High Street							2		2	1					1				4	2	
Hitchcock's Row												1							1		
London Place															1				1		
Magdalen Prospect							1												1		
New Street															1				1		
Plain				1															1		
Plowman's Buildings						1													1		
White's Row				1															1		
<b>Total</b>				2	1	5		3	2	1					5	7		1	16	11	
<b>SOUTHERN PARISHES.</b>																					
<i>St. Aldate.</i>																					
Alms-houses													1						1		
Brewer Street	1																		1		
Carter's Yard								1		2								1	3	1	
English's Yard					2										1					3	
Grandpont Cottages										1									1		
Green-Dragon Yard							1												1		
King's Row															1				1		
Pembroke Street							3												3		
Rose Court											2								2		
St. Aldate Street							1	2		1	3				1				5	3	
School Yard							1												1		
Sheppard's Row											1				1				1	1	
Sparks' Yard											2				1				2	1	
Stone's Yard					1														1		
Thames Street									2										2		
Water-Lane Square															1				1		
Westminster Court							1												1		
Wyatt's Yard								1							1	1			3	1	
<i>St. Ebbe.</i>																					
Abbey Place											2								2		
Albert Street							1												1		
Belvidere Street					1															1	
Blackfriars' Road						1					3		1	2					7		
Bridport Street											2				1			1	3	1	
Bull Street											2								2		
Church Street											1				1				2	2	
Commercial Road															1				2		
Friars' Street											2					1			3	1	
Gas Street											1								1		
Gas works											1								1		
Godfrey's Row															1				1		
Grubb's Row																			1		
Lee's Yard											1								1		
Littlegate															2				2		
Milbank											4								4		
New Street											1								1		
Orchard Street																			1		
Paradise Square											1				1				2	1	
Paradise Street											4								5		
Pembroke Street																			1		
Penson's Gardens											1				1				2	2	
St. Ebbe Street											1								1		
Speedwell Street											3								7	3	
Speedwell Terrace															1				1		
Taylor's Buildings											1								1		
<b>Total</b>	1			1	11	13	2	8	5	41	1	2			8	11		2	73	33	

	Sm.Pox.		Measles		Scarlat.		Hoop-C.		Diarrh.		Cholera		Influenz.		Fever		Erysipel.		Total		
	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	'49	'50	
<b>EXTRA PAROCHIAL.</b>																					
New College														1						1	
Oriel College																1				1	
Infirmary																	6	5	6	5	
Workhouse										2		4		4	1	5	3		1	15	
City Gaol										1									1	1	
County Gaol												5						1	1	6	
<b>Total</b>										3		9		4	2	5	5	7	8	28	15
<b>NORTHERN PARISHES</b>																					
<b>WESTERN</b>		1									8	2	2	1	1	10		1		4	2
<b>CENTRAL</b>			1								7	15	2	4	6	8	1			8	12
<b>EASTERN</b>											2	1	5		3	2	1			5	7
<b>SOUTHERN</b>	1										11	13	2	8	5	41	1	2		8	11
<b>EXTRA-PAROCHIAL</b>														3		9		4	2	5	5
<b>UNKNOWN</b>	†1													2	2			1		†1	1
<b>Total</b>	2	1	1	1	3	39	42	6	24	17	75	2	11	2	42	45	9	17	209	130	

s One of these removed to his home near Tityhe Bridge, and died there.  
t Both of these brought from the country to the Infirmary, and died there.

This Table agrees so nearly with those given by Mr. Ormerod in his pamphlet "On the Sanatory Condition of Oxford," that it is unnecessary to examine it in detail in these pages. It would be better for the reader to do this for himself, comparing at the same time the description given of certain localities by Mr. Ormerod, by the writer in the Oxford Herald<sup>u</sup>, and by Messrs. Cubitt and Smith<sup>x</sup>, with what is said of them in the preceding *Monthly Reports*, the result in every case of personal examination made in company with Mr. Allen:—it would be better still if the reader could be induced to visit some of these localities himself, see if the description of them is overdrawn, and then do what in him lies to bring about some improvement.

In two instances, where a Coroner's Inquest was held in one of these unhealthy localities, the Jury thought it their duty to append to their verdict some remarks on the discreditable state of the neighbourhood. The censure of White's Row, St. Ebbe Street, St. Ebbe, has been already quoted (II. p. 72); the other is as follows:—"The Jury, on viewing the body, were struck with the filthy and noxious state of the ditches on the north and west end of Jericho Street; and having learnt from the witnesses examined on this Inquest that there had been much illness in the neighbourhood of these ditches, unanimously requested the Coroner to represent their state to the Commissioners."

The number of Coroners' Inquests held in the years '49, '50 was probably 90y, which is rather more than the average. Of the persons whose deaths were thus inquired

u These letters, which were far too valuable to be confined to the ephemeral columns of a newspaper, have been collected in a separate form. See "A Report of the Evidence taken before T. Macdougall Smith . . . with an Appendix containing a Series of Letters . . . on the Streets of Oxford," &c. &c. &c. small 4to. 1851.  
x In their "Report upon the Sewerage and Water Supply" of Oxford, 8vo. 1851.

y It is difficult to speak with certainty on this matter, as the particulars have to be obtained from no less than four Coroners, viz. for the County of Oxford, the County of Berks, the University of Oxford, and the City of Oxford.

into, 69 were males, and 21 were females<sup>z</sup>. The following are the Causes of Death as gathered from the depositions of the witnesses:—

I.—Diarrhoea..... 1*	Brought up..... 29
Cholera ..... 1*	VII.—Disease of Liver ..... 1*
Fever ..... 1*	XIII.—Premature Birth and Debility 1*
Erysipelas ..... 1*	XVI.—Sudden ..... 12
II.—Hæmorrhage ..... 1	XVII.—Intemperance ..... 1
Dropsy ..... 1*	Cold ..... 1
Mortification ..... 1*	Poison ..... 1a
III.—Phthisis ..... 3*	Burns and Scalds ..... 8
IV.—Apoplexy ..... 8	Hanging and Suffocation .... 3
Convulsions..... 6	Drowning ..... 10
V.—Disease of Heart..... 3	Fractures and Contusions .. 12
VI.—Pneumonia ..... 1	Wounds..... 9
Disease of Lungs..... 1	Not specified ..... 2
Carried over..... 29	Total ..... 90

All the deaths marked \* (except one of *phthisis*,) occurred in the Gaols, where the cause of almost every death that takes place is officially inquired into.

Among the other cases the following deserve notice:—

A sawyer went to work after a hearty dinner, and died after a few minutes illness of *hæmorrhage* from rupture of splenic artery and extensive ulceration of stomach.

A man fell into the fire in a fit; and died six days afterwards of *apoplexy*.

A young woman died of *convulsions*, after violent passion.

*Drunkenness* was probably the immediate cause of one man's death, but three others owed their deaths to the same vice, more remotely, but not less certainly. One of these fell from the roof of a house, another was run over by a cart-wheel, and the third fell into the river.

A man was found dead on the high road, apparently from *cold*.

A child died of *poison*, having swallowed a solution of chloride of lime<sup>a</sup>.

Four young children died of *burns* occasioned by their clothes catching fire: and one grown-up woman was killed by the same accident. A man died from falling on the fire, probably in a fit.

Two young children died of *scalds*, occasioned by their upsetting, the one a tea-kettle, the other a coffee-pot.

<sup>z</sup> Number of Inquests held in Oxford during the 7 years 1844—'50:—

	Males	Females	Total
'44 ...	24	12	36
'45 ...	32	9	41
'46 ...	27	10	37
'47 ...	36	19	55
'48 ...	33	16	49
'49 ...	23	10	33
'50 ...	46	11	57
Total ..	221	87	308
Average .	31.6	12.4	44

<sup>a</sup> This child died July, 1850, in Hayfield-Hut Lane, i. e. in the *Headington* District. By some mistake (that cannot now be explained,) the death is not noticed in the Monthly Report.

Two men hanged themselves:—an aged woman died of *suffocation*, from a piece of meat having lodged in the glottis.

Ten persons were *drowned*: four while bathing; three from accidentally falling into the water, (one of these being drunk at the time); and three were "found drowned."

Twelve persons died of *fractures*, caused in five instances (one man being drunk at the time,) by wheels of carts and wagons;—a child was run over by a train of wagons on an unfinished line of railway;—three men (one of whom was drunk at the time,) fell from different buildings, one from a loaded wagon;—a newly-born illegitimate infant died of fracture of the skull, possibly caused by falling on the ground for want of proper care;—a young man died (after lingering 13 weeks,) of supposed concussion of the nervous system from jumping off a bridge into the river (see List of Deaths in Infirmary, No. 210).

Nine persons were killed by different kinds of *wounds*. One man shot himself intentionally:—another shot himself (in the opinion of the jury,) by accident. A man cut his throat, but did not die of the immediate effects of the wound (see List of Deaths in Infirmary, No. 200). Three men received fatal wounds from a bill-hook, reaping-hook, and scythe respectively (see List of Deaths in Infirmary, Nos. 194, 205, 207). A man died from having his hand and arm crushed between a paper-making machine;—a young woman, who was pregnant, had the lower part of one of her arms cut off by a thrashing machine; abortion followed in 17 days, and she died the next day (see List of Deaths in Infirmary, Nos. 159, 185). A man fell while skating; a gimlet in his coat pocket stuck in one of the vertebræ of the spine, and he died in 7 days.

In two cases the cause of death was *not specified*;—both were newly-born infants found exposed, one in a privy, the other in the canal.

Upon comparing the Registers of Births and Baptisms (p. 7), it was found that the former are much more complete than the latter. There is much less difference between the Registers of Deaths and Burials, though here also the civil Register is somewhat more complete than the ecclesiastical. In the years '39, '40 the number of Deaths registered throughout all England exceeded the number of parochial Burials by rather more than 15 per cent.<sup>b</sup>; and in the six Oxford parishes before mentioned in the same 7 years '44—'50 the excess of Deaths over parochial Burials was rather more than 1 per cent.<sup>c</sup> The excess of Burials in the parishes of St. Giles and St. Thomas is easily explained, as before the year '48 all the persons who died in the district of St. Paul were buried in one of these two church-yards. The same excess in the parish of St. Mary-the-Virgin is probably caused by a few persons connected with the University being buried in that church-yard. In three years the Deaths exceeded the Burials, in three

<sup>b</sup> Comparative annual average number of Deaths and Burials registered throughout England in the years '39, '40:—

Deaths	Burials	Excess of Deaths	Ditto per cent.
349,306	295,631	53,675	15.37

(*Census Returns*, 1841. *Parish Register Abstract*, p. xx.) It must be borne in mind that the number of Burials here mentioned does not include all those among the Dissenters.

<sup>c</sup> Comparative number of Deaths and Burials registered in six parishes of Oxford in 7 years:—

	St. Giles	St. Paul	St. Thomas.	St. Martin	St. Mary Magd.	St. Mary the Virg	Total.
Deaths . . . . .	340	408	415	41	352	29	1585
Burials . . . . .	565	90	500	38	329	40	1562
Excess of Deaths . .	..	318	..	3	23	..	23
Excess of Burials . .	225	..	185	..	..	11	..

*Deaths at different ages.*

the reverse was the case, and in one the numbers were equal<sup>d</sup>. The very uncertainty and unsatisfactoriness of these results may perhaps induce some one to institute a more complete examination and comparison of the Registers of Deaths and Burials in Oxford.

Of the 1264 persons that died in Oxford in the two years '49 and '50, 337 (or more than 26 per cent.) were cut off before they were 2 years of age. To some of the persons into whose hands these pages will fall this will perhaps appear a large number; but it is in fact comparatively small, as the proportion of infants dying before this age in the seven years 1838-44 throughout all England was more than 34 per cent.<sup>e</sup>

<sup>d</sup> Comparative number of Deaths and Burials registered in six parishes of Oxford in 7 years:—

	'44	'45	'46	'47	'48	'49	'50	Total
Deaths . . . . .	211	221	295	220	213	202	223	1585
Burials . . . . .	212	200	309	226	213	200	202	1562
Excess of Deaths . .	..	21	..	..	..	2	21	23
Excess of Burials . .	1	..	14	6	..	..	..	..

<sup>e</sup> Deaths at different ages in Oxford in '49, '50:—

	0 to 2	2 to 5	5 to 15	15 to 40	40 to 60	60 and over	Total
1849 . . .	171	50	60	131	109	142	663
1850 . . .	166	42	54	110	95	134	601
Both years	337	92	114	241	204	276	1264

Throughout all England in the seven years 1838-44 the total number of deaths was about 2,437 thousands, of which number about 842 thousands occurred under two years of age. (*Appendix to Ninth Annual Report of the Registrar-General*, p. 177, 8vo. ed.) "In Liverpool and Manchester half the children born die before they are five years of age, the numbers being 52 and 51 per cent. In Birmingham 48 per cent. of the deaths occur before this age, and in London rather more than 40 per cent., but in Wiltshire and Surrey only 31 per cent." (Dr. Snow, in Ranking and Radcliffe's *Half-Yearly Abstract &c.* vol. xviii. p. 1.)

## APPENDIX B.

*On the Epidemic Cholera as it prevailed in Oxford, during the months of August, September, and October, 1849.*

THOUGH this account of the Epidemic Cholera as it prevailed in Oxford is not so complete as it was originally intended to be, still it is hoped that the materials that were prepared will not be found altogether useless or uninteresting, even in the rough and unfinished form in which they are here given to the world. Probably in no part of the work will the reader have more cause to regret the absence of Mr. Allen's valuable assistance<sup>a</sup>.

In Oxford, as elsewhere, there were during several weeks premonitory symptoms of the coming pestilence. In June diarrhœa began to be prevalent, and carried off three infants. In July one fatal case occurred, and slight cases were unusually frequent; it was also "noticed that the ordinary doses of aperient medicine were too strong to be used with perfect safety." (*Monthly Report*, p. 48.) Early in August "a poor woman, travelling through Oxford, was admitted into the house of the Anti-Mendicity Society (Castle Street, St. Peter-le-Bailey), and died there after an illness of four days with many of the symptoms of Cholera." (p. 52.)<sup>b</sup> But the first acknowledged case of Cholera occurred in the County Gaol, St. Thomas (the very place where the disease first made its appearance in 1832), where a man, who had been in prison for several months, and who therefore could not have brought the disease from any infected locality, after suffering from diarrhœa for about 30 hours, was seized with decided symptoms of Cholera early in the morning of Aug. 13, and died in the afternoon. On the same day a young woman of bad character, who had been suffering from slight diarrhœa for 2 or 3 days, went to Nuneham Fair, where she got very wet, and probably ate and drank more than was good for her. After her return to her lodgings in Orpwood's Row, St. Thomas, the diarrhœa was worse, notwithstanding which she ate for breakfast the next morning some cucumber and vinegar; symptoms of Cholera came on soon after, and she died the same night, Aug. 14. As Cholera was prevailing at Abingdon at this time, it is quite possible that this patient may have been brought in contact with the disease at Nuneham Fair, but probably most persons will consider the known particulars of her history to be quite sufficient to account for her attack. For three days no fresh case occurred, but on Aug. 18 the wife of a tradesman in Castle Street, St. Peter-le-Bailey, was attacked, and from that time to the end of Oct. the disease continued to prevail with greater or less severity in different parts of the city.

<sup>a</sup> "Mr. Smith.—'Mr. Allen has handed me a copy of a statement which was read a year or two ago [Nov. 12. 1849] before the Ashmolean Society. I have read it with a good deal of interest, and I think it very valuable and important. It gives a very clear account of the rise and progress of the Cholera.'

"Dr. Ogle.— . . . . 'I had at that time [1832], as on the last visitation [1849], ample opportunity of witnessing Mr. Allen's indefatigable attention to the subject, and I have no doubt the information he has given you will be the best that is to be obtained.'" (Extract from *Evidence taken before T. Macdougall Smith, Esq.* p. 48.)

<sup>b</sup> In the *Report of the General Board of Health* (p. 154) it is stated that the first case of Cholera in Oxford occurred Aug. 8: probably this is the case alluded to. See below, p. 35. note u.

Cases and Deaths in different														
DISTRICTS.	Aug. 18		Aug. 25		Sept. 1		Sept. 8		Sept. 15		Sept. 22		Sept. 29	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
<b>NORTH.</b>														
St. Giles.....	..	..	3	..	1	1	..	1	1	..	..	1	..	..
St. Paul.....	..	..	..	..	1	1	..	..	1	..	1	2	2	..
	..	..	3	..	2	2	..	1	2	..	1	3	2	..
<b>WEST.</b>														
St. Thomas.....	1	1	3	1	10	5	3	1	2	..	1	1	2	1
<b>CENTRAL.</b>														
All Saints.....	..	..	..	..	1	1	..	..	..	..	..	..	..	..
Holywell.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. John.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Martin.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Mary Magdalene.....	..	..	..	..	..	..	1	..	..	..	..	..	..	..
St. Mary the Virgin.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Michael.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
St. Peter-le-Bailey.....	1	..	..	..	4	2	6	1	2	1	1	..	..	1
St. Peter-in-East.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1	..	..	..	5	3	7	1	2	1	1	..	..	1
<b>EAST.</b>														
St. Clement.....	..	..	..	..	..	..	..	..	1	..	2	1	..	..
<b>SOUTH.</b>														
St. Aldate.....	..	..	..	..	..	..	5	2	4	3	2	3	2	1
St. Ebbe.....	..	..	3	3	3	1	10	6	13	6	12	7	2	3
	..	..	3	3	3	1	15	8	17	9	14	10	4	4
<b>EXTRA-PAROCH.</b>														
Colleges and Halls.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Infirmary.....	..	..	..	..	..	..	..	..	..	..	..	..	..	2
Workhouse.....	..	..	..	..	1	1	2	..	1	..	1	1	2	1
Gaols.....	1	1	1	..	..	..	..	..	2	..	6	2	2	..
	1	1	1	..	1	1	2	..	3	..	7	3	4	3
<b>NORTH</b> .....	..	..	3	..	2	2	..	1	2	..	1	3	2	..
<b>WEST</b> .....	1	1	3	1	10	5	3	1	2	..	1	1	2	1
<b>CENTRAL</b> .....	1	..	..	..	5	3	7	1	2	1	1	..	..	1
<b>EAST</b> .....	..	..	..	..	..	..	..	..	1	..	2	1	..	..
<b>SOUTH</b> .....	..	..	3	3	3	1	15	8	17	9	14	10	4	4
<b>EXTRA-PAROCHIAL</b> .....	1	1	1	..	1	1	2	..	3	..	7	3	4	3
<b>Total</b> ....	3	2	10	4	21	12	27	11	27	10	26	18	12	9

This Table differs slightly from that given by Mr. Allen in the *Proceedings of the Ashmolean Society*, 1849, p. 236;

Parishes in the Weeks ending Saturday,													
DISTRICTS.	Oct. 6		Oct. 13		Oct. 20		Oct. 27		Nov. 3		Total		DISTRICTS.
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
<b>NORTH.</b>													
St. Giles.....	..	..	..	..	..	..	..	..	..	..	5	3	St. Giles.
St. Paul.....	..	..	..	..	..	..	..	..	..	..	5	3	St. Paul.
	..	..	..	..	..	..	..	..	..	..	10	6	
<b>WEST.</b>													
St. Thomas.....	1	..	1	..	..	..	..	..	..	..	24	10	St. Thomas.
<b>CENTRAL.</b>													
All Saints.....	..	..	..	..	..	..	..	..	..	..	1	1	All Saints.
Holywell.....	..	..	..	..	..	..	..	..	..	..	..	..	Holywell.
St. John.....	..	..	..	..	..	..	..	..	..	..	..	..	St. John.
St. Martin.....	..	..	..	..	..	..	..	..	..	..	..	..	St. Martin.
St. Mary Magdalene.....	1	1	..	..	..	..	..	..	..	..	2	1	St. Mary Magdalene.
St. Mary the Virgin.....	..	..	..	..	..	..	..	..	..	..	..	..	St. Mary the Virgin.
St. Michael.....	..	..	..	..	..	..	..	..	..	..	..	..	St. Michael.
St. Peter-le-Bailey.....	1	1	..	..	..	..	..	..	..	..	15	6	St. Peter-le-Bailey.
St. Peter-in-East.....	..	..	..	..	..	..	..	..	..	..	..	..	St. Peter-in-East.
	2	2	..	..	..	..	..	..	..	..	18	8	
<b>EAST.</b>													
St. Clement.....	..	..	..	..	..	..	..	..	..	..	3	1	St. Clement.
<b>SOUTH.</b>													
St. Aldate.....	1	2	..	..	..	..	..	..	..	..	14	11	St. Aldate.
St. Ebbe.....	5	1	4	1	1	1	..	1	1	..	54	30	St. Ebbe.
	6	3	4	1	1	1	..	1	1	..	68	41	
<b>EXTRA-PAROCH.</b>													
Colleges and Halls.....	..	..	..	..	..	..	..	..	..	..	..	..	Colleges and Halls.
Infirmary.....	..	..	..	..	..	..	..	..	..	..	..	..	Infirmary.
Workhouse.....	..	..	..	..	..	..	..	..	..	..	7	4	Workhouse.
Gaols.....	2	1	..	..	..	..	..	..	..	..	14	5	Gaols.
	2	1	..	..	..	..	..	..	..	..	21	9	
<b>NORTH</b> .....	..	..	..	..	..	..	..	..	..	..	10	6	<b>NORTH.</b>
<b>WEST</b> .....	1	..	1	..	..	..	..	..	..	..	24	10	<b>WEST.</b>
<b>CENTRAL</b> .....	2	2	..	..	..	..	..	..	..	..	18	8	<b>CENTRAL.</b>
<b>EAST</b> .....	..	..	..	..	..	..	..	..	..	..	3	1	<b>EAST.</b>
<b>SOUTH</b> .....	6	3	4	1	1	1	..	1	1	..	68	41	<b>SOUTH.</b>
<b>EXTRA-PAROCHIAL</b> .....	2	1	..	..	..	..	..	..	..	..	21	9	<b>EXTRA-PAROCHIAL.</b>
<b>Total</b> ....	11	6	5	1	1	1	..	1	1	..	144	75	<b>Total.</b>

but the variations are unimportant, and it is impossible to say which of the two is in error.



The following is a List of all the cases of Cholera in Oxford in the order in which they occurred<sup>c</sup>.

No. 1.—M. 40, convicted prisoner in County Gaol, where he had been for several months; a discharged soldier, of bad constitution; had diarrhoea in the night of Aug. 11, 12, and following day; at half-past 7 p.m. sent for medical assistance; after which time symptoms of cholera came on, and next morning at half-past 5 he was in a state of collapse;—died same day (Aug. 13) at 5 p.m.

No. 2.—F. 20, spinster, prostitute; last house in Orpwood's Row, St. Thomas (same house as No. 9, next door to No. 23); slight diarrhoea for 3 days; Aug. 13 went to Nuneham Fair, where she got very wet; diarrhoea worse that night; next morning ate for breakfast some cucumber and vinegar; symptoms of cholera came on soon after;—died same night (Aug. 14) at 11.

No. 3.—F. 54, wife of general dealer; No. 49, Castle Street, St. Peter-le-Bailey; seized Aug. 18 (neglected diarrhoea for 12 or 14 days);—recovered: (never quite well afterwards; died of phthisis, Jan. 1851.)

No. 4.—M. 52, builder; No. 3, Blenheim Place, St. Giles; no previous diarrhoea; quite well Aug. 19; restless during the night, and harassed by thoughts about the Cholera Hospital which was being built in his neighbourhood; seized Aug. 20, early in the morning;—recovered.

No. 5.—M. 43, labourer; Best's Yard, St. John's Road, St. Giles (which has since been removed to make room for South Parade); at work in culvert in Castle Street, St. Peter-le-Bailey, sometimes at night, with wet feet; seized Aug. 20;—recovered.

No. 6.—M. 28, turnkey at County Gaol; seized Aug. 21, early in the morning (diarrhoea the previous day);—recovered.

No. 7.—M. 18, rag-gatherer; 2nd or 3rd house in Orpwood's Row, St. Thomas; seized Aug. 21 (diarrhoea for some days before);—recovered.

No. 8.—M. 48, labourer; Lee's Yard, St. Ebbe Street, St. Ebbe; seized Aug. 21 at 6 a.m. while at work in culvert in Castle Street, St. Peter-le-Bailey (diarrhoea the previous day); admitted into Cholera Tent-Hospital<sup>d</sup> at half-past 4 p.m.;—died same day at 6 p.m.

No. 9.—F. 46, wife of ostler; last house in Orpwood's Row, St. Thomas (same house as No. 2, next door to No. 23); seized Aug. 22;—died next day, after 24 hrs. illness.

No. 10.—M. 57, cutler (husband of No. 26); Paradise Street, St. Ebbe; seized Aug. 24 at half-past 2 p.m. (had a slighter attack some days before);—died next day at 5 a.m.

No. 11.—M. 56, baker; Best's Yard, St. John's Road, St. Giles (which has since been removed to make room for South Parade); seized Aug. 24 at 3 p.m. (diarrhoea 2 or 3 days previous);—died Aug. 31 at half-past 11 p.m.

No. 12.—M. 39, a tramp; had been in Oxford 5 days, lodging in High Street, St. Thomas; seized Aug. 25 at 9 p.m.; found vomiting in the street; admitted into Cholera Tent-Hospital at 11 p.m.;—died next day at 8 a.m.

No. 13.—M. 7, son of butcher; Abbey Place, St. Ebbe; seized Aug. 25 at 5 a.m. (diarrhoea the previous night);—died same day at 9 p.m.

No. 14.—F. 48, a tramp; had been lodging for about a fortnight in High Street, St. Thomas, at the corner of Orpwood's Row; wretchedly poor and weak; seized Aug.

<sup>c</sup> This List was originally compiled during the continuance of the Cholera from 1. the returns made to the Local Board of Health, 2. the Register of Deaths, and 3. private lists of cases. In the following year (1850) each locality was visited by the Writer in company with Mr. Allen, and strict inquiries were made of the relatives and neighbours of the patients. The list has since been compared with Mr. Allen's list of cases admitted into the Cholera Hospital, and Mr. Wood's list of cases that occurred in the County Gaol.

<sup>d</sup> As the Cholera Hospital was not finished when the epidemic broke out, the patients were at first received in a tent.

26, about half-past 7 p.m.; admitted into Cholera Tent-Hospital;—died next day at half-past 7 p.m. (?)

No. 15.—F. 5, daughter of shoemaker; No. 9 Castle Street, St. Peter-le-Bailey; seized Aug. 27 about 6 a.m. (no previous diarrhoea);—died next day about 4 a.m.

No. 16.—M. 25, shoemaker; Amsterdam Court, All Saints; seized Aug. 27; ischuria for 5½ days;—died Sept. 1.

No. 17.—M. 2, son of baker; High Street, St. Thomas, near Holly-bush Row; under treatment for diarrhoea for 7 or 8 weeks; seized Aug. 27 at 3 a.m.;—recovered (diarrhoea continued for a long time).

No. 18.—F. 25, spinster, prostitute; Blay's Yard, Holly-bush Row, St. Thomas; seized Aug. 27 at half-past 4 p.m.;—recovered.

No. 19.—F. 73, wife of stableman; High Street, St. Thomas; seized Aug. 27;—recovered.

No. 20.—M. 60, labourer; No. 58 Friars Street, St. Ebbe; seized Aug. 28 at 1 p.m. (neglected diarrhoea for 3 days; had drunk some cold water while at work);—recovered.

No. 21.—F. 4, daughter of labourer; last house in Vaughan's Yard, St. Thomas; seized Aug. 28 at 4 a.m. (no previous diarrhoea);—died same day at half-past 4 p.m.

<sup>e</sup> No. 22.—F. 25, spinster, prostitute; High Street, St. Thomas; seized Aug. 28 at 11 p.m.;—recovered.

No. 23.—F. 21, spinster, prostitute; Orpwood's Row, St. Thomas (next house to Nos. 2 and 9); seized Aug. 29 at 9 a.m.; admitted into Cholera Tent-Hospital at half-past 2 p.m.;—died next day at half-past 2 a.m.

No. 24.—F. 55, wife of labourer; Union Street, St. Paul; seized Aug. 29 (slight diarrhoea the previous day; rather subject to diarrhoea);—died same day after 6 hours illness.

No. 25.—F. 82, widow in Workhouse; seized Aug. 30; admitted into Cholera Tent-Hospital at half-past 10 a.m.;—died next day at half-past 10 a.m.

No. 26.—F. 55, wife of cutler (No. 10); Paradise Street, St. Ebbe; seized Aug. 30, at 8 a.m.;—died next day at half-past 1 a.m.

No. 27.—M. 40, hawker; lodging in Castle Street, St. Peter-le-Bailey (corner of Paradise Street, same house as No. 62); nervous and timid; had just come into the town; seized Aug. 30 at 11 a.m. (diarrhoea for 2 days previous); admitted into Cholera Hospital Sept. 1 at 1 p.m.;—recovered.

No. 28.—F. 27, wife of currier; lodging at No. 40, Castle Street, St. Peter-le-Bailey; diarrhoea for several days; worse Aug. 29; confirmed Cholera, Aug. 30 at 10 a.m.;—died next day at half-past 11.

No. 29.—M. 5, son of strolling German musician, lodging in Hamel, corner of Osney Lane, St. Thomas (same house as No. 139); seized Aug. 31 at 4 a.m.;—died same day at half-past 9 p.m.

No. 30.—F. 35, wife of stableman; Abbey Place, St. Ebbe; seized Sept. 1 at 11 p.m.;—recovered for the time, but was seized again, and died Sept. 26. (See No. 121.)

No. 31.—M. 21, boatman; seized at Langford Lane, Sept. 1, about 11 p.m. (diarrhoea for 1 wk. previous); brought home next day to Hythe Bridge, St. Thomas;—recovered.

No. 32.—F. 30, wife of labourer; High Street, St. Thomas (near the "Shoulder-of-Mutton"); seized Sept. 1 at 6 p.m. (no previous diarrhoea);—recovered.

No. 33.—M. 11, son of school-master (brother of No. 36); Alder's Yard, St. Peter-le-Bailey; seized Sept. 1 (felt poorly the previous evening);—recovered.

No. 34.—F. 63, wife of tallow-chandler; No. 11, St. Giles Road, St. Giles; seized Sept. 1 about 2 p.m. (diarrhoea for about 10 days, which she had treated herself);—died Sept. 6 at 2 a.m.

No. 35.—F. 27, pauper in Workhouse; (mother of No. 91); taken to the Workhouse from the parish of St. Thomas, Aug. 30; seized Sept. 2;—recovered.

<sup>e</sup> The particulars of this case are doubtful.

No. 36.—M. 13, son of school-master (brother of No. 33); Alder's Yard, St. Peter-le-Bailey; seized Sept. 2 (diarrhoea for 2 days previous);—recovered.

No. 37.—M. 44, faggot-maker; Payne's Yard, High Street, St. Thomas; drank to excess Sept. 1; ate some underdone pork for dinner Sept. 2 (no previous diarrhoea); seized at 9 same evening;—died next morning at half-past 10.

No. 38.—F. 9, daughter of salesman; No. 6, Church Street, St. Ebbe; seized Sept. 3 at half-past 12 p.m. (no previous diarrhoea, but had been eating apples the day before); admitted into Cholera Hospital at 2 p.m.;—died same day at 11 p.m.

No. 39.—F. 27, sawyer's wife; Billing's Row, High Street, St. Thomas; brought home ill in the evening from St. Giles' Fair, Sept. 3;—recovered.

No. 40.—F. 14, daughter of carpenter (sister of No. 46); Paradise Street, St. Ebbe; seized Sept. 3 at 3 a.m. (ailing the previous evening);—died same day at 3 p.m.

No. 41.—M. 28, stableman (husband of No. 67); Arnold's Passage, St. Peter-le-Bailey; seized Sept. 3 (diarrhoea for 2 or 3 days previous);—recovered.

No. 42.—M. 8, son of tailor (brother of Nos. 55 and 57); Faulkner's Row, St. Peter-le-Bailey; seized Sept. 4 at 7 a.m. (no previous diarrhoea);—died same day at 8 p.m.

No. 43.—M. 74, farmer's labourer; came from near Aylesbury to Oxford Sept. 1, to stay with his son in Bridport Street, St. Ebbe; seized Sept. 4 about 5 p.m. (no previous diarrhoea); admitted into Cholera Hospital at half-past 11 p.m.;—died Sept. 10.

No. 44.—F. 56, wife of labourer; opposite the Church, Blackfriars Road, St. Ebbe; seized Sept. 4 at 7 p.m.;—recovered.

No. 45.—M. 5, son of College servant; No. 48, St. Aldate Street, St. Aldate (corner of Thames Street); seized Sept. 5 at 6 a.m. (subject to diarrhoea);—died same day at half-past 5 p.m.

No. 46.—M. 11, son of carpenter (brother of No. 40); Paradise Street, St. Ebbe; seized Sept. 5 at 6 p.m.;—died next day at 3 p.m.

No. 47.—M. 18, son of No. 76 (brother of Nos. 68, 81); No. 11, Speedwell Street, St. Ebbe; seized Sept. 5 at 7 a.m. (no previous diarrhoea, though subject to this complaint; had been eating apples at St. Giles' Fair);—died next day at 1 a.m.

No. 48.—M. 5, son of No. 49; New Street (near Bull Street), St. Ebbe; seized Sept. 5 at 2 p.m.;—died Sept. 12 at 4 p.m.

No. 49.—F. 40, wife of carpenter (aunt of No. 80, and mother of No. 48); New Street (near Bull Street), St. Ebbe; seized Sept. 5 at 6 p.m.;—recovered.

No. 50.—M. 20, carpenter; High Street, St. Thomas, near the Church; under treatment for diarrhoea for 3 or 4 wks.; seized Sept. 5 at 8 p.m.;—recovered.

No. 51.—M. 17, printer's boy at the University Press; Sparks' Yard, St. Aldate; seized Sept. 5 at half-past 11 p.m.;—died next day at half-past 9 a.m.

No. 52.—M. 10, son of widow, shoebinder; Red-Lion Square, St. Mary-Magdalene; seized Sept. 6 at 10 a.m. (neglected diarrhoea for 6 or 7 days previous);—recovered.

No. 53.—M. 30, tailor (husband of No. 86, father of No. 124); admitted into the Workhouse from St. Mary-Magdalene parish, Aug. 11; seized Sept. 6;—recovered.

No. 54.—F. 14, daughter of (?); Faulkner's Row, St. Peter-le-Bailey (between Nos. 57 and 97); seized Sept. 6 at 10 p.m. (no previous diarrhoea);—recovered.

No. 55.—M. 16, son of tailor (brother of Nos. 42 and 57); Faulkner's Row, St. Peter-le-Bailey; seized Sept. 6 at 7 p.m.;—recovered.

No. 56.—F. 10, daughter of policeman (No. 66); No. 25, Bull Street, St. Ebbe (next door to No. 64); seized Sept. 7 at 7 a.m. (no previous diarrhoea);—died same day at 7 p.m.

No. 57.—F. 25, wife of billiard-marker (sister of Nos. 42 and 55); Faulkner's Row, St. Peter-le-Bailey (next door to No. 54); had been nursing her brothers; seized Sept. 7 at 6 a.m.;—recovered.

No. 58.—M. 38, labourer; No. 36, Blackfriars Road, St. Ebbe; seized Sept. 8 at 1 a.m.;—died same day at 9 p.m.

No. 59.—M. 5, son of tinker; Sparks' Yard, St. Aldate; seized Sept. 8 at 9 a.m. (diarrhoea and vomiting for 2 days previous; his sister had an attack of diarrhoea at the same time);—died Sept. 10.

No. 60.—F. 21, wife of tailor (daughter of No. 92); No. 60, St. Aldate Street, St. Aldate (corner of Sparkes' Yard); seized Sept. 8 about noon (diarrhoea for 5 or 6 days, during which time she ate some cucumber);—died Sept. 17 at 1 a.m.

No. 61.—F. 2, daughter of waterman (niece of No. 71); last house in Wyatt's Yard, St. Aldate; seized Sept. 8 at 10 p.m. (diarrhoea for 5 or 6 days previous);—died Sept. 12 at 10 p.m.

No. 62.—F. 41, wife of porter, charwoman; lodging in Castle Street, St. Peter-le-Bailey (corner of Paradise Street, same house as No. 27); seized Sept. 9 at 1 a.m.; admitted into Cholera Hospital at 1 p.m.;—recovered.

No. 63.—M. 16, boatman; lived at Abingdon; passing through Oxford; seized Sept. 9 at 3 a.m. near Hythe Bridge, St. Thomas;—recovered.

No. 64.—M. 2, son of porter; No. 24, Bull Street, St. Ebbe (next door to Nos. 56, 66, and 127); seized Sept. 9 at 3 a.m. (had been in the next house the evening before);—died same day at 6 p.m.

No. 65.—M. 20, butcher's boy; Osney Lane, St. Thomas, near the Hamel; seized when at Cowley Sept. 9 at 7 or 8 p.m. (no previous diarrhoea);—recovered.

No. 66.—M. 32, policeman (son of No. 127, father of No. 56); No. 25, Bull Street, St. Ebbe (next door to No. 64); seized Sept. 10 at 7 a.m. (diarrhoea for 2 or 3 days previous; had helped to carry cholera patients);—recovered.

No. 67.—F. 22<sup>f</sup>, wife of stableman (No. 41); Arnold's Passage, St. Peter-le-Bailey; seized Sept. 10 at 5 a.m.; admitted into Cholera Hospital at 4 p.m.;—died same day at 8 p.m.

No. 68.—F. 20, daughter of No. 76 (sister of Nos. 47, 81); No. 11, Speedwell Street, St. Ebbe; seized Sept. 11 at 7 p.m. (had been ailing all day, but no previous diarrhoea);—died next morning at half-past 7 a.m.

No. 69.—M. 28, college servant; Sparkes' Yard, St. Aldate; seized Sept. 11 at 10 a.m. (under treatment for slight diarrhoea for 3 days previous);—recovered.

No. 70.—F. 58, wife of victualler; No. 43, Speedwell Street, (corner of Speedwell Terrace,) St. Ebbe; had been in-patient at Infirmary for ulcer of leg; made out-patient Aug. 1; seized Sept. 11 (diarrhoea for a few days previous);—died next day.

No. 71.—F. 8, daughter of hay-trusser (aunt of No. 61); Wyatt's Yard, St. Aldate; had been much with No. 61 during her illness; seized Sept. 12, early in the morning;—recovered.

No. 72.—F. 26, spinster, daughter of No. 85; living with a brother at No. 2, Speedwell Street, St. Ebbe; seized Sept. 12 (in delicate health for some time previous);—died same day after 12 hours' illness.

No. 73.—M. 34, brewer's man, last house in Cherwell Street, St. Clement; seized Sept. 12 at 6 p.m. (neglected diarrhoea for 5 days previous);—recovered.

No. 74.—F. 24, wife of railway-labourer; Sheppard's Row, St. Aldate; seized Sept. 13 at 5 a.m.; first seen by a doctor at half-past 2 p.m., when she was in a state of collapse; admitted into Cholera Hospital at half-past 3 p.m.;—died same day at half-past 9 p.m.

No. 75.—M. 20, convicted prisoner in County Gaol, where he had been for several months; seized Sept. 13 at 1 p.m. (diarrhoea for 1 or 2 days previous); ischuria for 72 hrs.;—recovered.

<sup>f</sup> Had refused to allow her husband to be taken to the Cholera Hospital, but nursed him at home herself.

No. 76.—F. 46, wife of tailor (mother of Nos. 47, 68, 81, and sister-in-law of No. 109); No. 11, Speedwell Street, St. Ebbe; seized Sept. 13 at 7 a.m. (diarrhœa the previous day); admitted into Cholera Hospital Sept. 15 at 3 p.m.; transferred to Convalescent Ward Sept. 19;—recovered.

No. 77.—M. 16, ostler; Speedwell Terrace, St. Ebbe; seized Sept. 14 at 3 p.m.;—recovered.

No. 78.—M. 46, retired wheelwright; No. 32, Speedwell Street, St. Ebbe (next door to No. 100); seized Sept. 14 at 8 a.m. (no previous diarrhœa);—did Sept. 21 at 4 a.m.

No. 79.—F. 60, widow of street-sweeper; Carter's Yard, St. Aldate (same house as No. 106); seized Sept. 14 at 1 p.m. (ailing for some time; her husband died of diarrhœa Sept. 13 after 14 days' illness);—died Sept. 17 at half-past 12 a.m.

No. 80.—M. 31, labourer (nephew of No. 49, brother-in-law of No. 143); No. 26, Friars Street, St. Ebbe; seized Sept. 15 at 2 a.m. (under treatment for diarrhœa for 2 days previous);—recovered.

No. 81.—M. 16, son of No. 76 (brother of Nos. 47 and 68); No. 11, Speedwell Street, St. Ebbe; seized Sept. 15 at 5 a.m. (diarrhœa 2 days before);—recovered.

No. 82.—M. 37, convicted prisoner in County Gaol, where he had been for 6 mths.; seized Sept. 15 at 4 a.m. (diarrhœa previous day); ischuria;—died comatose Sept. 18 at half-past 6 p.m.

No. 83.—F. 17, spinster, servant at No. 9, Speedwell Street, St. Ebbe; seized Sept. 15 at 5 a.m.; admitted into Cholera Hospital at 6 p.m.; transferred to Convalescent Ward Sept. 20;—recovered.

No. 84.—M. 10, son of No. 93 (brother of No. 90); Milbank, near Speedwell Street, St. Ebbe; seized Sept. 15 at 6 a.m. (diarrhœa the previous day); admitted into Cholera Hospital at 6 p.m.; transferred to Convalescent Ward Sept. 25;—recovered.

No. 85.—F. 61, wife of shoemaker; No. 2, St. Giles Road, St. Giles; mother of No. 72, whom she had attended during her illness, Sept. 12; she also visited the house on the two following days; quite well on Sept. 14; no previous diarrhœa; seized Sept. 15 about 5 a.m.; admitted into Cholera Hospital at half-past 9 a.m.;—died next day at half-past 8 a.m.

No. 86.—F. 27, wife of No. 53 (mother of No. 124); admitted into Workhouse from St. Mary Magdalene parish Aug. 11; seized Sept. 15;—recovered.

No. 87.—M. 18 months, son of No. 96; No. 3, Portland Place, St. Paul; seized Sept. 15 early in the morning;—died Sept. 17 about 11 a.m.

No. 88.—F. 33, charwoman; No. 34, Blackfriars Road, St. Ebbe; seized Sept. 15 at 4 p.m. (diarrhœa 5 days previous); admitted into Cholera Hospital at 9 p.m.; transferred to Convalescent Ward Sept. 20;—recovered.

No. 89.—F. 34, market-woman, spinster, very poor; Hitchcock's Row, Bath Street, St. Clement; seized Sept. 16 at 7 p.m. (diarrhœa the day before, without medical aid);—died next day at 1 a.m.

No. 90.—M. 13, son of No. 93 (brother of No. 84); Milbank, near Speedwell Street, St. Ebbe; seized Sept. 16 at 2 p.m. (diarrhœa for 2 or 3 days previous); admitted into Cholera Hospital at 7 p.m.; transferred to Convalescent Ward Sept. 25;—recovered.

No. 91<sup>g</sup>.—M. 4 mths., son of No. 35, Workhouse; seized Sept. 16;—died Sept. 20.

No. 92.—F. 44, wife of tailor; No. 9, Penson's Gardens, St. Ebbe; mother of No. 60, whom she attended during her illness; had diarrhœa about a week before; brought home ill Sept. 16, having been seized about 4 a.m.;—died Sept. 20 at 3 a.m.

No. 93.—F. 36, wife of machine-maker (daughter of No. 102, sister of Nos. 94, 99, mother of Nos. 84, 90); Milbank, near Speedwell Street, St. Ebbe; felt poorly Sept. 16 (no previous diarrhœa); worse at 11 p.m.;—died next morning at 11 a.m.

<sup>g</sup> Registered as "Diarrhœa," but reported as "Cholera" to the Local Board of Health.

No. 94.—M. 36, wheelwright (step-brother of Nos. 93, '99); lived in Friar's Wharf, St. Ebbe, but was working at Milbank, near Speedwell Street, St. Ebbe, where he assisted in laying out No. 93; seized Sept. 17 at 3 p.m.; admitted into Cholera Hospital at 4 p.m.;—died next day at half-past 11 a.m.

No. 95.—F. 25, spinster, servant; Friars Street, St. Ebbe (near the end, on right hand side); seized Sept. 17 at 2 p.m. (no previous diarrhœa); admitted into Cholera Hospital at half-past 4 p.m.; transferred to Convalescent Ward Sept. 23;—recovered.

No. 96.—F. 28, spinster, sempstress (mother of No. 87); No. 3, Portland Place, St. Paul; apparently in good health when her child died, Sept. 17, about 11 a.m.; seized about 4 p.m., after taking her tea as usual; admitted into Cholera Hospital about 9 p.m.;—died next morning about half-past 2 (?) a.m.

No. 97.—F. 12, daughter of washerwoman; Faulkner's Row, St. Peter-le-Bailey (next door to No. 54); seized Sept. 17 at 3 a.m. (ate pork and apple-pudding for dinner Sept. 16; felt poorly same evening); admitted into Cholera Hospital at 8 p.m.;—died Sept. 27 at half-past 12 a.m.

No. 98.—F. 10, daughter of (?); near Bridport Street, St. Ebbe; seized Sept. 17 at 4 p.m.;—recovered.

No. 99.—F. 26, spinster, laundress (daughter of No. 102, sister of Nos. 93, 94); Friars Street, St. Ebbe (near the end, on right hand side); had been staying at Milbank, helping to nurse the family, Nos. 84, 90, 93; seized Sept. 18 at 10 a.m.; admitted into Cholera Hospital at half-past 2 p.m.;—died same day at 10 p.m.

No. 100.—F. 28, wife of Chandler; No. 31, Speedwell Street, St. Ebbe (next door to No. 78); seized Sept. 18 at 4 p.m. (no previous diarrhœa);—died Sept. 26 at 1 p.m.

No. 101.—M. 16, convicted prisoner in County Gaol, where he had been for about 3 weeks; seized with symptoms of Cholera Sept. 18 at 3 p.m., after diarrhœa for about 6 hours; he himself attributed the attack to the smell of the evacuations of No. 82, who was in the next cell;—died next day at 7 a.m.

No. 102.—F. 62, laundress (mother of Nos. 93, 99); Friars Street, St. Ebbe (near the end, on right hand side); had been staying 3 or 4 days at Milbank, helping to nurse No. 93; and had also attended on Nos. 84, 90, and 99 at Cholera Hospital; seized Sept. 19 at 7 p.m.; admitted into Cholera Hospital Sept. 22 at 10 a.m.;—died same day at 3 p.m.

No. 103.—M. 28, convicted prisoner in County Gaol, where he had been for 2 mths.; seized Sept. 19 at 10 a.m. (under treatment for diarrhœa for 2 days previous);—recovered.

No. 104.—M. 41, convicted prisoner in County Gaol, where he had been for 2 mths.; seized Sept. 19 at 4 p.m. (under treatment for diarrhœa);—recovered. This man died in the Gaol afterwards of erysipelas of face, Oct. 9.

No. 105.—M. 31, convicted prisoner in County Gaol, where he had been for 4 days; seized Sept. 19 at 7 p.m. (under treatment for diarrhœa);—recovered.

No. 106.—F. 60, poor widow; Carter's Yard, St. Aldate; same house as No. 79, after whose death she was removed to the House of Refuge Sept. 18, apparently in good health; seized Sept. 19 at half-past 8 a.m.; admitted into Cholera Hospital at 10 a.m.;—died next day at 5 a.m.

No. 107.—F. 5, daughter of No. 115; Rose Court, St. Aldate (next door to No. 118); seized Sept. 19 at 5 a.m. (under treatment for diarrhœa for several days previous); admitted into Cholera Hospital at half-past 4 p.m.; transferred to Convalescent Ward Sept. 25;—recovered.

No. 108.—M. 25, convicted prisoner in County Gaol, where he had been for 4 mths.; seized Sept. 20 at 5 a.m. (under treatment for diarrhœa);—recovered.

No. 109.—F. 36, wife of (?) (sister-in-law of No. 76, mother-in-law of No. 111); lived in Bath Street, St. Clement, but had been staying for some days at No. 11, Speedwell Street, St. Ebbe, nursing the family; seized Sept. 20 at 8 a.m.;—recovered.

No. 110.—F. 28, spinster, charwoman; Gas Street, St. Ebbe; seized Sept. 21 at half-past 11 p.m.; admitted into Cholera Hospital next day at half-past 11 a.m.;—died Oct. 4 at 8 p.m.

No. 111.—F. 26, wife of shoemaker (daughter-in-law of No. 109, but had had no communication whatever with the family in Speedwell Street, as she was very much afraid of catching the disease); Caroline Street, St. Clement; seized Sept. 22 at 7 a.m., after having had diarrhoea during the night; admitted into Cholera Hospital at 9 a.m.; transferred to Convalescent Ward, Sept. 25;—recovered.

No. 112.—M. 4, son of labourer; No. 5, Blackfriars Road, St. Ebbe; seized Sept. 22 at half-past 12 a.m.; admitted into Cholera Hospital at half-past 7 a.m.;—died same day at half-past 9 a.m.

No. 113.—M. 24, convicted prisoner in County Gaol, where he had been for 4 days; seized Sept. 22 at half-past 9 a.m. (under treatment for diarrhoea about 24 hours);—recovered.

No. 114.—M. 49, tailor; Shoulder-of-Mutton Yard, St. Thomas; lived by himself; seen alive Sept. 21 in the morning; found dead next evening;—died apparently of Cholera.

No. 115.—M. 47, labourer (father of No. 107); Rose Court, St. Aldate (next door to No. 118); had been admitted into the Infirmary for abscess of the side, July 11; and had been dismissed cured, Sept. 19, on which day he visited his child at the Cholera Hospital; seized Sept. 23 at 3 a.m. (diarrhoea 2 days previous); admitted into Cholera Hospital at half-past 9 a.m.;—died Sept. 27 at half-past 9 p.m.

No. 116.—F. 33, wife of butcher; Holly-bush Row, St. Thomas; seized Sept. 23 at half-past 1 a.m.;—died Sept. 28 at 6 p.m.

No. 117.—M. 29, convicted prisoner in County Gaol, where he had been for 8 days; seized Sept. 23 at 2 p.m. (under treatment for diarrhoea for 4 days previous);—recovered.

No. 118.—F. 47, wife of labourer; Rose Court, St. Aldate (next door to Nos. 107 and 115); seized Sept. 24 at 2 a.m. (diarrhoea 2 or 3 days previous); admitted into Cholera Hospital at half-past 12 p.m.;—died Oct. 2 at 2 p.m.

No. 119.—M. 46, convicted prisoner in County Gaol, where he had been for 11 days; a tramp, of worn-out constitution; under treatment for diarrhoea Sept. 20; was to have left the prison Sept. 22, but remained at his own request; seized Sept. 24 at 3 p.m.;—died Sept. 27 at 8 p.m.

No. 120.—F. 49, married, laundress; Nelson Street, St. Paul; had been attending on a neighbour's family where there were several bad cases of Fever; seized (without previous diarrhoea) Sept. 25 at 3 a.m.; admitted into Cholera Hospital at 1 p.m.; convalescent Oct. 3;—recovered.

<sup>h</sup>No. 121.—F. 35, wife of stableman; Abbey Place, St. Ebbe; had a slight attack Sept. 1, and recovered (see No. 30); seized again Sept. 26 at 1 a.m.;—died same morning at 9 a.m.

No. 122.—F. 3, daughter of labourer; Bridport Street, St. Ebbe; seized Sept. 26 at 11 a.m.; admitted into Cholera Hospital at half-past 4 p.m.;—died same day at half-past 7 p.m.

No. 123.—F. 66, Workhouse; seized Sept. 26 (?); admitted into Cholera Hospital Sept. 27 at half-past 12 a.m.;—died same day at 3 p.m.

<sup>h</sup> The particulars of the remaining cases are believed to be correct, but, in consequence of the loss of some papers, they are not quite so trustworthy as the preceding.

No. 124.—M. 1, son of Nos. 53, 86; admitted into Workhouse from St. Mary Magdalene parish, Aug. 11; seized Sept. 26;—died Sept. 29.

No. 125.—F. 23, spinster, servant; Nelson Street, St. Paul; seized Sept. 27 at half-past 7 a.m.; admitted into Cholera Hospital at half-past 2 p.m.;—recovered.

No. 126.—F. 10, daughter of labourer; Faulkner's Row, St. Thomas; seized Sept. 29 at half-past 12 a.m.;—recovered.

No. 127.—M. 63, formerly schoolmaster (father of No. 66); No. 25, Bull Street, St. Ebbe (next door to No. 64); seized Sept. 30 at 1 a.m.; admitted into Cholera Hospital at 1 p.m.;—recovered.

No. 128.—F. 15, prisoner in County Gaol, where she had been for 11 days; (the only female attacked in County Gaol;) seized Oct. 1 at 6 a.m.; ischuria, 70 hours;—recovered.

No. 129.—M. 67, turnkey at County Gaol, of broken-down constitution; seized Oct. 1 at 9 p.m.;—died Oct. 4 at half-past 2 p.m.

No. 130.—F. 35, widow, charwoman; Nunney's Buildings, George Street, St. Mary Magdalene; seized Oct. 2 at 8 p.m. (previous diarrhoea neglected?); admitted into Cholera Hospital Oct. 3 at 8 a.m.;—died same day at half-past 7 p.m.

No. 131.—F. 2, daughter of painter; Fisher Row, St. Thomas; seized Oct. 3 at 4 a.m.;—recovered.

No. 132.—F. 3, daughter of tailor; Friars Street, St. Ebbe; seized Oct. 3 at 5 a.m.;—recovered.

No. 133.—M. 17, groom; Figg's Livery Stables, St. Aldate Street, St. Aldate; seized Oct. 4 at half-past 8 a.m.; admitted into Cholera Hospital at half-past 11 a.m.;—died same evening at half-past 6.

No. 134.—M. 70, builder; corner of Orchard Street, (formerly Littlegate Street,) St. Ebbe; seized Oct. 4 at half-past 6 p.m.;—recovered.

No. 135.—M. 8, son of stonemason; Friars Street, St. Ebbe (same house as No. 138); seized Oct. 5 at 9 a.m.; admitted into Cholera Hospital at half-past 4 p.m.;—died Oct. 7 at 3 a.m.

No. 136.—F. 18 mths., daughter of general dealer; St. Ebbe Street, St. Peter-le-Bailey; seized Oct. 5 at 8 a.m.;—died same day at 6 p.m.

No. 137.—M. 31, gardener; Blackfriars Road, St. Ebbe; seized Oct. 5 at 3 p.m.;—recovered.

No. 138.—F. 35, laundress; Friars Street, St. Ebbe (same house as No. 135); seized Oct. 8 at 3 a.m.;—died Oct. 14.

No. 139.—F. 12, strolling musician; lodging in Hamel, corner of Osney Lane, St. Thomas (same house as No. 29); seized Oct. 9 at 8 p.m.;—recovered.

No. 140.—M. 5, son of carpenter (No. 143); Eyles' Buildings, Blackfriars Road, St. Ebbe; seized Oct. 12 at 3 p.m.; admitted into Cholera Hospital at half-past 4 p.m.;—recovered.

No. 141.—M. 3, brother of No. 142; Penson's Gardens, St. Ebbe; seized Oct. 13;—recovered.

No. 142.—M. 11 mths., brother of No. 141; Penson's Gardens, St. Ebbe; seized Oct. 13;—recovered.

No. 143.—M. 37, carpenter (father of No. 140, brother-in-law of No. 80); Eyles' Buildings, Blackfriars Road, St. Ebbe; seized Oct. 18 at 4 p.m.;—died Oct. 21 at 5 p.m.

No. 144.—M. 7, son of groom; Eyles' Buildings, Blackfriars Road, St. Ebbe; seized Oct. 28 at 11 p.m.;—recovered<sup>i</sup>.

<sup>i</sup> To those who may wish to trace the progress of the disease in particular localities the following classification

The above is a list of all the cases officially reported as Cholera to the Local Board of Health. As medical practitioners are not agreed as to the possibility or even the correctness of distinguishing in every case a slight attack of Cholera from a severe attack of Diarrhœa, (besides that in a time of pestilence different individuals are tempted, in some instances perhaps unconsciously, either to exaggerate or understate the amount of the calamity,) it is probable that if all these cases had been reported by the same person the returns would have been somewhat different. Still it is believed that the above List is upon the whole a fair and correct one, an incidental proof of which may be found in its striking similarity in all important points with the List of Cases in Oxford in 1832<sup>k</sup>. It may be added that both lists exhibit internal marks of genuineness in the high rate of mortality which they disclose.

Before examining these cases in detail it will be well to consider the total number, as compared with the deaths in other places, and in Oxford in 1832: both these comparisons will furnish the inhabitants of Oxford with sufficient cause for thankfulness, and shew them that in 1849 they were mercifully dealt with. The epidemic in Oxford in '49 was less terrible than in '32, whether we consider its duration, the total number of cases and deaths, or the severity with which particular localities were attacked. In '32 it lasted (with two intervals,) from the last week in June to the third week in Nov., viz.

of the above cases may be useful. It gives a reference to the cases that occurred in each parish, (though a few might perhaps with equal propriety be arranged differently,) marking with an asterisk \* those which ended fatally:—

- St. Giles.—Nos. 4, 5, 11\*, 34\*, 85\*.
- St. Paul.—Nos. 24\*, 87\*, 96\*, 120, 125.
- St. Thomas.—Nos. 2\*, 7, 9\*, 12\*, 14\*, 17, 18, 19, 21\*, 22, 23\*, 29\*, 31, 32, 37\*, 39, 50, 63, 65, 114\*, 116\*, 126, 131, 139.
- All Saints.—No. 16\*.
- St. Mary Magdalene.—Nos. 52, 130\*.
- St. Peter-le-Bailey.—Nos. 3, 15\*, 27, 28\*, 33, 36, 41, 42\*, 54, 55, 57, 62, 67\*, 97\*, 136\*.
- St. Clement.—Nos. 73, 89\*, 111.
- St. Aldate.—Nos. 45\*, 51\*, 59\*, 60\*, 61\*, 69, 71, 74\*, 79\*, 106\*, 107, 115\*, 118\*, 133\*.

- St. Ebbe (Speedwell Street, and neighbourhood).—Nos. 43\*, 47\*, 68\*, 70\*, 72\*, 76, 77, 78\*, 81, 83, 84, 90, 93\*, 94\*, 98, 99\*, 100\*, 102\*, 109, 122\*.
- (Friars Street, and neighbourhood).—Nos. 13\*, 20, 30, 44, 48\*, 49, 56\*, 58\*, 64\*, 66, 80, 88, 95, 110\*, 112\*, 121\*, 127, 132, 135\*, 137, 138\*, 140, 143\*, 144.
- (Paradise Street, and neighbourhood).—Nos. 8\*, 10\*, 26\*, 38\*, 40\*, 46\*, 92\*, 134, 141, 142.
- Workhouse.—Nos. 25\*, 35, 53, 86, 91\*, 123\*, 124\*.
- County Gaol.—Nos. 1\*, 6, 75, 82\*, 101\*, 103, 104, 105, 108, 113, 117, 119\*, 128, 129\*.

The following summary account of the mortality in Oxford is extracted from the Registrar-General's Report on Cholera (p. 239);—the words inserted between brackets [ ] are added by the present Writer:—  
 "OXFORD [DISTRICT]. Population 19,796 [(or rather 19,667) in 1841; 20,172 in 1851].—[Deaths from] Cholera, 44; Diarrhœa, 22.—(This is only a part of the City of Oxford; the rest of the City is in Headington [District]. The first death from Cholera occurred [Aug. 13th, in the County Gaol; the second] Aug. 14th, at Orpwood's Row, in a spinster, aged 20; 7 [fatal] cases occurred in Speedwell Street [and Milbank, to which number should be added 3 persons who were removed from these localities to the Cholera Hospital, and died there]. Four [deaths occurred] in Paradise Street, 2 in High Street, [St. Thomas,] and 2 in St. Aldate Street, [to which number should be added one person who was removed from this locality to the Cholera Hospital, and died there.] There were also 5 [fatal] cases in the County Gaol. It prevailed most in the month of Sept.; the last [fatal] case occurred Oct. 21st in [Eyles' Buildings,] Blackfriars Road, in a carpenter, aged 37, after an attack of two days. Diarrhœa was very prevalent during September.

"HEADINGTON [DISTRICT]; St. Clement [Sub-District]. Population 10,499 [(or rather 10,628) in 1841; 12,150 in 1851].—Cholera, 31; Diarrhœa, 14.—(This is a part of the City of Oxford, [together with several neighbouring villages].) Of the deaths from Cholera, 25 took place in the Cholera Hospital, situate in the parish of St. Giles; the first having occurred there on [Aug 21st, in a labourer, aged 48; the second on] Aug. 26th, in a tramp (male), aged 39, 10 hours after attack. A tailor's son, aged 1, died of Cholera, in the Workhouse, [two persons were removed to the Cholera Hospital, and died there; and an infant died in the Workhouse, of Cholera, according to the reports made to the Local Board of Health, of Diarrhœa, according to the Register of Deaths.] A few [fatal] cases [of Diarrhœa] occurred in High Street, [and of Cholera in] Bath Street [or rather Hitchcock's Row], St. Giles's [Road], and [Best's Yard,] St. John's Road. The last death took place in the Hospital, Oct. 7th; it was a stonemason's son, aged 8. The epidemic attained its greatest height in September. Four [fatal] cases of Diarrhœa occurred in the [Oxford and Headington] Workhouse[s]; 2 were children, and 2 aged."

k Mr. Thomas, in his valuable and interesting Memorials of the Malignant Cholera in Oxford, 1832, does not notice the cases that occurred in the parish of St. Giles, (comprising at that time part of St. Paul's,) as that parish "thought it more expedient to have a distinct and separate Board" of Health (p. 6). A list has been compiled from the records of both Boards, which is deposited with the papers relating to these Reports, and which is the list referred to in the following pages.

about 22 weeks; in '49 it lasted only about 12 weeks, viz. from the third week in August to the end of October. Again, in '32 about 8 persons out of every 1000 were attacked, of which number rather more than half died; in '49 only about 5 persons per 1000 were attacked, the relative mortality being a trifle higher. Lastly, in '32 in one parish more than 40 persons out of every 1000 were attacked, and nearly 15 per 1000 in another; while in '49 not 12 persons in 1000 were attacked even in those parishes which suffered most severely.

If we compare the mortality in Oxford with that of the rest of England the result is partly satisfactory, partly not so. Throughout all England, taking one part with another, 3 persons out of every 1000 died of Cholera in '49; in 415 inland Districts, where the Cholera was less fatal than on the coast, the deaths were 1.7 per 1000. In Oxford the proportion was 2.83: and while many towns suffered less than Oxford, it would be easy to name many that suffered infinitely more<sup>l</sup>.

The influence of sex on the mortality from Cholera appears to have been slight altogether, and not uniform in all places: throughout all England the mortality was a shade less among females (3.00 per 1000) than among males (3.02 per 1000)<sup>m</sup>. In Oxford in '32 the male part of the population suffered more severely than the female; in '49 the reverse was the case: taking both years together the two sexes suffered about equally<sup>n</sup>.

Age appeared to exert an important influence both on the number of attacks and the proportion of fatal cases. The table on the following page shews that (with some slight difference in the two sexes,) of persons who were attacked between the ages of 10 and 45, the greater part recovered; and that under the age of 10, and above the age of 45,

l The following names are selected from those in the Registrar-General's Report on Cholera, p. cxxx, &c. :—

	Deaths per 1000		Deaths per 1000		Deaths per 1000
Bristol . . . . .	9.0	Plymouth . . . . .	16.7	Coventry . . . . .	6.5
Clifton . . . . .	7.5	Salisbury . . . . .	18.5	Durham . . . . .	5.0
Hull . . . . .	24.1	Southampton . . . . .	7.4	Gloucester . . . . .	4.4
Leeds . . . . .	14.5	Tynemouth . . . . .	12.9	Henley . . . . .	.2
Liverpool . . . . .	16.7	Aylesbury . . . . .	.9	Northampton . . . . .	1.7
London . . . . .	6.2	Birmingham . . . . .	.2	Reading . . . . .	.9
Manchester . . . . .	4.0	Cambridge . . . . .	.2	Warwick . . . . .	.5
Merthyr Tydfil . . . . .	23.4	Canterbury . . . . .	2.5	Worcester . . . . .	1.6

In the above calculations the Census of 1851 was used for the first 12 names; that of 1841 for the last 12.

m Registrar General's Report, p. xxxix; Mr. Grainger's Report, p. 20.

n Number of Cases and Deaths in Oxford to 1000 living persons, both males and females, in '32 and '49:—

	1832.					1849.				
	Population 1831	Cholera Cases	Cases per 1000	Cholera Deaths	Deaths per 1000	Population 1851	Cholera Cases	Cases per 1000	Cholera Deaths	Deaths per 1000
Males . . . . .	11,211?	101	9.01	56	5.00	12,920?	73	5.65	34	2.63
Females . . . . .	10,824?	81	7.49	37	3.42	13,560?	71	5.24	41	3.02
Unknown . . . . .	...	2	...	2	...	...	...	...	...	...
Total . . . . .	22,035	184	8.35	95	4.31	26,480	144	5.44	75	2.83

Proportion of Deaths to Cases in Oxford in males and females:—

	1832. Per cent.	1849. Per cent.	BOTH YEARS Per cent.
Males . . . . .	55.46	46.58	51.72
Females . . . . .	45.67	57.75	51.33

Cases, Deaths, and Recoveries, with the respective Sex and Age.

1832.

Ages . . . .	0 to 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		ALL AGES.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Deaths . .	11	3	6	3	2	1	5	6	6	10	16	3	2	10	2	5	4	8	1	3	3	56	35	91
Recoveries	5	3	9	1	2	4	6	6	6	13	19	4	8	3	5	5	1	3	1	1	2	42	44	86
Cases . . .	16	6	15	4	4	5	11	12	12	23	35	7	10	13	7	10	4	14	9	4	5	98	79	*177

1849†.

Ages . . . .	0 to 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		ALL AGES.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Deaths . .	5	4	7	2	1	3	4	6	1	8	9	7	5	6	3	1	2	1	2	1	1	34	41	75
Recoveries	3	2	2	2	5	4	10	3	11	11	22	3	4	1	2	3	2	1	1	1	1	39	30	69
Cases . . .	8	6	9	4	6	7	14	9	12	19	31	10	9	7	5	4	10	14	3	1	2	73	71	144

BOTH YEARS.

Ages . . . .	0 to 5		5 to 10		10 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		ALL AGES.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
Deaths . .	16	7	13	5	3	4	7	9	7	18	25	10	7	16	5	6	12	10	10	4	4	90	76	166
Recoveries	8	5	11	3	7	8	15	9	17	24	41	7	12	4	7	8	2	3	2	1	2	81	74	155
Cases . . .	24	12	24	8	10	12	22	18	24	42	66	17	19	20	12	14	14	17	12	5	6	171	150	*321

\* Omitting 7 cases in '32, age unknown.

† Taken from a Table by Mr. Allen in Proceedings of Ashmolean Society.

Influence of Age,—Occupation,—Locality.

the greater number of cases ended fatally. The table at the bottom of the page<sup>o</sup> is intended to shew the proportion of persons attacked in Oxford at different ages, but the result must be received only as an approximation to the truth. So far as it can be depended on, it shews that the *smallest* proportion of attacks took place among persons *under* 25 years of age, especially between 15 and 25 years; and the *largest* among persons *above* that age, especially between 25 and 35 years. This result agrees in the main with the statement in the Registrar-General's Report (p. xlii), "that men of the age of 25-35 are in a cholera epidemic twice as likely to die as men ten years younger (15-25); and that from this period the danger increases with age."

The influence of mere occupation did not appear to be great, but that of wealth and poverty was undoubtedly very considerable, and in Oxford, as elsewhere, the chief sufferers were the poor. In '32, out of 174 persons attacked whose condition of life was known, 140 "were under such circumstances that they might claim parish relief" (*Memorials, &c.* p. 22), and the remainder (in St. Giles' parish,) evidently belonged to the class of small tradesmen or mechanics<sup>p</sup>. In '49 out of 144 persons that were attacked, 122 were considered proper objects of relief by the local Board of Health. Nor will this be wondered at, when it is remembered that the poor are not only habitually exposed to most of the predisposing causes of Cholera in a much greater degree than the rich, but are also much less able to remove from them when the epidemic makes its appearance. An examination of the localities where the different cases of Cholera occurred will illustrate this.

Upon the whole it may be stated generally, that, with some few exceptions, the course taken by the Cholera both in '32 and '49 was pretty nearly such as might have been expected; sparing those parts of the city which are generally considered the most healthy, and attacking most severely those where the greatest mortality ordinarily takes place. Very few cases of Cholera occurred in any of the principal streets<sup>q</sup> either in '32 or '49. Again, in St. Giles' parish, and in all the central parishes (except St. Peter-le-

<sup>o</sup> In the following table it is assumed that the population of Oxford during the Long Vacation does not differ materially from the rest of England, there being of course during term time an unusually large proportion of males between the ages of 15-25. Accordingly the calculations are based upon the ages enumerated in p. 176 of the Appendix to Ninth Annual Report of the Registrar-General:—

AGE.	Number of persons living in England in thousands	Number per cent. of total population	Number of Cholera Cases in Oxford	Proportion per cent. of total Cases
0-5 . . . .	2107	13.22	36	11.21
5-10 . . . .	1905	11.96	32	9.97
10-15 . . . .	1733	10.87	22	6.85
15-25 . . . .	3142	19.72	46	14.33
25-35 . . . .	2454	15.40	66	20.56
35-45 . . . .	1775	11.14	36	11.21
45-55 . . . .	1274	8.00	32	9.97
55-65 . . . .	832	5.22	28	8.72
65-75 . . . .	484	3.04	17	5.30
75-85 . . . .	191	1.20	6	1.87
85 & over	32	.20	..	..

<sup>p</sup> If we may judge from the houses where they lived, viz. Plantation Road, Pauling's Yard, &c.

<sup>q</sup> Viz. St. Giles' Street, (from St. Giles' Church,) Cornmarket Street, the upper part of St. Aldate Street, Beaumont Street, St. John Street, Broad Street, Holywell Street, and High Street.

The following statement made by the late Dr. Kidd relative to the localities attacked in '49 is in the main correct:—  
 "Dividing the whole City into two parts, an eastern and a western, by a line of houses nearly a mile in length, which is continued from the Radcliffe Observatory on the north, to the bridge called Folly Bridge on the south,

DISTRICTS.	1832.					1849.				
	Recover.	Deaths	Cases	Popula- tion '31.	Cases per 1000	Recover.	Deaths	Cases	Popula- tion '51.	Cases per 1000
<b>NORTH.</b>										
St. Giles.....	1	4	5	1736?	2.88	2	3	5	2438	2.05
St. Paul.....	15	11	26	1750?	14.86	2	3	5	2634	1.90
	16	15	31	3486?	8.29	4	6	10	5072	1.97
<b>WEST.</b>										
St. Thomas.....	6	8	14	1700?	8.24	14	10	24	2090	11.48
<b>CENTRAL.</b>										
All Saints.....	2	..	2	560	3.57	..	1	1	559	1.79
Holywell.....	..	1	1	944	1.06	..	..	..	901	..
St. John.....	..	..	..	122	..	..	..	..	107	..
St. Martin.....	1	1	2	490	4.08	..	..	..	449	..
St. Mary Magdalene	3	2	5	2410?	2.08	1	1	2	2449	0.82
St. Mary the Virgin	..	..	..	419	..	..	..	..	391	..
St. Michael.....	..	..	..	971	..	..	..	..	1022	..
St. Peter-le-Bailey..	1	1	2	1236	1.62	9	6	15	1315	11.41
St. Peter-in-East..	2	2	4	1126	3.55	..	..	..	1144	..
	9	7	16	8278?	1.93	10	8	18	8337	2.16
<b>EAST.</b>										
St. Clement.....	38	36	74	1836	40.30	2	1	3	2269	1.32
<b>SOUTH.</b>										
St. Aldate.....	5	8	13	1452	8.95	3	11	14	2131	6.57
St. Ebbe.....	15	16	31	3123	9.93	24	30	54	4656	11.60
	20	24	44	4575	9.62	27	41	68	6787	10.02
<b>EXTRA-PAROCH.</b>										
Colleges and Halls	..	..	..	1634	..	..	..	..	1251	..
Infirmery.....	..	..	..	145	..	..	..	..	150	..
Workhouse.....	?	?	?	219	?	3	4	7	291	24.05
Gaols.....	..	3	3	162?	18.52	9	5	14	233	60.08
	..	3	3	2160?	1.39	12	9	21	1925	10.91
<b>NORTH</b> .....	16	15	31	3486?	8.29	4	6	10	5072	1.97
<b>WEST</b> .....	6	8	14	1700?	8.24	14	10	24	2090	11.48
<b>CENTRAL</b> .....	9	7	16	8278?	1.93	10	8	18	8337	2.16
<b>EAST</b> .....	38	36	74	1836	40.30	2	1	3	2269	1.32
<b>SOUTH</b> .....	20	24	44	4575	9.62	27	41	68	6787	10.02
<b>EXTRA-PAROCH.</b> ..	..	3	3	2160?	1.39	12	9	21	1925	10.91
<b>UNKNOWN</b> .....	..	2	2	....	..	..	..	..	....	..
<b>Total</b> ....	89	95	184	22,035	8.35	69	75	144	26,480	5.44

NORTHERN PARISHES.		'32	'49	SOUTHERN PARISHES.		'32	'49
<i>St. Giles.</i>				<i>St. Aldate.</i>			
Best's Yard.....	..	2		Alms-houses.....	1	..	
Blenheim Place.....	..	1		Carter's Yard.....	2	2	
Pauling's Yard.....	1	..		Opposite Church....	1	..	
Plantation Road....	3	..		Penny-farthing Street	1	..	
St. Giles' Road.....	..	2		Pipemaker's Yard....	1	..	
Unknown.....	1	..		Rose Court.....	..	3	
<i>St. Paul.</i>				<i>St. Peter-le-Bailey.</i>			
Jericho Gardens....	22	..		Alder's Yard.....	..	2	
Nelson Street.....	..	2		Arnold's Passage....	..	2	
Portland Place.....	..	2		Castle Street.....	..	5	
Union Street.....	..	1		Faulkner's Row.....	..	5	
Near University Press	1	..		Queen Street.....	1	..	
Near Walton Terrace	3	..		St. Ebbe Street.....	1	1	
<b>Total</b> .....	31	10		<i>St. Peter-in-East.</i>			
<b>WESTERN PARISH.</b>				<i>St. Clement.</i>			
<i>St. Thomas.</i>				Bath Street.....	6	..	
Billings Row.....	..	1		Caroline Street.....	26	1	
Blay's Yard.....	..	1		Cherwell (Brewery) St.	6	1	
Faulkner's Row.....	..	1		Opposite old Church..	1	..	
Fisher Row.....	1	1		Near Cowley House..	1	..	
Hamel.....	2	2		Cowley Road.....	5	..	
High Street.....	1	7		George Street.....	4	..	
Holly-Bush Row....	..	1		George's Yard.....	7	..	
Near Hythe Bridge..	..	2		High Street.....	13	..	
Orpwood's Row.....	2	4		Hitchcock's Row....	..	1	
Osney Lane.....	3	1		London Place.....	2	..	
Payne's Yard.....	..	1		New Street.....	2	..	
Should.-of-Mutton Yd.	1	1		Workhouse (?).....	1	..	
Vaughan's Yard.....	..	1					
Unknown.....	4	..		<b>Total</b> .....	74	3	
<b>Total</b> .....	14	24		<b>EXTRA-PAROCHIAL.</b>			
<b>CENTRAL PARISHES.</b>				<i>All Saints.</i>			
<i>All Saints.</i>				Amsterdam Court....	..	1	
High Street.....	1	..		High Street.....	1	..	
Unknown.....	1	..		London Place.....	2	..	
<i>Holywell.</i>				New Street.....	2	..	
Holywell Street.....	1	..		Workhouse (?).....	1	..	
<b>Carried over</b> ....	3	1		<b>Total</b> .....	3?	21	
<b>Total</b> .....		74	3	<b>UNKNOWN</b> .....		2	..

Bailey<sup>r</sup>), the mortality is low, and in all these the cases of Cholera both in '32 and in '49 were very few. In the parishes of St. Paul and St. Clement the ordinary mortality is not high (*for Oxford*), and these also were almost passed over by the Cholera in '49, though (what is worth notice,) these were the very two parishes that suffered most se-

only one [fatal?] case of Cholera occurred on the east of that line; all the other [fatal?] cases, amounting to about 70, occurring on the west. The value of this fact is greatly enhanced by the observation that the western side of the line above described is generally a swampy soil, with scarcely any fall for drainage, and is inhabited by a population least attentive either to domestic cleanliness or personal temperance; while the eastern side has as great a proportion of physical and moral advantages as are usually observable under such circumstances. . . . The western part is on clay, and is traversed by the minor streams and subdivisions of the Isis, into which the cesspools and privies are emptied; these streams are not always in a flowing state, but are sometimes dammed up by large collections of offensive matter." (Dr. Baly's Report, pp. 19, 242.)

<sup>r</sup> No account is here taken of St. John's parish, the total population being only about 100.

verely in '32. On the other hand, two of the parishes where the ordinary mortality is highest are St. Thomas, and (the lower parts of) St. Aldate; and these are two of the parishes that were most severely visited by the Cholera both in '32 and in '49. Again, it must be noticed that St. Peter-le-Bailey escaped almost entirely in '32, but suffered severely in '49, and this is the parish in which (next to St. Thomas,) the ordinary mortality is highest. Lastly, in the *whole* parish of St. Ebbe the ordinary mortality (compared with the whole of Oxford,) is not high; and yet this parish was severely visited by Cholera on both occasions. Some of these anomalies admit of an easy and satisfactory explanation, and probably all of them are more apparent than real, though it would take up too much space to examine each in detail, nor is it necessary to endeavour to find out any special cause, either local or personal, to account for each individual case. It will be sufficient to mention the prominent facts relating to some of the localities chiefly visited.

In Jericho Gardens, St. Paul, there were in 1832 no less than twenty-two cases of Cholera; in 1849 there was not one, though the neighbourhood is by no means in a satisfactory condition. The only apparent cause for this difference is contained in a letter from Mr. Wood, in which he says that the place "has changed owners since '32, and that the present landlord has weeded out all the disreputable persons who formerly congregated there."

With respect to the parish of St. Peter-le-Bailey there does not at first sight seem to be any particular reason why the Cholera should visit Castle Street and its courts so much more severely in '49 than in '32. Perhaps, however, when we consider the importance of a copious supply of wholesome water, we shall be justified in attributing the attack in '49 in some degree at least to the sudden failure of the wells in this part of the city in the summer and autumn of that year. At any rate the passages quoted below are worthy of attention<sup>t</sup>, though their value with reference to Cholera will be differently estimated by different individuals. Another point connected with this parish is the state of the Castle Ditch, which from the subjoined evidence appears to

<sup>s</sup> Mr. Wood goes on to say:—"The Cholera was taken there in '32 by a man living there who stole some clothes from the bed of his mother, a woman named Sarah C., who died of the Cholera in Christ Church Almshouses; and from his home it spread through the neighbourhood,—one of the clearest instances of the communicability of Cholera, and there were many others in '32."

<sup>t</sup> Extract from Dr. Harington's evidence: . . . . . "between 30 and 40 wells in the parishes of St. Peter-le-Bailey and St. Ebbe, which had been deprived of their water in cutting through the bed of gravel from which their supply was obtained." (p. 5.) "The water of nearly all the wells in the vicinity [of the County property] rapidly disappeared." (p. 6.)

Mr. Hoggar said, "We drained the wells, after 2 or 3 weeks, for 1000 feet from us. . . . . I think we drew some millions of gallons away." (p. 17.)

Mr. Brockliss said, [The wells were affected] "as far up as the Cross Keys in Queen Street." (p. 24.)

Mr. Taylor said, . . . . . "not to deprive the neighbourhood of the water from the wells, having seen and experienced the baneful effects of such a measure in the neighbourhood in which I reside, caused by the construction of the Jericho drain. I consider that owing to this cause the place is much less healthy than it was before, and consequently less valuable. I have myself a supply of water now, but it is of a very inferior quality to that I had before . . . . . and I consider that owing to the use of that water the inmates of my house, either children or servants, are not so healthy as before. . . . . it is not far from the Castle Ditch." (p. 8.)

In the *Letters on the Sanitary Condition of Oxford* it is stated "that the chief evils affecting the sanitary condition of the parish of St. Peter-le-Bailey consist, first, in the neglect of the proprietors of houses to lay down culverts or sewers to join the main drain, and second, in the almost total deprivation of water for domestic purposes to which the inhabitants have recently been subjected through the operation of the Jericho drainage. . . . . In Faulkner's Row there is a most obvious want of attention to drainage and general cleanliness. All the inhabitants of the yards on this side of Castle Street, as well as on the opposite side, complained loudly of the withdrawal of the water by the Jericho drain." (p. 75, where there is much more on the same subject.)

See also Mr. Rowell's evidence, p. 40, and his Letter to the Chairman of the Commissioners "On the Effects of Oxford Spring Water on Health."

It will be readily understood that the Writer in making these extracts is not expressing or implying any opinion of his own as to the general merits of the Jericho drainage, (which is a subject on which he is not called upon to form a judgment, even if he were capable of doing so,) but simply stating its effects on the water supply of the neighbourhood of Castle Street.

have been very offensive in the summer of '49<sup>u</sup>. Probably these two evils, added to the generally dirty state of some of the yards, will be considered a sufficient reason why the parish of St. Peter-le-Bailey, and especially the neighbourhood of Castle Street, though it was spared by the Cholera in '32, should be so severely visited in '49.

The County Gaol is closely connected geographically with the parish of St. Peter-le-Bailey, and here too the Cholera visitation was much more severe in '49 than in '32. Here also the same two evil influences appear to have been (in some degree at least,) at work, which will probably be thought deserving of some attention<sup>x</sup>, though no notice is taken of them in Dr. Baly's Cholera Report, nor in the papers published in the Prisons Report<sup>y</sup>, relative to the outbreak of Cholera in the County Gaol. From these papers the following particulars are extracted. On the 13th of Aug. at 5 a. m. the first case occurred in the Castle (which was also the first in Oxford,) in the person of a male prisoner, aged 40, who had been confined four months and a half, and was on the full diet of the prison:—he died the same evening. The next case occurred in the night between Aug. 20th and 21st, when one of the turnkeys was attacked:—this man recovered. During the past week there had been no great amount of diarrhoea in the prison, and the inmates in general were in a better state of health than usual up to the beginning of Sept., when diarrhoea began to prevail. On Sept. 13th and 15th two more male prisoners were attacked, one of whom recovered, the other died. From this time diarrhoea began to increase until it spread gradually through the prison. On the

<sup>u</sup> In the following extracts the words between brackets [ ] are inserted by the present Writer.

Mr. Rogers, after giving a description of the Ditch (p. 10), goes on to say, "The first case [of Cholera] that broke out was during the progress of the Jericho drainage, when they touched upon this mud, the filling up of the old ditch, where the mud was 20 feet deep. At the Anti-Mendicity Society's premises in Castle Street, closely adjoining this spot, a poor woman was taken in during the month of August, and she was seized with Cholera; she was cured of the Cholera, but died of exhaustion in 7 days afterwards. The poor woman slept in a house within 6 feet of this accumulation of mud. [See above, p. 17.] On the 18th of Aug., 1849, a stench broke out while they were cutting through the mud, and it was of so fearful a character that my doctor recommended me to send my family away, as they had suffered in 1848 from scarlet fever. The atmosphere was so bad that we could scarcely breathe, as they were drawing up tons of this mud. It was a day or two after this that the Cholera broke out in the Prison; it was the day after the stench, about the 19th. On the 20th, Pulker, one of the turnkeys, [see List of Cholera Cases, No. 6.] was taken ill. On the same morning Brewster, one of the labourers [No. 8], was taken ill; I had him removed out of the drain, and he died the same afternoon. Pulker did not die, but was very ill; another of the turnkeys died, [Oct. 4. No. 129.] On the 31st of Aug. Mrs. King [No. 28], who lived at the end of the Anti-Mendicity Society's premises, died—a desperate case of Cholera. On the 3rd of Sept. a person [No. 40] died of Cholera at the bottom of Castle Street. I removed my family in consequence of the dreadful stench which I have mentioned, and I kept up a constant fumigation of the place. The Clerk of the Peace, whose offices adjoin my house, was much alarmed. I remained on the spot only because my duty compelled me. The excavation was examined by the medical men late one night, and they ordered a large quantity of lime to be thrown in." See also the evidence of Mr. Cobb, p. 23.

<sup>x</sup> Besides some of the extracts already quoted (p. 34), the following passages relate to the failure of the wells in the County Gaol:—

Dr. Harington says (p. 11), "The Castle wells were affected by the Jericho drainage."

Extract from the Journal kept by Capt. Robins (p. 38):—"1848, Dec. 21. The pump in No. 1 yard fails to give water. . . . 1849, March 7. The City Surveyor (Mr. Selby) had a part of the City Ditch emptied to-night.—March 28. There is a little return of water to No. 1 yard pump.—Apr. 26. The water has returned to No. 1 yard pump, and also to the Watchman's pump.—July 20. The pump at the Outer Lodge became dry.—July 25. Water partially returned to Outer Lodge pump.—Aug. 3. No water in the Outer Lodge pump.—Aug. 13. The first death in the Prison from Cholera.—Aug. 30. Repaired the box of the pump, Outer Lodge, after which it delivered water freely."—Several other remarks about the water appear in the Journal up to Nov. 13, 1850, and then it is stated that "Since the last dates the supplies have varied, sometimes more water and sometimes less."

See also Mr. Rowell's evidence, p. 41, and his Letter to the Chairman of the Commissioners.

With respect to the Castle Ditch Dr. Harington says (p. 10), "In consequence of the unsoundness of the ground it was found necessary to sink, and to take down the boundary wall which was close upon the ditch."

Mr. Taylor says (p. 8), "The smell from that ditch is very bad. The Cholera broke out in Oxford on one day, as it might be, and I wrote to Mr. Tawney, and said, that, if the smell continued, it must bring the Cholera to our neighbourhood. I dispatched my note to him on Monday, and on Tuesday or Wednesday morning the Cholera broke out in the County Gaol. It was a sultry night, and the smell was most offensive." [The man in the County Gaol must have been dying of Cholera at the very time Mr. Taylor was writing his note.]

<sup>y</sup> See *Fifteenth Report of Inspectors of Prisons for the Home District*, 1850. p. 43, &c.



18th another case occurred in a prisoner who died in 18 hours from the first symptoms of diarrhœa:—he was the only patient who attempted to assign a cause for the attack, which he attributed to the smell of the motions of a prisoner in the next cell who died of Cholera.

After this date large alterations both in the diet and discipline of the prison were made. Liberal allowances of wine and brandy were served to the officers, a good solid diet with beer allowed to the prisoners in attendance on the patients, and tobacco served out to every prisoner able to smoke. Between Sept. 19 and Sept. 24 six more male prisoners were attacked, of whom only one died.

From this time the diarrhœa began to abate in violence, and no new case of Cholera occurred up to Sept. 29th, when the surgeon was enabled to report that the prison was tolerably healthy, and that there was no fresh case of diarrhœa. In the night between Sept. 30th and Oct. 1st no less than 7 prisoners, 4 males and 3 females, were simultaneously attacked with diarrhœa; three of these cases were very severe, and one (that of a young female,) advanced to true Cholera:—all, however, recovered. On the evening of the same day, Oct. 1st, one of the turnkeys was found suffering very severely from Cholera, from which he sank on the third day.

This was the last case of Cholera that occurred in the prison during the continuance of the epidemic in Oxford, but cases of diarrhœa continued to present themselves through the whole of the winter and spring; and on Febr. 3rd, 1850, a male prisoner, aged 24, who had been in the Gaol during the prevalence of the epidemic in the previous autumn, and had passed unharmed through that sickly time, was attacked with undoubted Cholera:—he recovered in 7 days.

It appears therefore that the total number of persons attacked by Cholera in the County Gaol during the prevalence of the epidemic was 14, of whom 5 died, and 9 recovered,—a result certainly highly creditable to the medical officer<sup>z</sup>. The disease attacked indiscriminately prisoners of all ages and descriptions, with the exception of the debtors, and prisoners for trial; those who slept in the large building, where the prisoners for trial also slept, and those in the building called "No. 6," on the opposite side of the prison; those who had been in confinement for months, and those who had been in prison for a few days only: and it was remarkable that both the officers who had the disease did not sleep within the actual wall of the prison, but in lodges outside the wall, though on the premises.

The parish of St. Ebbe suffered severely from Cholera in '32, and still more so in '49; but the localities attacked were not exactly the same on both occasions. In '32 that part of the parish which lies to the north of the Trill-Mill Stream was the most severely affected, especially Godfrey's Row, where 9 cases occurred, while in '49 in this court not one person was attacked. It is easier to say why this locality should be attacked in '32 than why it should be spared in '49; for in March '48, it was, with two other yards in the immediate neighbourhood, characterised by Mr. Ormerod<sup>a</sup> as "courts of the very worst kind," which "presented in common a degree of neglect and filth rarely witnessed;" and in March '50, a longer, but equally unfavourable description of the locality is given by the writer of the "Letters" in the *Oxford Herald*<sup>b</sup>. Some of

<sup>z</sup> "It is but right to state" (says Mr. Wood,) "that no case was registered as Cholera, excepting those only, where, in addition to the rice-water purging, and vomiting, and cramps, there were also present collapse, a wholly or almost imperceptible pulse, and total suppression of urine. Many were the cases of diarrhœa resembling Cholera so nearly as to be with difficulty distinguished from that disease, and three of them refused to yield to the treatment for diarrhœa, but began to amend directly they were put on the plan adopted for Cholera." (p. 46.) Mr. Wood also states (in a MS. communication,) that "he had the advantage of Dr. Acland's kind assistance through the whole course of the epidemic, he having seen every patient with him, and concurred in the plan of treatment."

<sup>a</sup> *On the Sanatory Condition of Oxford*, p. 21.

<sup>b</sup> See *Report of Evidence*, &c. p. 74.

the streets in this part of St. Ebbe's parish would probably suffer from the same two evils that were felt in Castle Street, and with respect to Penson's Gardens, where three cases of Cholera<sup>c</sup> occurred, there was (at least in Febr. '51,) the additional calamity of "water in wells contaminated by percolation from cesspools." (Messrs. Cubitt and Smith's *Report*, &c. pp. 10, 36.)

With respect to that part of the parish of St. Ebbe which lies to the south of the Trill-Mill Stream, and which suffered severely on both occasions, some of the streets which the Cholera visited in '49 were not built in '32. This was the case with Speedwell Street, which (to quote the words of Dr. Milroy<sup>d</sup>), "was more severely visited with Cholera than any other street in Oxford; and yet it is moderately wide, the houses are newly built, of fair size, and well windowed, and the inhabitants are respectable and above the lower class. The cellars and basement stories, however, were very damp, and in wet weather the water often stood one or two feet in them for months at a time. When the water dried up, the inmates were annoyed with a most unpleasant smell in the lower part of their houses." Of Milbank, near this Street, Dr. Milroy speaks as follows:—"The exhalations from the muddy banks or bottoms of ditches and canals were observed in many parts of the country to promote the development of Cholera. I saw a striking instance of this at Oxford. In a house recently built, clean, and standing by itself, six<sup>e</sup> persons were attacked, and four died of the disease. There did not appear to be any cause of insalubrity within the house; but it stood upon the very edge of a lengthened ditch or canal, which communicated with the river, but was generally left nearly dry during the summer months, and then exhaled an unpleasant smell. It is quite a spot where we should expect to meet with aguish disease." When we also remember that great part of this portion of St. Ebbe's parish, as well as the neighbouring parts of St. Aldate's, are but little above the level of the river, adding also the especially unsatisfactory state of the soil, the air, and the water in these localities, we cannot be surprised that these parts suffered so severely during the late visitation of Cholera. Much the same may be said of great part of the parish of St. Thomas<sup>f</sup>.

The case of St. Clement's parish is somewhat remarkable; and "the very striking fact of the Cholera having been so slightly felt there during the visitation of 1849, as contrasted with the extraordinary preponderating degree in which its virulence fell upon the same locality in 1832, naturally suggests the idea of some special predisposing cause having been in operation at the one period, from which the parish may have been relieved in the course of the long interval ensuing between the two periods. That cause is supposed by certain of the residents to be found in the supply of water, which is now very different indeed from what it was in 1832. At that time the water used for every domestic purpose was obtained solely from the Cherwell, and there is too much reason to believe that it must have been exceedingly deleterious to health. Some few years since, however, a public subscription was set on foot, and a sum of several hundred pounds raised by the liberality of the University and the citizens in general, which was applied towards the laudable object of obtaining a constant supply of good water for the district from Shotover Hill, and that design has proved most successful and beneficial in operation. This water is collected in a large tank situated near Cheney Lane, (branching off from Headington Hill towards the Asylum,) whence it is conveyed by pipes into St. Clement's, and supplied without stint to the residents by public pumps. In quality and flavour it is not surpassed by the water supplied to any town or district in England<sup>g</sup>."

<sup>c</sup> One of these, however, (No. 92,) was taken home ill from St. Aldate Street.

<sup>d</sup> *Report of the General Board of Health*, pp. 50, 54. See also Dr. Baly's *Report*, p. 247.

<sup>e</sup> [Viz. Nos. 84, 90, 93, 94, 99, 102.]

<sup>f</sup> It would be tedious to quote all the evidence relating to these points given before Mr. Macdougall Smith; and perhaps, as the evils in the case of all three parishes are notorious and of long standing, it is the less necessary to do so.

<sup>g</sup> *Letters on the Sanitary State of Oxford*, &c. p. 88. See also Mr. Rowell's *Evidence*, pp. 40, 41. It must not

In making this examination of the localities chiefly affected by the epidemic in Oxford we have had occasion incidentally to notice some of the most important of the predisposing causes of Cholera: viz. a low situation, dampness, bad drainage; water deficient in quantity, and unwholesome in quality; air polluted by putrescent mud, ditches, cesspools, &c. The examination has been satisfactory, because, if it is not quite clear why Jericho Gardens and Godfrey's Row should escape in '49, (it is less difficult to assign a reason for their suffering in '32,) there is at least a plausible reason for the difference observed in the parishes of St. Clement and St. Peter-le-Bailey, and a very good one why the parish of St. Thomas and the lower parts of St. Aldate's and St. Ebbe's should suffer so severely on both occasions. Probably if the examination were made still more minute, and extended to each individual house in which any case of Cholera occurred, the result would in most cases be equally satisfactory; but enough has been done to shew that the course of the disease in Oxford taught the same sanitary lessons as elsewhere. It must however be confessed that Oxford, like other places, also exhibited instances of the (apparently) capricious character of the epidemic; nor can any one whose interest either in the place or the disease has led him to search for a sufficient reason why Cholera should visit the localities mentioned at p. 33, fail to enquire also why of those enumerated at pp. 10-12, and of others which are at least as unhealthy as some of those that suffered, so many should have altogether escaped. To this inquiry none of the theories that have been brought forward to explain the causes and modes of diffusion of Cholera afford (at least to the Writer's mind,) a satisfactory answer. It would be out of place here to enter into greater detail<sup>h</sup>.

There are several other points of interest that present themselves upon examination of the list of cases given above. One of the most important in a practical point of view is the large number of cases in which premonitory diarrhœa is known to have been present, and this number would probably have been much greater if it had been possible to have enquired more strictly at the time into each individual case<sup>i</sup>. In some of these instances the diarrhœa passed into Cholera in spite of medical treatment; in the greater part, however, this premonitory symptom was neglected; and if we allow that a considerable proportion of the 2 or 3000<sup>k</sup> diarrhœa cases then in Oxford would probably have ended in Cholera but for timely precaution, we shall perhaps be justified in the conclusion that in this premonitory stage of the complaint Cholera was as amenable to medical treatment as most other serious diseases.

The bad effect of excesses in eating and drinking as predisposing the system to the attacks of Cholera was sufficiently established by observations made in various parts of the country<sup>l</sup>; and in Oxford several cases were connected at least with dietary imprudences, if not actually occasioned by them<sup>m</sup>. In several places it was noticed that the greatest number of attacks occurred on Sunday night, Monday, and Tuesday; which was attributed (with great appearance of reason,) to excesses committed on Saturday night or Sunday. If this was generally the case throughout the country, Oxford must be considered an exception, for in '32 the greatest number of attacks occurred on

however be supposed that the sanitary condition of this parish is altogether satisfactory, and even with respect to the water supply Mr. Plowman states as follows:—"I have 26 houses there, and there is no water on the premises. They are supplied by a pump which is in the street, and the parties have to fetch the water when they require it. It is distant from some of the houses 60 or 70 yards. The same thing applies to all the property there, and there are 1700 houses. When the pumps are dry, or out of repair, which is frequently the case, the inhabitants have no water for days together." (p. 13.)

<sup>h</sup> See Dr. Baly's Report, pp. 12, &c., 215.

<sup>i</sup> Previous diarrhœa was certainly present in about 50 cases. It is said to have been absent in about 20 cases. It was not specified in about 70 cases.

<sup>k</sup> "Cases of premonitory diarrhœa treated, at least between 2500 and 3000:—the exact number could not be ascertained." (Paper issued by the Local Board of Health, Apr. 29, 1850.)

<sup>l</sup> See Registrar-General's Report, p. xlix; Mr. Grainger's Report, p. 95, 6; Dr. Gull's Report, p. 157; Dr. Duncan's Report on the Health of Liverpool, p. 37.

<sup>m</sup> See Nos. 2, 20, 37, 38, 47, 60, 97.

Thursday, in '49 on Saturday, and adding both years together on Thursday<sup>n</sup>. The indirect evidence in support of the same opinion derived from examining the days of the week on which the greatest number of deaths occurred, is less conclusive; for though throughout the whole of England and Wales the deaths were most numerous on Tuesday, yet this day was not equally fatal in particular places<sup>o</sup>. In Oxford Friday was the most fatal day in '32, and Thursday in '49, and also in both years taken together.

Cholera Attacks and Deaths occurring on each day from Aug. 13 to Oct. 28.

		Cases.	Deaths.			Cases.	Deaths.			Cases.	Deaths.
Aug. 13.	Mon.	1	1	Sept. 6.	Thurs.	4	4	Sept. 26.	Wedn.	4	3
— 14.	Tues.	1	1	— 7.	Fri.	2	1	— 27.	Thurs.	1	4
— 18.	Sat.	1	..	— 8.	Sat.	4	1	— 28.	Fri.	..	1
— 20.	Mon.	2	..	— 9.	Sun.	4	1	— 29.	Sat.	1	1
— 21.	Tues.	3	1	— 10.	Mon.	2	3	— 30.	Sun.	1	..
— 22.	Wedn.	1	..	— 11.	Tues.	3	..	Oct. 1.	Mon.	2	..
— 23.	Thurs.	..	1	— 12.	Wedn.	3	5	— 2.	Tues.	1	1
— 24.	Fri.	2	..	— 13.	Thurs.	3	1	— 3.	Wedn.	2	1
— 25.	Sat.	2	2	— 14.	Fri.	3	..	— 4.	Thurs.	2	3
— 26.	Sun.	1	1	— 15.	Sat.	9	..	— 5.	Fri.	3	1
— 27.	Mon.	5	1	— 16.	Sun.	5	1	— 7.	Sun.	..	1
— 28.	Tues.	3	2	— 17.	Mon.	5	5	— 8.	Mon.	1	..
— 29.	Wedn.	2	1	— 18.	Tues.	3	4	— 9.	Tues.	1	..
— 30.	Thurs.	4	1	— 19.	Wedn.	6	1	— 12.	Fri.	1	..
— 31.	Fri.	1	5	— 20.	Thurs.	2	3	— 13.	Sat.	2	..
Sept. 1.	Sat.	5	1	— 21.	Fri.	1	1	— 14.	Sun.	..	1
— 2.	Sun.	3	..	— 22.	Sat.	4	3	— 18.	Thurs.	1	..
— 3.	Mon.	4	3	— 23.	Sun.	3	..	— 21.	Sun.	..	1
— 4.	Tues.	3	1	— 24.	Mon.	2	..	— 22.	Sun.	1	..
— 5.	Wedn.	7	1	— 25.	Tues.	1	..				

n Attacks and Deaths in Oxford on the several days of the week:—

	ATTACKS.			DEATHS.		
	'32	'49	Both years	'32	'49	Both years
Sunday . .	32	19	51	15	6	21
Monday . .	22	23	45	13	13	26
Tuesday . .	21	20	41	14	10	24
Wednesday .	21	25	46	7	12	19
Thursday . .	36	17	53	7	17	34
Friday . . .	28	13	41	21	9	30
Saturday . .	24	28	52	8	8	16
	184	145	329	95	75	170

o Days on which the greatest and the least number of Cholera Deaths occurred:—

	Greatest number	Least number
All England and Wales . . . . .	Tuesday	Friday
London . . . . .	Monday	Friday
Other parts of England and Wales	Saturday	Friday
Liverpool . . . . .	Wednesday	Sunday
Oxford in '32. . . . .	Friday	Wednesday
— in '49. . . . .	Thursday	Sunday
— in both years . . . . .	Thursday	Saturday

The number of cases and deaths during different periods of the epidemic in '49 in Oxford was interesting, and strikingly similar to what took place in '32. If the whole period during which the Cholera prevailed on each occasion be divided into four equal parts, it will be seen that in the *first* the disease invaded Oxford with great severity, in the *second* it reached its acme, in the *third* it rapidly declined, and in the *fourth* it gradually ceased<sup>p</sup>. Probably during the period of *invasion* the character of the disease was in itself more virulent than it was afterwards<sup>q</sup>; perhaps also the treatment may have been somewhat better understood after a little experience: but, however this may be, it is certain that the proportion of fatal cases decreased<sup>r</sup> during the succeeding periods. Any person therefore who survived the periods of invasion and acme might be considered as comparatively safe.

There are no means of ascertaining the number of persons attacked by Cholera in '49 either throughout England, or in any large masses of the population. It is not therefore possible to state the average proportion of deaths to recoveries. Mr. Farr says<sup>s</sup> that "Cholera has rarely been fatal in England to more than one in two attacked; and it may be laid down, that, for one death, not more than three persons were attacked in the severer way." Accordingly he calculated that the proportion of deaths to recoveries throughout England amounted to about 33 per cent. Mr. Grainger (*Report*, p. 19), "from various sources of information, believes it may be safely stated that in Western Europe, in fully developed cases . . . the mortality will amount, including the whole epidemic, from 45 to 50 per cent. of the attacks." The great difference in the proportion of deaths to recoveries recorded in different places is probably more apparent than real, depending chiefly on the more or less extended signification given to the term *Cholera*, and in fact indicating a diversity in the systems of registration, rather than in

<sup>p</sup> Cases and deaths in four periods of the epidemic in Oxford in '32 and '49:—

1832.	Total Cases	Total Deaths	Deaths per cent.
Weeks 1—5	65	42	64.62
— 6—10	80	38	47.50
— 11—15	31	11	35.48
— 16—22 (7 weeks)	8	4	50.00
	184	95	51.63
1849.			
Weeks 1—3	34	19	55.89
— 4—6	80	41	51.25
— 7—9	28	14	50.00
— 10—12	2	1	50.00
	144	75	52.08
BOTH YEARS			
1st quarter	99	61	61.62
2nd —	160	79	49.38
3rd —	59	25	42.36
4th — (10 weeks)	10	5	50.00
	328	170	51.82

<sup>q</sup> See the remark by Dr. Burrows in Dr. Gull's *Report*, p. 167.

<sup>r</sup> May we not say *steadily and progressively* decreased? When the epidemic was rapidly ceasing it is not improbable (especially in a place where none but undoubted cases of Cholera were registered as such,) that one or two recoveries may have been reckoned as *Diarrhœa*, which would at an earlier period of the epidemic have been reckoned as *Cholera*. If only *one* such instance occurred in '32 and *one* in '49, the number of cases in the period of *cessation* will be 12 instead of 10, and the proportion of deaths will be 41.67 instead of 50.00.

<sup>s</sup> Registrar-General's *Report*, p. lxxi.

the results of treatment or the nature of the disease. When a difference in the rate of mortality really exists, the excessive proportion of deaths is sometimes due to the greater malignity of the disease, sometimes to the less efficient medical treatment, perhaps also sometimes to the shorter duration and less gradual decline of the epidemic<sup>t</sup>. In Oxford the proportion of deaths to attacks was decidedly large both in '32 and in '49. Mr. Thomas on the former occasion accounted for this by the precise and limited definition of the disease adopted by the Local Board of Health<sup>u</sup>. The high rate of mortality in '49 was probably due to the same cause<sup>x</sup>: at any rate there was certainly no reason to complain of want of care or skill in the treatment of the patients; nor did the medical practitioners find the disease more malignant in Oxford than the experience of other places had taught them to expect.

With respect to the duration of the fatal cases it was found that in Oxford, as elsewhere, more than one half terminated within 24 hours after the manifestation of the first characteristic symptoms of the disease<sup>y</sup>. Of 31 persons who survived the fourth day on both occasions, only 4 were under 5 years of age, and only 4 above 50.

*Duration of 170 fatal cases of Cholera, reckoning from the manifestation of the first characteristic symptoms of the disease.*

Duration.	1832.			1849*.			BOTH YEARS.		
	Males	Fem.	Cases	Males	Fem.	Cases	Males	Fem.	Cases
Under 12 hrs.	?	?	?	4	4	8	?	?	?
12 to 24 . . . .	?	?	?	14	18	32	?	?	?
Under 1 day..	16	10	26	18	22	40	34	32	66
1 day . . . . .	25	15	40	2	7	9	27	22	49
2 — . . . . .	6	3	9	1	..	1	7	3	10
3 — . . . . .	2	2	4	5	2	7	7	4	11
4 — . . . . .	3	1	4	2	2	4	5	3	8
5 — . . . . .	1	2	3	1	2	3	2	4	6
6 — . . . . .	..	..	..	1	1	2	1	1	2
7 — . . . . .	..	3	3	3	..	3	3	3	6
8 — . . . . .	..	1	1	..	2	2	..	3	3
9 — . . . . .	..	..	..	..	1	1	..	1	1
10 — . . . . .	..	..	..	..	1	1	..	1	1
11 — . . . . .	1	..	1	..	..	..	1	..	1
12 — . . . . .	1	..	1	..	..	..	1	..	1
13 — . . . . .	1	..	1	..	1	1	1	1	2
Unknown . . . .	?	?	2	1	..	1	?	?	3
Total . . . . .	56	37	95	34	41	75	90	78	170

\* Taken from a table by Mr. Allen in *Proceedings of Ashmolean Society*.

Though for the most part it was impossible to state in each individual instance the precise moment when the characteristic symptoms of the disease first manifested them-

<sup>t</sup> This last cause may perhaps at first sight appear paradoxical, but a single instance will at once explain what is meant. If in '32 the Cholera had lasted in Oxford 11 weeks (from June 24 to Sept. 8) instead of 22 weeks, the deaths would have amounted to 53.75 per cent. instead of 51.63: if in '49 it had lasted 6 weeks (from Aug. 12 to Sept. 22) instead of 12 weeks, the deaths would have been 52.64 per cent. instead of 52.08.

<sup>u</sup> "It was laid down as a principle by the Oxford Board of Health, both for the regulation of its returns to Government, and for the determination of its pecuniary liabilities, to recognise no cases as returnable, or payable by the Board, but such as were clearly developed." Accordingly, "nothing found its way into the Oxford Reports, but what was strongly marked and fully developed. If the course pursued in other places had been adopted here, 772 more cases might have been annexed to the returns actually made . . . . and the deaths, instead of being one out of two attacked, would have been no more than one out of eleven." (*Memorials*, &c. pp. 14—16.)

<sup>x</sup> Two or three (at most) of the cases above recorded were considered at the time to be hardly deserving of insertion in the list, but the Writer (when examining into each case afterwards with Mr. Allen,) was unable to satisfy himself that they ought to be expunged.

<sup>y</sup> This apparently was not the case in '32, but the difference is in fact probably *only* apparent, as the duration of the fatal cases was not on that occasion reckoned by hours. Mr. Thomas says, "Of the 86 deaths which occurred, 65 were short, rapid, overwhelming cases, such as were called *one-day cases*, as having been reported on

selves, still in counting up a large number of cases a general result of sufficient practical accuracy may be arrived at. And therefore in making arrangements for meeting another attack of Cholera it will not be unimportant to remember that on the last occasion (dividing the 24 hours into three equal parts,) the *greatest* number of attacks took place during the night (from 10 p. m. to 6 a. m.), and the *least* number during the morning (from 6 a. m. to 2 p. m.); in other words, that those predisposing causes which were not constantly at work, were more active during the day than during the night. The practical result is that those who have the care of the sick during a cholera epidemic must be prepared for a very unusual proportion of night work<sup>t</sup>.

The influence of personal intercourse in the propagation of Cholera has been very differently estimated by different individuals, and names of great authority may be quoted both in favour of the theory of contagion, and against it. Probably however the experience of two epidemics has induced most persons both in this country and abroad<sup>u</sup> to admit the possibility of the diffusion of Cholera in more ways than one. The apparent influence of a defective sanitary condition in different parts of the city has been sufficiently noticed; it remains to enquire briefly whether Oxford supplied any positive evidence in support of the theory that Cholera is propagated by human intercourse, or any negative evidence tending to prove the contrary. In the first place, it does not appear that Cholera was introduced into Oxford by means of human intercourse<sup>v</sup>, or that the earliest cases of the disease could have been influenced by it. Secondly, the three persons who were employed for several weeks in washing the numerous bundles of foul bed-linen sent from the Cholera Hospital to the hospital washhouse, all escaped without any serious attack of the epidemic. The medical attendants and the nurses at the Cholera Hospital enjoyed the same immunity. It is true that several of them suffered from diarrhoea, but this was at the time a general complaint among persons not specially exposed to any known risk of infection<sup>x</sup>. Thirdly, it must be admitted, that, when we examine carefully the cases in which more or less direct personal intercourse can be traced, not one is sufficiently conclusive to *prove* that the disease was communicated from one individual to another; and though many persons will consider it highly probable that in some at least of these cases this mode of propagation took place, still the degree of probability will be so differently estimated by others that upon the whole

one day as new cases, and on the following as having terminated fatally:—not that this designation is to be so understood as to imply exactly a duration of 24 hours, for some of the *one-day cases* were of shorter, and some of longer duration." (*Memorials*, &c. p. 13.)

<sup>t</sup> See *Report of General Board of Health*, pp. 31, 2.

<sup>u</sup> Thus M. Roche in a letter, "De la Contagion du Choléra," addressed to the Editor of *L'Union Médicale*, sums up his conclusions in these words:—"Le Choléra-morbus Asiatique a deux manières de se propager, l'influence épidémique, et la contagion. L'influence épidémique est la plus commune et la plus puissante: la contagion est rare, mais elle n'existe pas moins." (See *Trois Lettres . . . . . sur le Choléra*, Paris, 1849.)

<sup>v</sup> Oxford is quoted by Dr. Baly as affording one of the most convincing instances that "Cholera can arise independently of infection conveyed by human intercourse." (*Report*, &c. pp. 160, 161, 163.)

The following notes of the early cases of Cholera in Oxford, though containing several trifling inaccuracies, is in the main correct:—

"*First Patient*. A male prisoner in County Gaol since April 3rd, attacked on Aug. 12th; no communication suspected. Died on the 13th.—*Second Patient*. A prostitute, at a fair at Numeham, a few miles off, on 12th Aug.; attacked on 13th, and died same day in Orpwood's Row.—*The Third Case* occurred on the 18th Aug.—*The Fourth and Fifth* on the 20th, without communication with first and second case.—*Sixth Case*. A turnkey in the Gaol was attacked on the 21st Aug., who had had communication with first patient during his illness; he recovered.—*Seventh Case*. A woman in Orpwood's Row, where second patient lived, on the 21st Aug.—*Eighth Case*. A man employed in digging a drain, close to a drain and locality of third case. No communication traced.—*Ninth Case*. A woman in whose house second patient had lodged, and who had nursed her during her illness, and had washed her clothes after death, attacked on 22nd: died.—*Tenth to fifteenth Cases* in different localities in Oxford not traced to communication.—Succeeding cases down to 22nd Sept. in different parishes, not traced to communication. — In the Gaol a third case occurred on Sept. 13th, and within next 9 days 8 cases occurred to male prisoners. On the female side the disease showed itself on 22nd Sept. in women recently admitted. On 22nd Aug. a girl, living in same house with second and ninth patients, whom she had nursed, sickened with Cholera and died." (*Ibid.* p. 322.)

<sup>x</sup> Dr. Baly's *Report*, pp. 174, 180, 335, 339.

the experience of Oxford will not help much towards the solution of this *vezata questio*.

Notwithstanding all this, and notwithstanding the impression that had been produced before the Cholera reached Oxford by the strong and positive language contained in the Notifications issued by the General Board of Health, the Writer believes he is correct in stating that at the end of the epidemic in Oxford it was the general conviction in the minds of the medical practitioners of the place (as it certainly was in his own,) that Cholera was occasionally communicated directly or indirectly by personal intercourse. And in cases like this a *consensus* of medical practitioners may fairly deserve some consideration, unless the opinion entertained can be *proved* to be positively foolish and unfounded<sup>z</sup>.

A few miscellaneous observations naturally occur upon looking through the preceding list of Cholera cases.—One dead body (No. 114) was found, the individual (who lived by himself,) having died apparently of Cholera, without having received any medical assistance. This same distressing accident occurred not unfrequently in other places<sup>a</sup>.—One person (No. 30) after recovering from an attack of Cholera, was seized a second time in about three weeks, and died in 8 hours.—The influence of fear as a predisposing cause of Cholera was shewn in the case of No. 4, perhaps also in that of No. 111, as no other persons were attacked in their immediate neighbourhoods, and no other equally plausible reason could be assigned for their seizure<sup>b</sup>.—Mr. Farr says that "strangers, who can avoid it, should not visit a town in an epidemic: they appear to be peculiarly liable to an attack<sup>c</sup>." Several of the persons attacked in Oxford appear to have been

<sup>y</sup> The father of the present Dr. Stokes, of Dublin, thought that the probabilities for or against the doctrine of contagion might be submitted to calculation. Accordingly he proposed to an eminent mathematician two very similar problems as to the chance that out of a family of 12 persons 11 would sicken during an epidemic, supposing the sickness of one member of the family does not promote the sickening of another, that is, supposing the disease not to be contagious. The answers given by Dr. Brinkley "furnish (in the opinion of Dr. Stokes,) proofs so convincing of the truth of the doctrine of contagion, that it is hardly necessary to go further." (*Clinical Lecture on Fever*, in *Med. Times and Gaz.* 1854. vol. i. p. 231.) It would be very difficult to have the problems stated fully and satisfactorily; but without aiming at mathematical precision, the doctrine of probabilities might be allowed to have some weight in deciding our opinion as to the contagious or non-contagious character of Cholera. From a later Lecture it appears that Dr. Paget of Cambridge has written to Dr. Stokes, stating some well-founded objections to these calculations, but at the same time admitting the general soundness of the conclusions to be "sufficient to carry conviction to the mind of any candid person." *Ibid.* p. 640.

Some of the cases in Oxford of Cholera (apparently) influenced in some degree by personal intercourse were the following:—No. 67 had refused to allow her husband (No. 41,) to be taken to the Cholera Hospital, but attended on him at home: upon his recovery she was seized herself, and died in 15 hours.—No. 57 had nursed one brother, (No. 42,) and was attending on the other, (No. 55,) when she was seized herself.—No. 76 seized Sept. 13, after attending on her daughter (No. 68,) who died Sept. 12; removed to Cholera Hospital Sept. 15; her son (No. 81,) seized Sept. 15, treated at home; her sister-in-law, (No. 109,) who had been nursing the family, seized Sept. 20.—A policeman, (No. 66,) who had helped to carry Cholera patients, and whose daughter (No. 56) had died Sept. 7, seized Sept. 10.—No. 92 seized while nursing a married daughter, (No. 60).—No. 71 seized Sept. 12; had been much with her niece, (No. 61,) who died same day.—No. 85 had attended on her daughter, (No. 72,) who died Sept. 12; she had also visited the house on the two following days; seized Sept. 15.—Six members of one family were attacked; it is not known how many escaped. A son (No. 84,) seized Sept. 15; another, (No. 90,) Sept. 16; the mother, (No. 93,) same day; her step-brother, (No. 94,) who had been working on the premises and had assisted in laying her out, Sept. 17; her sister, (No. 99,) who had been staying in the house, helping to nurse the family, Sept. 18; and her mother, (No. 102,) who had been staying in the house to nurse her, and had also attended on Nos. 84, 90 and 99 in Cholera Hospital, seized Sept. 19.—No. 115 was dismissed cured from the Infirmary Sept. 19; on reaching his home he found his daughter (No. 107,) had been seized with Cholera early that same morning, and was on the point of being removed to the Cholera Hospital, where he visited her; diarrhoea came on Sept. 21, and confirmed Cholera Sept. 23.

<sup>z</sup> In connection with this subject it may be mentioned that Mr. Hitchings noticed, that, whenever the bedding, linen, &c. which had been saturated or even moistened by the evacuations, was not at once removed from the premises, he invariably had a second case in the same or the adjoining house.

<sup>a</sup> See *Report of the General Board of Health*, p. 102; Dr. Sutherland's *Report*, p. 54; Mr. Grainger's *Report*, pp. 151, 2.

<sup>b</sup> See Mr. Grainger's *Report*, p. 96.

<sup>c</sup> Registrar-General's *Report*, p. xcix.

strangers. who had probably not been in the place many days. (See Nos. 12, 14, 27, 29, 43, 139.)

The arrangements made in Oxford to meet the Cholera in '32 were considered worthy of imitation in '49. At the end of '48 some preliminary steps were taken, the most important of which was the removal of certain nuisances in different parts of the city: this however was only done on a small scale. In the summer of '49, when the Cholera was reported to have made its appearance at Abingdon<sup>a</sup>, (about six miles from Oxford,) a local Board of Health was formed, by which all matters relating to the Cholera were managed during the prevalence of the epidemic. It is right to add that the Board performed its difficult and delicate duties zealously and efficiently, and to the general satisfaction of all parties<sup>b</sup>.

The whole city was divided into districts, to each of which a certain number of medical officers were attached, whose duty it was to attend all persons attacked by Cholera or Diarrhoea, and to carry on a house-to-house visitation more or less completely as they might deem necessary. In order to meet the difficulty that not unfrequently occurred when not one of the medical officers of a district happened to be at home when he was sent for, it was decided that a medical practitioner should be stationed constantly during the day at the Town Hall, to prescribe for such persons as were able to call there for medical advice, and to give such general assistance as might be in his power without quitting the spot. This duty devolved almost entirely upon the late Dr. Kidd, whose age prevented his undertaking any more active and laborious duty, and who might on this ground have been well excused from taking any part whatever in the management of the epidemic, but whose active benevolence and high sense of duty would not allow him to be idle in such a time of public calamity<sup>c</sup>.

The opening of a House of Refuge (under the management of Mr. Wood,) for the reception of the family and immediate neighbours of persons attacked by Cholera had been considered so useful in '32<sup>d</sup>, and was so strongly recommended in the Second Notification issued by the General Board of Health, that it was determined to follow the same plan in '49, and Mr. Wood was again appointed to superintend the medical treatment of the inmates<sup>e</sup>. The result was as satisfactory on this as on the former occasion; though there were many severe cases of diarrhoea, out of 115<sup>f</sup> persons admitted into the House only one<sup>g</sup> was attacked by Cholera, whereas it can scarcely be doubted but that a much larger number would have been seized if they had been left at their own homes.

In 1832 it had been thought advisable to remove, not only the family and neighbours of the sick, but also the patients themselves (or at least the poor,) from the localities where the evil influences that had originally caused the disease probably continued to exist: it had also been considered that to attend to the poor properly at their own homes would be so difficult as to be practically impossible. Notwithstanding that in

<sup>a</sup> The first death from Cholera in Abingdon occurred July 17th. (See Registrar-General's Report, p. 234.)

<sup>b</sup> Into the unhappy dispute between the Local Board of Health and the Board of Guardians, which occurred after the epidemic had ceased, and which therefore did not in any way interfere with the arrangements made to combat the disease, the Writer (though entertaining a very strong opinion on the subject,) does not feel himself called upon to enter.

<sup>c</sup> Those who have seen the *Memorials of the Malignant Cholera in Oxford in 1832*, will not forget the terms in which Mr. Thomas speaks of Dr. Kidd's behaviour on that occasion.

<sup>d</sup> Out of 209 persons received into the House of Refuge in 1832, only 5 were seized with Cholera, 2 of whom were attacked within 5 hours after their admission, and 2 within 24 hours. (See *Memorials*, &c. p. 24.)

<sup>e</sup> The house was situated at the junction of Wellington Street and Nelson Street, St. Paul, a locality that would not have been chosen, but that it was impossible to find another house at the time that suited altogether so well.

<sup>f</sup> The greatest number of inmates at any one time was 52 on Sept. 28th.

<sup>g</sup> Viz. No. 106, an insane woman, aged 60, who (as was said) had been embracing the corpse of a person that had died of Cholera (No. 79), and was attacked herself on the morning after her admission into the House of Refuge.

'32 the mortality in the Cholera Hospital had been greater than in private houses<sup>h</sup>; and notwithstanding the recommendation of the General Board of Health "that the best provision practicable should be made for affording assistance to the individuals who might need it, at their own homes<sup>i</sup>;" the two considerations mentioned above had derived so much additional weight from the experience of '32, that in '49 it was resolved without (or with scarcely) a dissentient voice that those persons who could not be properly treated at their own homes should be advised to leave them. Perhaps it is not too bold to say that the combined experience of '32 and '49 will, when next the Cholera visits Oxford, cause the local authorities again to recommend the sick poor to remove from their dwellings, rather than to continue in them, though it will still be a matter for grave consideration how best to dispose of them after their removal.

At the beginning of October, 1848, when the epidemic first reached Great Britain, the three junior physicians of the Radcliffe Infirmary presented a memorial to the Governors of that institution recommending that Cholera patients should be received, not into the wards of the hospital itself, but into a separate wing of the building erected expressly for the reception of Fever patients<sup>k</sup>. This application was rejected, for reasons which the Writer still thinks more plausible than convincing, and which, when tested by the experience of Oxford and of other places<sup>l</sup>, will probably have less weight with the Governors on the next occasion.

<sup>b</sup> Proportion of Deaths to Cases in the Cholera Hospital and in private houses:—

	1 8 3 2.			1 8 4 9.			BOTH YEARS.		
	Cholera Cases	Cholera Deaths	Deaths per cent.	Cholera Cases	Cholera Deaths	Deaths per cent.	Cholera Cases	Cholera Deaths	Deaths per cent.
Cholera Hospital	24	13	54.17	39	25	64.10	73	38	52.05
Private Houses . .	152	76	50.00	105	50	47.62	257	126	49.04
Total . . . . .	*184	*95	51.63	144	75	52.08	*338	*170	50.29

\* Including 8 cases and 6 deaths in the parish of St. Giles'; unknown whether treated at home or not.

<sup>i</sup> See *First Notification*, quoted in *Report*, p. 129.

<sup>k</sup> The memorial states as follows:—

" . . . . . That it is manifestly the duty of the Infirmary to be prepared to receive all cases of serious emergency, there being no sufficient reason to the contrary.

" That in the opinion of the most competent judges there is no reason for supposing that Cholera is contagious, —none certainly for thinking it to be more so than Fever.

" That on the score of contagion therefore there is no reason why Cholera patients might not be admitted to the ordinary wards; but that, inasmuch as the frightful symptoms of the disease, the rapidity of its course, and the prevalent dread of its attacks, would then be a cause of distress to the other patients, it is better and right to provide separate accommodation for them.

" That room may be conveniently provided for a moderate number of persons in the Fever Wing; and in addition, the brewhouse may be easily converted into a valuable and spacious ward."

[These words were written before the Cholera had visited either Oxford or (perhaps) England. The only change that the Writer would now be inclined to make in them is to omit the assertion that Cholera is not contagious, stating simply that it is not more so than Fever.]

<sup>l</sup> The principal reasons in favour of admitting Cholera patients into public hospitals are well summed up by Dr. Babington, President of the Epidemiological Society, in his Letter to Dr. Milroy, Chairman of the Cholera Committee (dated Sept. 13, 1853, and published in the medical journals). But surely in this case "the burden of proof" lies with those who oppose their admission, not with those who advocate it, simply on the ground that "there is no reason why cases of Cholera should not be admitted into hospitals, which does not apply with more than equal force to cases of typhus fever, which are never refused admission."

The strongest objections to their admission are, 1. the danger to the other inmates, and 2. the fear of filling the beds to the exclusion of all other patients. With respect to the former objection Mr. Grainger says, "Having carefully considered all the facts connected with the admission of Cholera cases into common hospitals, and having consulted the medical officers of those institutions, I feel myself justified in stating, that, when suitable precautions

"About the latter end of Oct. or the beginning of Nov., 1848, the medical officer of the Oxford Union intimated to the Board of Guardians . . . . . that, in the event of any case [of Cholera] occurring in this district, he should send such case into the Workhouse. The Guardians [however] thought it would be extremely undesirable to have Cholera patients brought into the House, and . . . the Mayor coincided entirely in the opinion of the Board<sup>m</sup>."

Under these circumstances the Board of Health determined to follow the precedent of 1832, and erect a temporary building as a Cholera Hospital, under the medical superintendence of Mr. Allen, who had so satisfactorily discharged the duties of this office on the former occasion. This was accordingly done; but, though a larger number of persons was relieved in the Cholera Hospital in '49 than in '32, and the building was therefore more useful, still the mortality was even higher, and upon the whole it must be confessed that the result on both occasions was not such as to warrant the experiment being tried a third time. As it is believed that this was not the prevailing opinion during the epidemic, when the excellence of the arrangements at the Cholera Hospital (as soon as they were completed,) gave general satisfaction, it is necessary to inquire into the causes of the excessive mortality, and see how far they were unavoidable from the very nature of the arrangements, and how far they might be prevented on the next occasion. Mr. Allen assigns two reasons, 1. the delay in completing the building, and 2. the unfavourable character of the cases received into it. He says:—

"The order for the building was delayed until Cholera had commenced, and was not completed for nearly three weeks after. The first five patients were received in a tent erected in the field where the Hospital was being built: they were bad cases, and all died. The first lived but one hour and a half after admission; the second was a vagrant, half-starved and crippled; the third was a female tramp; the fourth a prostitute of shattered constitution; the fifth a poor old woman of eighty-two.

"Of the 39 cases admitted, 25 died: some were in a dying state when brought in; many had been living in a state of poverty bordering on destitution; several were persons of intemperate habits and dissolute life; and not a few were advanced in age. Of the total 73 males, only 13 were brought to the Hospital; of the total 71 females, 26 were brought there: the proportion being as 3 to 4 out, and 2 to 1 in the Hospital. Of the 25 deaths, 8 were males, and 17 females. Of the total 144 cases, 12 were above 60 years of age; of these, 7 were sent to the Hospital: the proportion of cases above 60 years old out of the Hospital being about 1 in 20, while in the Hospital it was 1 in 5½. Of the 25 deaths, 7 died in less than 6 hours after admission, and 6 more in less than 12 hours. Most of the cases had been treated elsewhere before admission.

are in all respects observed, there is no danger attending the practice. Distinct wards should be set apart for the reception of Cholera cases, and, if possible, they should be in a detached building." (*Report*, p. 18. note.) This statement is substantially correct, though probably most persons will think it is expressed somewhat too broadly (see *Dr. Baly's Report*, p. 176, &c.); in dealing with any hospital that does not exclude fever patients it is sufficient to say (what few competent judges will deny,) that by admitting Cholera patients the inmates would not be exposed to greater danger than arises from the cases ordinarily admitted without scruple.

With respect to the latter objection mentioned above, whatever may be the case in other places, in Oxford in '49 there would certainly have been no danger of filling all the spare beds with Cholera patients; nor, as Cholera chiefly prevails at the very time when the Oxford Infirmary has plenty of vacant beds, is it probable that such an inconvenience would ever occur. The greatest number of inmates at any one time in the Cholera Hospital was 10, viz. 7 recent cases and 3 convalescent.

<sup>m</sup> Letter from the Chairman of the Board of Guardians to the Poor Law Commissioners, dated Dec. 10th, 1849. Probably it was this feeling of the "extreme undesirableness" of having Cholera patients in the Workhouse which occasioned the sending two women, aged respectively 66 and 82 years (Nos. 25, 123), to the Cholera Hospital, where they died. Of five other Cholera patients retained in the Workhouse, two infants (Nos. 91, 124) died, and three adults (Nos. 35, 53, 86) recovered.

"These facts may account in some degree for the disproportionate mortality at the Cholera Hospital<sup>n</sup>."

The former of these reasons, viz. the delay in completing the arrangements, is liable to occur whenever a building has to be, not only fitted up internally, but also entirely erected; for the Board of Health, after making as far as possible the necessary preparations, was naturally unwilling to incur the great expense of actually building the Hospital before it was quite certain that it would be wanted. Still the time spent in getting ready the Cholera Hospital at Oxford was certainly much greater than was anticipated; and hence about a week after the epidemic had broken out, the tent was set up, which was used till the Hospital was finished, Aug. 31. As it was expected that this tent would be wanted for 2 or 3 days only, it was very imperfectly fitted up, and afforded insufficient accommodation; if it had been intended originally to last for weeks, it would have been differently erected, and the result would probably have been less fatal<sup>o</sup>.

With respect to the second cause assigned by Mr. Allen, viz. the unfavourable character of the cases sent into the Hospital, it seems hardly possible (even if it were quite clear that it is desirable,) to prevent this occurring constantly. The most severe cases of every disease will always find their way to the place where it is believed the best treatment is to be had; and if the responsibility of sending from home a person who has little chance of recovery, is great, the responsibility of excluding him from a Cholera Hospital would be still greater.

There is a third reason, which constituted the principal objection to the use of Cholera Hospitals in other places<sup>p</sup>, and which probably exerted a powerful influence in Oxford, though the number of cases admitted is too small to warrant any positive conclusion. The Hospital was erected on an eminence in a field beyond the Foundry, to the left of the Woodstock Road; a situation which seemed to be altogether the most eligible that could be procured, and which was a convenient distance from one of the localities which suffered most severely from Cholera in 1832. However, in '49 (as has been mentioned,) there were very few cases of Cholera in the neighbouring parishes of St. Paul and St. Giles, and accordingly of the 39 persons admitted into the Hospital 33<sup>q</sup> were brought from localities varying in distance from three quarters of a mile to one mile and a quarter. Though the patients were carefully conveyed, lying on a portable bed with a hooped canopy, this long journey to persons in such a state must have been most injurious, and probably tended materially to swell the mortality. It would

<sup>n</sup> Cases, Deaths, and Recoveries in the Cholera Hospital, with the respective Sex and Age:—

AGES.	0 to 10			10 to 35			35 to 55			55 to 85			ALL AGES.		
	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.	M.	F.	Tot.
Deaths . . . .	2	2	4	1	7	8	4	3	7	1	5	6	8	17	25
Recoveries . .	1	1	2	2	5	7	1	3	4	1	..	1	5	9	14
Cases . . . . .	3	3	6	3	12	15	5	6	11	2	5	7	13	26	39

<sup>o</sup> See in the *Report of the General Board of Health*, p. 127, &c., the results of removing large masses of people to tents.

<sup>p</sup> See *Report of General Board of Health*, p. 130; *Dr. Sutherland's Report*, p. 128; *Mr. Grainger's Report*, p. 16; *Dr. Duncan's Report on the Health of Liverpool*, pp. 43, 4.

<sup>q</sup> Cases sent from different parishes to the Cholera Hospital:—

	St. Giles	St. Paul	St. Thomas	St. Mary Magd.	St. Peter-le-Bailey	St. Clement	St. Aldate	St. Ebbe	Workhouse	Total.
Deaths . . . .	1	1	3	1	2	..	5	10	2	25
Recoveries	..	2	..	..	2	1	1	8	..	14
Cases . . . . .	1	3	3	1	4	1	6	18	2	39

be tedious and unnecessary to examine into the circumstances attending each individual case, which any one who takes an interest in the subject can do for himself by the help of the subjoined table<sup>r</sup>; but it may be well to take *one class* of patients, and see how far they can be fairly supposed to have been influenced by the distance of their transport to the Hospital. The most favourable period of life for Cholera patients in '49 was between the ages of 10 and 35, when of persons treated at home about 29 per cent. died, and of those received into the Hospital about 53 per cent.<sup>s</sup>;—this is certainly an enormous difference. Of the 15 persons at this age received into the Hospital, 13 were brought from a distance; of the 8 that died, all but one. In 3 cases out of 8 the deaths occurred in 6 hours after admission, and 3 others died in 12 hours; so that by the time they reached the Hospital the patients were evidently in a very serious state. Of course these numbers are far too small to *prove* anything, but, as far as they go, they quite confirm the results obtained in other places, and justify the conclusion mentioned above.

Probably on the next occasion, instead of receiving Cholera patients in one newly erected building, (which must almost necessarily be situated at a considerable distance from some of the localities attacked, and which can hardly be ready for use as soon as it is wanted,) it will be found better to adopt as the only alternative the recommendation given in the First Notification of the General Board of Health (issued Oct. 5, 1848), viz. that, "as cases may occur of extreme destitution in neighbourhoods and houses wholly unfit for the curative treatment of the sick, provision should be made for the reception of such cases, either in the common Hospitals, in the Union Houses, or in separate apartments specially prepared for the purpose, and properly warmed and ventilated." This recommendation (confirmed as it was by "the result of the whole experience of the late epidemic<sup>t</sup>,") can be carried out in its full extent as easily in Oxford as in most places. The Infirmary and the Workhouse will be the natural and proper receptacles of all Cholera cases that occur in the *northern* parishes during the whole period of the epidemic; while, as soon as the Cholera breaks out, they will be ready for the reception of patients from other parishes also, until suitable accommodation can be provided nearer to the different localities attacked.

It only remains to say a few words on the modes of treatment pursued in Oxford, and this is in every respect the least satisfactory part of the subject. It was at first intended to procure at the time the details of the treatment of each case, and analyze the

<sup>r</sup> The following is a list of the cases admitted into the Cholera Hospital:—those marked \* died. Nos. 8\*, 12\*, 14\*, 23\*, 25\*, 27, 33\*, 43\*, 62, 67\*, 74\*, 76, 83, 84, 85\*, 88, 90, 94\*, 95, 96\*, 97\*, 99\*, 102\*, 106\*, 107, 110\*, 111, 112\*, 115\*, 118\*, 120, 122\*, 123\*, 125, 127, 130\*, 133\*, 135\*, 140.

<sup>s</sup> Cases treated at home and in the Cholera Hospital at different ages, with the mortality per cent.:—

AGE.	HOME.			HOSPITAL.		
	Cases	Deaths	Deaths per cent.	Cases	Deaths	Deaths per cent.
0—10 . . .	21	14	66.67	6	4	66.67
10—35 . . .	52	15	28.85	15	8	53.33
35 & over . .	32	21	65.63	18	13	72.21
All Ages . . .	105	50	47.62	39	25	64.10

<sup>t</sup> See Dr. Sutherland's *Report*, p. 129. While strongly advocating the home-treatment of Cholera patients, (a plan which has been twice tried to a considerable extent in Oxford, so as to afford ample means of judging how far the result is or is not satisfactory,) Dr. Sutherland says, "there are, however, circumstances under which some sort of hospital accommodation will perhaps always be required during Cholera epidemics; but this should consist of scattered rooms, as near the affected houses of the worst districts as possible."

results; but this was soon found to be impracticable. This may be regretted inasmuch as the *history* of Cholera in Oxford is thus rendered less complete than it would otherwise have been, but in a practical and scientific point of view, when we recollect that of the total number of cases more than one half ended fatally, it must be confessed that the omission is probably of little consequence.

For the treatment of ordinary cases of Diarrhœa the Medical Committee of the Local Board of Health directed packets of powdered chalk and opium to be kept in readiness, and dispensed by the different druggists at the order of the medical practitioners: but this was done merely in order to save time and trouble, and each medical practitioner was left at liberty to order whatever medicines he pleased at the expense of the Local Board of Health. It is believed that the medicine recommended by the Medical Committee was used by many of the practitioners, (as it was by the Writer,) and apparently with good success.

When Diarrhœa had passed on to fully developed Cholera the most popular remedy at Oxford was calomel. It was given sometimes in large doses, and sometimes in small, sometimes alone, and sometimes in combination with other remedies; but the result certainly did not altogether confirm the favourable anticipations that were entertained respecting it. Mr. Wood's *last twelve* cases, which were treated almost entirely by calomel, form probably the most successful series that occurred in Oxford<sup>d</sup>, only one third having ended fatally; but, though they are quite sufficient to justify *him* in having recourse to the same mode of treatment on any future occasion, still, when it is remembered that the total number of recoveries only amounted to eight, and that not one of these occurred during the most fatal period of the epidemic, they will hardly appear equally convincing to others.

Various other internal remedies, such as were then in vogue<sup>e</sup>, were also tried, but the success was not such as to require any special notice here<sup>f</sup>. Upon the whole, the general results at which the Writer arrived at the time, (which were confirmed by the experience of others who had greater practical acquaintance with the disease than himself,) were these: 1. that no case should be given up as hopeless as long as the slightest spark of life remained; 2. that no one general plan of treatment could be laid down for all cases, but that each individual case should be treated according to its own peculiar circumstances; and 3. that no one special mode of treatment was more beneficial than another. Certainly, when the patient was in a state of complete collapse, it seemed to

<sup>d</sup> It is right therefore to quote his remarks at length:—

"After the first two cases, the patients were treated on the plan proposed by Dr. Ayre of Hull, with some modifications, namely, 2 grains of calomel every 10, 15, or 20 minutes, according to circumstances, until bilious stools were procured. No stimulants or opiates were allowed, excepting occasionally 10 drops of ether when the coldness of the surface remained longer than usual; and when the hiccup was troublesome, 4 or 5 drops of laudanum were administered at intervals, and always with relief.

"No food or drink was allowed, excepting cold water in quantities of one tablespoonful with each dose of calomel, until reaction was begun, when very small quantities of tea, and afterwards of beef-tea, were given at intervals, and gradually increased in quantity until the improvement in the symptoms allowed a return to solid food; several days, however, elapsed before it was found prudent to go beyond the beef-tea.

"The principal modifications in Dr. Ayre's plan of treatment consisted in commencing with one large dose of calomel, (as 20 to 30 grains, according to circumstances,) and then following up with the 2-grain doses, and in the addition of the ether.

"It is of course to be understood that the usual external remedies were employed, such as frictions, mustard poultices, bags of heated salt and bran, and tins of hot water to the feet and legs." (*Prisoners' Report*, p. 46.)

<sup>e</sup> *Sulphuric acid*, which is perhaps altogether the most important medicine that has lately been proposed as a remedy for Diarrhœa and Cholera, had not at that time been brought prominently before the notice of the public in this country.

<sup>f</sup> Mr. Hitchings found the disease most benefited by calomel and sulphuric ether in frequently repeated doses: and adds, that of all the cases of genuine Cholera which he saw under treatment (amounting altogether to 63,) not one recovered where opium had been given.

matter little what remedies were used. In this fully developed stage of the disease, until the acme of the epidemic was passed,

“Exitium superabat opem, quæ victa jacebat.”—(Ovid, *Metam.* vii. 527.)

The nurse was then of more use to the patient than the doctor, who could only strive to combat each symptom as it appeared, and leave the result in God's hands<sup>g</sup>.

POSTSCRIPT. As it may be useful to know the cost of an epidemic in a place like Oxford, the following abridged statement has been prepared from the details of expenditure given in Mr. Thomas's *Memorials, &c.*, and in the paper issued by the Local Board of Health, Apr. 29, 1850. Besides the sum actually spent at the time of the epidemic a considerable annual expense was entailed on the rate-payers on both occasions for the support of the widows and orphans of persons dying of the disease.

RECEIPTS.		DISBURSEMENTS.			
	1832.	1849.			
	£	£	1832.		
			£		
First subscription .....	49	1057	Medical attendance .....	421	498
Second do. ....	809	123	Cholera Hospital .....	232	183
Parish contributions .....	494	...	House of Observation .....	175	40
Proceeds of sale of sundries	46	32	House of Convalescence ....	68	...
Total .....	<u>1398</u>	<u>1212</u>	House expenses.....	...	153
			Wages, gratuities, &c. ....	124	96
			Drugs, &c.....	...	102
			Burial expenses.....	96	10
			Printing, Stationary, &c. ....	65	57
			Sundries.....	167	73
			Total .....	<u>1398</u>	<u>1212</u>

It must be remembered that the above sums relate to the *public* expenditure only; the extra expense entailed upon individuals is of course unknown. There can be little doubt, but that, if the same amount of money had been judiciously expended in sanitary improvements previous to the visitation of Cholera in '49, much of the terror and misery caused by its attack might have been prevented<sup>h</sup>.

<sup>g</sup> “No special treatment,” Mr. Allen says, “was attended with satisfactory results.” Mr. Hansard (who saw many cases both at the Cholera Hospital and elsewhere,) says, “Of one thing I am fully certain, no course of remedies, or combination of the same, seemed more profitable than another. . . . I remember I used often to say to Mr. Allen that good nursing, &c., and nothing else, was best.”

<sup>h</sup> The Registrar-General mentions ten large towns in which the mortality from Cholera in '49 was less than in '32 (*Report, &c.* p. xlv). Two of the most striking of these instances of exemption were afforded by Exeter and Nottingham, and they are the more instructive, because there is reason to believe that it may be attributed in a great measure to sanitary improvements. See Dr. Shapter's *Sanitary Measures and their Results*; and *A Report upon the past and present Sanitary State of Nottingham*.

## APPENDIX C.

### *On the Medical and Surgical Cases treated in the Radcliffe Infirmary during the years 1849, '50.*

THE number of In-patients admitted into the Radcliffe Infirmary in '49 was 796, of whom 1 in every 17.30 died; in '50 it was 759, of whom 1 in every 21.69 died. The total number of disposable beds was reckoned to be 140; the average number of beds occupied was 107 in '49, and 101 in '50<sup>a</sup>. The number of deaths was 46 in '49, and 35 in '50; the former number being much above the average, and higher than in any of the 10 years 1841—'50 except '47. The rate of mortality was 42.99 per cent. in '49, and 34.65 per cent. in '50: the average rate of mortality for the 10 years 1841—'50 was 31.26 per cent. Compared with London hospitals this rate of mortality is very low<sup>b</sup>; it is also probably lower than that of provincial hospitals in general<sup>c</sup>.

The excessive mortality in '49 was caused chiefly by the deaths from Erysipelas and Scrofula, which were much more numerous than usual. A severe form of Erysipelas began to prevail in the Infirmary in the year '46, and continued to the end of '50; since which time no fatal case has occurred, though there were several cases of a milder type in the winter of 1851, 52.

<sup>a</sup> Number of In-and-Out-patients in the years 1849 and '50, and average number of the same, extracted from the 83rd Annual Report:—

	'49	'50	Average
In-patients in the House at the end of the preceding year .. .. .	102	105	101
Do. admitted during the year .. .. .	796	759	857
Do. total in the House during the year .. .. .	<u>898</u>	<u>864</u>	<u>958</u>
Out-patients (not including those under treatment at the end of the preceding year)	1741	1648	1629
Total In-and-Out-patients .. .. .	<u>2639</u>	<u>2512</u>	<u>2587</u>
Weekly average of male In-patients .. .. .	60	57	61
Do. female .. .. .	47	44	47
Do. total In-patients .. .. .	<u>107</u>	<u>101</u>	<u>108</u>

N.B. The average is reckoned from the ten years, 1844—'53.

<sup>b</sup> See the Registrar-General's *Weekly Returns of Births and Deaths in London*, Nos. 26 and 27, 1850; and Dr. John Webster's paper, “On the Health of London during the six months terminating Sept. 28, 1850,” read before the Medical Society of London, Nov. 2, 1850, (and published in the *London Journal of Medicine*), which gave occasion for various notices on the subject in the medical journals of that date.

Dr. Webster took as the basis of his calculations the number of *beds* in each hospital; the Registrar-General the number of *inmates*. The latter method is obviously the more correct, and has been adopted in the text.

<sup>c</sup> See *A Comparative Statement of the Economy of 32 Provincial Hospitals, &c.*, Birmingham, 1844; also Dr. Lochee's *Reports of the Medical and Surgical Cases treated in the Kent and Canterbury Hospital*, Canterbury, 1811, '42.



Classification of the Diseases of In-patients in the years 1849, '50<sup>d</sup>.

	'49	'50	Both years		'49	'50	Both years
<b>I.—Zymotic Diseases:—</b>				<b>V.—Diseases of the Organs of Circulation:—</b>			
Small-pox .....	1	..	1	Pericarditis .....	1	1	2
Scarlatina .....	..	1	1	Aneurysm of aorta .....	2	..	2
Diarrhoea .....	4	4	8	— of popliteal artery .....	1	..	1
Ague .....	3	1	4	Disease of heart .....	19	18	37
Fever .....	11	9	20		23	19	42
Rheumatic Fever .....	3	3	6	<b>VI.—Diseases of the Respiratory Organs:—</b>			
	22	18	40	Laryngitis (chronic) .....	..	2	2
<b>II.—Diseases of uncertain or variable seat:—</b>				Bronchitis (chronic) .....	17	6	23
Hæmorrhage, viz.				Pleurisy .....	3	3	6
Hæmoptysis .....	6	4	10	Pleurodynia .....	5	1	6
Hæmatemesis .....	1	5	6	Pneumonia .....	4	1	5
Hæmorrhoids .....	5	2	7	Emphysema of lungs ..	1	..	1
Hæmaturia .....	1	1	2		30	13	43
Menorrhagia .....	4	3	7	<b>VII.—Diseases of the Digestive Organs:—</b>			
Dropsy .....	15	11	26	Enlargement of tonsils ..	1	2	3
Abscess .....	32	35	67	Cynanche Pharyngea ..	5	1	6
Ulcer .....	5	20	25	Gastralgia .....	4	8	12
of leg .....	58	40	98	Dyspepsia .....	11	12	23
Fistula in ano .....	7	2	9	Vomiting .....	2	..	2
Cancer .....	13	13	26	Peritonitis (chronic) .....	2	2	4
Tumour .....	17	15	32	Strangulated Hernia .....	6	6	12
	164	151	315	Constipation .....	2	1	3
<b>III.—Tubercular Diseases:—</b>				Disease of liver .....	6	10	16
Scrofula .....	23	14	37		39	42	81
Tabes Mesenterica .....	..	3	3	<b>VIII.—Diseases of the Urinary Organs:—</b>			
Phthisis .....	10	31	41	Disease of kidneys .....	5	2	7
	33	44	81	Nephria .....	4	8	12
<b>IV.—Diseases of the Nervous System:—</b>				Diabetes .....	5	1	6
Apoplexy .....	..	1	1	Stone .....	3	2	5
Paralysis .....	12	5	17	Disease of bladder .....	9	7	16
Delirium Tremens .....	1	3	4	Dysuria .....	1	1	2
Chorea .....	3	10	13	Stricture of urethra .....	2	1	3
Epilepsy .....	3	5	8	Urine, extravasation of, ..	1	1	2
Hysteria .....	16	24	40	retention of, .....	9	8	17
Hypochondriasis .....	2	2	4		39	31	70
Cephalalgia .....	8	5	13	<b>IX.—Diseases of the Organs of Generation:—</b>			
Disease of brain .....	2	9	11	Amenorrhœa & Chlorosis ..	33	23	56
Disease of spinal marrow ..	3	1	4	Dysmenorrhœa .....	2	1	3
Sciatica .....	4	2	6	Leucorrhœa .....	4	2	6
Amaurosis .....	4	..	4	Disease of uterus .....	14	11	25
Cataract .....	8	6	14	Hydrocele .....	8	4	12
Corneitis .....	10	..	10		61	41	102
Ulcer of Cornea .....	8	..	8		105	113	218
Iritis .....	1	..	1				
Ophthalmia .....	20	40	60				

<sup>d</sup> Drawn up by Mr. Briscoe, the House-Surgeon, and inserted in the 79th and 80th Annual Reports. The classification has been altered in several cases in order to agree more closely with that adopted in the Registrar-General's Reports, but it is not certain that these changes have always been improvements.

	'49	'50	Both years		'49	'50	Both years
<b>X.—Diseases of the Organs of Locomotion:—</b>				<b>XII.—Malformations:—</b>			
Inflammation of elbow ..	2	2	4	Hare-lip .....	2	..	2
of knee .....	11	5	16	<b>XVII.—External Causes:—</b>			
of ankle .....	3	1	4	Burns and scalds .....	8	2	10
of foot .....	4	..	4	Fracture of skull .....	1	2	3
of bursa .....	3	2	5	of lower jaw .....	1	..	1
Rheumatism (chronic) ..	32	40	72	of clavicle .....	3	3	6
Periostitis .....	..	3	3	of upper arm .....	3	6	9
Caries of spine .....	6	7	13	of fore arm .....	5	7	12
Necrosis of tibia .....	6	2	8	of ribs .....	2	2	4
of ulna .....	1	..	1	of pelvis .....	2	..	2
Disease of shoulder .....	5	2	7	of thigh .....	8	10	18
of ulna .....	..	1	1	of patella .....	2	..	2
of elbow .....	4	2	6	of leg .....	15	13	28
of wrist .....	1	5	6	of leg (compound) ..	3	7	10
of finger .....	7	3	10	of fibula .....	3	4	7
of hip .....	13	11	24	Dislocation of shoulder ..	2	1	3
of knee .....	27	25	52	Wounds & contusions ..	36	53	89
of ankle .....	9	7	16	Gun-shot wound of arm ..	1	..	1
of foot .....	5	3	8	of hand .....	..	1	1
of toe .....	1	2	3	of foot .....	1	..	1
Weakness of ankle .....	2	3	5		96	111	207
Pes Equinus .....	1	..	1	<b>CLASS</b>			
Pes Equino-varus .....	..	5	5	I .....	22	18	40
Valgus .....	..	5	5	II .....	164	151	315
	143	136	279	III .....	33	48	81
<b>XI.—Diseases of the Integumentary System:—</b>				IV .....	105	113	218
Acne .....	1	..	1	V .....	23	19	42
Eczema .....	11	11	22	VI .....	30	13	43
Erythema .....	1	1	2	VII .....	39	42	81
Ichthyosis .....	1	..	1	VIII .....	39	31	70
Lepra .....	2	6	8	IX .....	61	41	102
Lupus .....	1	1	2	X .....	143	136	279
Pemphigus .....	..	1	1	XI .....	28	28	56
Porriago .....	3	3	6	XII .....	2	..	2
Psoriasis .....	4	5	9	XVII .....	96	111	207
Onychia .....	4	..	4	<b>Diseases unmentioned, or of uncertain seat .....</b>			
	28	28	56		11	8	19
				<b>TOTAL .....</b>	<b>796</b>	<b>759</b>	<b>1555</b>

CAUSES OF DEATH. CLASSIFICATION OF DISEASES.	YEARS										Yearly Average
	1841	'42	'43	'44	'45	'46	'47	'48	'49	'50	
I.—Zymotic (i. e. Epidemic, Endemic, and Contagious Diseases } SPORADIC DISEASES:—	2	1	3	3	1	5	12	7	9	6	4.9
II.—Dropsy, Cancer, and other Diseases of uncertain or variable Seat } III.—Tubercular Diseases	10	5	11	5	1	..	3	3	2	3	4.3
IV.—Diseases of the Brain, Spinal Marrow, Nerves, and Senses } V.—Diseases of the Heart and Blood-vessels	8	4	6	4	4	4	8	5	12	7	6.2
VI.—Diseases of the Lungs, and of the other Organs of Respiration } VII.—Diseases of the Stomach, Liver, and other Organs of Digestion	3	2	..	2	1	1	2	..	2	1	1.4
VIII.—Diseases of the Kidneys, &c. .... IX.—Childbirth, Diseases of the Uterus, &c. ....	1	1	1	1	2	2	..	1	6	1	1.6
X.—Rheumatism, Diseases of the Bones, Joints, &c. .... XI.—Diseases of the Skin, Cellular Tissue, &c. ....	3	1	..	..	1	1	2	4	1	2	1.5
XII.—Malformations XIII.—Premature Birth and Debility	1	1	1	1	2	2	7	6	1	2	2.4
XIV.—Atrophy XV.—Age	2	2	1	3	..	2	7	5	4	4	3.0
XVI.—Sudden. XVII.—Violence, Privation, Cold, and Intemperance	..	..	..	..	1	..	..	1	1	..	.3
Causes not specified	..	..	..	..	..	..	..	1	..	..	.1
TOTAL FROM ALL CAUSES	1	..	..	..	..	..	..	..	..	..	.1
	41	30	31	28	17	23	55	40	46	35	34.6

N. B. These tables, and also those on pp. 56, 7, are chiefly due to Mr. Briscoe.

CAUSES OF DEATH. LIST OF SPECIFIC DISEASES.	YEARS										Yearly Average
	1841	'42	'43	'44	'45	'46	'47	'48	'49	'50	
I.—Small-Pox Diarrhoea Typhus Rheumatic Fever Erysipelas	..	..	1	..	..	3	..	..	1	..	.1
II.—Hæmorrhage Dropsy Abscess Mortification Cancer	..	..	2	..	..	..	1	..	..	..	.3
III.—Scrofula Tabes Mesenterica Phthisis (or Consumption) Hydrocephalus	5	2	1	3	..	..	..	..	1	..	1.2
IV.—Cephalitis Apoplexy Paralysis Disease of Brain, &c.	1	..	4	..	..	..	1	1	..	..	.7
V.—Aneurysm Disease of Heart, &c.	1	2	1	1	1	1	1	1	2	2	1.5
VI.—Laryngitis Bronchitis Pleurisy Pneumonia Disease of Lungs, &c.	4	2	1	..	2	1	2	3	8	2	2.5
VII.—Ascites Ulceration of Intestines Hernia Disease of Liver Disease of Spleen	..	..	..	..	..	1	..	..	1	..	.1
VIII.—Nephritis, or Bright's Disease Diabetes Stone Stricture Disease of Kidneys	3	2	5	4	2	3	4	2	4	5	3.4
IX.—Ovarian Dropsy Disease of Uterus	1	..	..	..	..	..	1	..	..	..	.2
X.—Disease of Joints, &c.	1	..	..	..	..	..	1	..	1	..	.3
XI.—Carbuncle	1	1	..	..	..	..	..	..	..	..	.4
XVII.—Burns and Scalds Hanging &c. Fractures Wounds	..	..	..	..	..	..	1	..	1	..	.3
	1	1	1	1	2	2	..	4	1	2	1.3
	..	..	..	..	..	..	1	2	..	1	.1
	1	..	..	..	..	1	..	..	..	1	.5
	..	..	..	..	..	1	..	..	..	..	.1
	2	1	..	..	1	..	1	1	1	1	.4
	..	1	1	..	..	..	..	..	..	..	.4
	..	..	..	..	..	..	..	..	1	2	.2
	1	1	1	1	2	2	..	..	4	1	1.3
	..	..	..	..	..	..	..	1	..	..	.1
	1	..	..	..	..	..	1	2	..	1	.5
	..	..	..	..	..	1	..	..	..	..	.1
	2	1	..	..	1	..	..	1	1	1	.4
	..	1	1	..	..	..	..	..	..	..	.4
	..	..	..	..	..	..	..	..	1	2	.2
	1	..	..	..	1	1	3	4	..	..	1.0
	..	..	..	..	..	1	3	2	1	1	.8
	..	..	..	1	1	..	..	..	..	..	.2
	..	..	..	..	..	1	3	1	3	1	.9
	..	..	..	..	..	..	..	1	..	..	.1
	..	1	3	..	..	1	2	..	3	..	1.0
	1	1	1	..	..	..	..	..	..	..	.3
	1	..	..	..	1	3	2	..	..	..	.7
	..	..	..	..	..	1	..	..	1	..	.2
	..	..	..	..	..	..	..	..	..	1	.1
	1	..	..	..	..	..	..	..	1	..	.1
	1	..	..	..	..	..	..	..	..	..	.1
	5	3	2	2	2	..	5	2	3	..	2.4
	..	..	1	..	..	..	..	..	..	..	.1
	3	8	3	4	1	3	7	5	3	3	4.0
	2	1	1	3	2	2	2	2	1	5	2.1

CAUSES OF DEATH. CLASSIFICATION OF DISEASES.	AGE						Total	Yearly Average
	0 to 2	2 to 5	5 to 15	15 to 40	40 to 60	60 and over		
I.—Zymotic (i. e. Epidemic, Endemic, and Contagious) Diseases.....	..	..	1	8	4	2	15	4.9
SPORADIC DISEASES :—								
II.—Dropsy, Cancer, and other Diseases of uncertain or variable Seat.....	..	..	..	..	4	1	5	4.3
III.—Tubercular Diseases .....	..	..	3	10	5	1	19	6.2
IV.—Diseases of the Brain, Spinal Marrow, Nerves, and Senses .....	..	..	..	..	2	1	3	1.4
V.—Diseases of the Heart and Bloodvessels..	..	..	..	3	3	1	7	1.6
VI.—Diseases of the Lungs, and of the other Organs of Respiration .....	..	..	..	1	2	..	3	1.5
VII.—Diseases of the Stomach, Liver, and other Organs of Digestion.....	..	..	..	2	..	1	3	2.4
VIII.—Diseases of the Kidneys, &c.....	..	1	1	6	..	..	8	3.0
IX.—Childbirth, Diseases of the Uterus, &c...	..	..	..	1	1	..	2	.3
X.—Rheumatism, Diseases of the Bones, Joints, &c.....	..	..	..	1	..	..	1	.1
XI.—Diseases of the Skin, Cellular Tissue, &c.	..	..	..	..	..	..	..	.1
XII.—Malformations.....	..	..	..	..	..	..	..	..
XIII.—Premature Birth and Debility .....	..	..	..	..	..	..	..	..
XIV.—Atrophy .....	..	..	..	..	..	..	..	..
XV.—Age .....	..	..	..	..	..	..	..	..
XVI.—Sudden .....	..	..	..	..	..	..	..	..
XVII.—Violence, Privation, Cold, and Intemperance.....	..	1	2	6	2	4	15	8.6
Causes not specified .....	..	..	..	..	..	..	..	.2
<b>TOTAL FROM ALL CAUSES..</b>	..	2	7	38	23	11	81	34.6

N. B.—The average is reckoned from the number of

CAUSES OF DEATH. LIST OF SPECIFIC DISEASES.	AGE						Total	Yearly Average
	0 to 2	2 to 5	5 to 15	15 to 40	40 to 60	60 and over		
I.—Small-Pox.....	..	..	..	1	..	..	1	.1
Typhus.....	..	..	1	3	..	..	4	1.4
Erysipelas.....	..	..	..	4	4	2	10	2.7
II.—Dropsy .....	..	..	..	..	..	1	1	1.2
Cancer .....	..	..	..	..	4	..	4	1.5
III.—Scrofula .....	..	..	2	7	1	..	10	2.5
Phthisis, or Consumption .....	..	..	1	3	4	1	9	3.4
IV.—Cephalitis .....	..	..	..	..	1	..	1	.3
Apoplexy .....	..	..	..	..	..	1	1	.3
Paralysis .....	..	..	..	..	1	..	1	.4
V.—Aneurysm .....	..	..	..	..	2	..	2	.3
Disease of Heart .....	..	..	..	3	1	1	5	1.3
VI.—Bronchitis.....	..	..	..	..	1	..	1	.5
Pneumonia .....	..	..	..	1	1	..	2	.4
VII.—Ulceration of Intestines .....	..	..	..	1	..	..	1	.2
Disease of Liver .....	..	..	..	1	..	1	2	.8
VIII.—Nephria, or Bright's Disease .....	..	..	..	4	..	..	4	.9
Diabetes .....	..	..	..	1	..	..	1	.1
Stone.....	..	1	1	1	..	..	3	1.0
IX.—Ovarian Dropsy .....	..	..	..	..	1	..	1	.2
Disease of Uterus.....	..	..	..	1	..	..	1	.1
X.—Disease of Joints .....	..	..	..	1	..	..	1	.1
XVII.—Burns and Scalds .....	..	1	2	..	..	..	3	2.4
Fractures and Contusions .....	..	..	..	4	1	1	6	4.0
Wounds .....	..	..	..	2	1	3	6	2.1

  

1849, '50.		Yearly Average	1849, '50.		Yearly Average
Males .....	59	25.1	Inhabitants of Oxford .....	24	9.2
Females .....	22	9.5	From the Country .....	57	25.0
			Unknown .....	0	.4
<b>Total ....</b>	<b>81</b>	<b>34.6</b>	<b>Total ....</b>	<b>81</b>	<b>34.6</b>

Deaths occurring in the ten years 1841—1850.

*Classified List of Deaths in the Infirmary during the  
years 1849, '50<sup>a</sup>.*

**SMALL-POX.**—Male 0, Female 1: Total 1.

No. 177.—F. 36, servant; believed to have been vaccinated; supposed to have caught the disease near London; died in 11 days from first sickening; Small-pox of a very malignant type, both confluent and petechial.

**TYPHUS.**—Males 4, Female 0: Total 4.

No. 163.—M. 17, farmer's labourer; typhus, 3 months.

No. 164.—M. 21, boot-closer; typhus, ulceration of ilium, 3 weeks.—*P.M.*

No. 165.—M. 40, paper-maker, out of work; recovering from typhus after about 3 weeks illness; death in about 38 hours from perforation of ilium.—*P.M.*

No. 197.—M. 35, baker; stated that he had been ailing for 4 months; sent into the Infirmary as a fever case of 3 weeks' duration; symptoms obscure, but not urgent; on fourth day after admission became suddenly collapsed, and died in a few hours.—*P.M.* Ulceration of ilium and cæcum, perforation of ilium, peritonitis:—serous effusion on surface of brain.

**ERYSIPELAS.**—Males 8, Females 2: Total 10.

No. 139.—M. 45, farmer's labourer; (North Attic Ward;) admitted for stricture of urethra; after 5 or 6 weeks idiopathic erysipelas came on, commencing with sore throat, and extending to face and head; bronchitis; death in 7 days.

No. 151.—M. 60, farmer's labourer; (East Ward, North Attic;) admitted for cancer of lip; operation; in about a week was attacked by erysipelas of face and head; was apparently recovering, when rheumatic pains in all his limbs came on, for which colchicum was given; severe diarrhœa followed, of which he sank in 3 days.

No. 157.—F. 21, servant; (Litchfield Ward;) admitted for scrofulous ulcers of neck of 4 years standing; in about 5 weeks attacked by erysipelas, extending to face and head; death in 7 days.

No. 158.—M. 24, farmer's labourer; (Centre Ward, Attic;) admitted for hemiplegia of right side of 5 weeks standing; erysipelas of head and face followed the application of a blister to the neck; death in 6 days.—*P.M.* Softening of left optic thalamus and corpus striatum.

No. 170.—M. 42, labourer; (Rowney Ward;) admitted with syphilitic ulcer of scalp; in about 2 weeks the wound was attacked by erysipelas, which extended over head, face, and neck; death in 11 days, hastened by bronchitis during the last 12 hours.

No. 183.—M. 50, shoemaker; (North Attic Ward;) admitted for fistula; four weeks after admission, a small wound of leg was attacked by erysipelas, which extended over the whole limb, accompanied with pneumonia of right lung. Death in 12 days.—*P.M.* Upper lobe of right lung hepatized, middle and lower lobes softened like the spleen of a fever patient, left lung congested.

No. 188.—F. 31, schoolmistress; (Litchfield Ward;) admitted for an encysted tumour, the size of a pullet's egg, over left parotid gland, which was removed by excision; on the second day the wound was attacked by erysipelas, which soon spread over face and head, accompanied by low bronchitis; died on the fifth day after the operation.

No. 190.—M. 62, carpenter; (in Marlborough Ward when attacked, removed to

<sup>a</sup> Almost the whole of this list was drawn up by Mr. Briscoe.

Fever Ward;) admitted for ulceration of leg and foot of six months' duration, probably depending upon disease of heart; six weeks after admission the wound was attacked with erysipelas, from which he sank on the third day.

No. 192.—M. 53, labourer; (in Marlborough Ward when attacked, removed to Fever Ward;) admitted for a small epithelial cancer of skin over calf of left leg, which was removed by excision; operation followed by erysipelas which subsided; in 11 weeks the wound, not having quite healed, was again attacked by erysipelas, of which he sank on the ninth day.

No. 196.—M. 30, servant; (Rowney Ward;) admitted for paralysis agitans of 8 months' duration, affecting some of the muscles supporting the head, for which a seton was inserted in back of neck; slight erysipelas of neck and ears ensued; death in six days.—*P.M.* Serous effusion into theca vertebralis.

**DROPSY.**—Male 1, Female 0: Total 1.

No. 213.—M. 60, labourer; admitted for anæmia of 1 year's duration; gradually became weaker, and died comatose four weeks after admission.—*P.M.* The whole body was in a state of extreme anæmia, but no organic disease was detected.

**CANCER.**—Males 2, Females 2: Total 4.

No. 144.—M. 44, farmer's labourer; (East Ward, North Attic;) admitted for tumour of left axilla of 12 months duration; exploratory trochar introduced, followed by capillary phlebitis, extending to the left arm, side, and leg; death in 3 days.—*P.M.* The tumour was found to be of a malignant nature, springing from the periosteum of the scapula; encephaloid cancer, containing scirrhus absorbent glands.

No. 176.—F. 56, wife of farmer's labourer; scirrhus of breast and liver, duration unknown; spontaneous fracture successively of both humeri, and right femur.—*P.M.*

No. 189.—M. 42, farmer's labourer; admitted for constant and severe pain in epigastrium, of 6 weeks' duration; gradually sank, and died 2 months after admission.—*P.M.* A scirrhus ulcer of pyloric extremity of stomach, the size of a half-crown piece.

No. 195.—F. 46, labourer's wife; admitted for ascites, of three months' duration; died 11 days after admission.—*P.M.* Scirrhus tubercle scattered over peritoneum, lumbar glands affected with same deposit; some ascites; a cyst the size of a distended urinary bladder, springing by a narrow pedicle from the right ovary, occupying a central position, and filled with a clear colourless fluid.

See also *Dis. of Heart*, and *Dis. of Uterus*.

**SCROFULA.**—Males 5, Females 5: Total 10.

No. 145.—F. 26, servant. Admitted for pleuro-pneumonia; death from bronchitis in about six weeks from commencement.—*P.M.* Lower two-thirds of both lungs solidified by recent tubercles.

No. 156.—M. 8. Admitted for chronic peritonitis.—*P.M.* Peritoneum thickly studded with tubercles.

No. 160.—F. 25, servant. Admitted for chronic peritonitis.—*P.M.* Whole peritoneum studded with recent tubercular deposit, in parts as much as an inch in thickness.

No. 135.—M. 18, servant. Caries of spine, of uncertain duration; lumbar abscess, 12 months.

No. 153.—F. 24. Caries of spine and lumbar abscess, both of uncertain duration; pleurisy, 3 days.—*P.M.*

No. 171.—M. 11. Scrofulous disease of hip-joint, 8 months; 14 days before death there came on symptoms of acute meningitis.—*P.M.* Serous effusion in both ventricles and on the surface of the brain.

No. 149.—F. 43, wife of a weaver. Scrofulous disease of knee-joint, of 2 years duration; diarrhoea, which had ceased; amputation; gradually sank, and died from exhaustion on the 5th day.

No. 150.—F. 15. (South Attic Ward.) Scrofulous disease of knee-joint of 9 years duration; amputation; erysipelas attacked the stump on the 6th day; died on the 17th.

No. 193.—M. 19, labourer; admitted for scrofulous disease of knee joint, of one year's duration. Amputation, death in six months, after protracted diarrhoea.—*P.M.* Ulceration of ilium, peritonitis, tubercular disease of both lungs.

No. 204.—M. 24, hawker; admitted for chronic peritonitis, of unknown duration, died 4 weeks after admission.—*P.M.* The whole peritoneum studded with minute tubercle, slight ascites.

See also *Ulceration of Intestines.*

**PHTHISIS.**—Males 6, Females 3: Total 9.

No. 137.—M. 42, grocer's assistant. Tubercular disease of both lungs of about 13 months duration; died within 7 days after admission.—*P.M.* Large cavity in left lung; right lung thickly studded with tubercles, of which only a very few had begun to soften; both lungs closely adherent to ribs.

No. 138.—M. 25, railway labourer. Scrofulous disease of hip-joint, of some months standing; phthisis, 3 months.

No. 147.—M. 42, farmer's labourer. Tubercular disease of both lungs of many months duration; hæmoptysis.—*P.M.*

No. 180.—M. 25, labourer. Phthisis, some months; pneumonia, 1 week.

No. 182.—F. 14, labourer's daughter; admitted for diarrhoea with phthisis; 4 weeks after admission was attacked with inflammation of right pleura; death in 9 days.—*P.M.* Right pleura contained upwards of a pint of turbid fluid, with bands of recently effused lymph stretching from one surface to the other; tubercular disease of both lungs.

No. 186.—M. 46, stableman; admitted for hæmoptysis; died two weeks after admission.—*P.M.* Upper lobes of both lungs infiltrated with small tubercle, small cavity in apex of right lung, right pleura contained about 3 pints of bloody serum.

No. 203.—F. 63, labourer's wife; phthisis of long duration.

No. 209.—M. 56, painter; phthisis of uncertain duration; died of pneumonia 10 weeks after admission.

No. 212.—F. 29, needlewoman; phthisis one year, peritonitis 3 days.

**CEPHALITIS.**—Male 1, Female 0: Total 1.

No. 168.—M. 40, farmer's labourer. Chronic inflammation of the membranes of the brain, about 4 months.—*P.M.*

**APOPLEXY.**—Male 1, Female 0: Total 1.

No. 206.—M. 60, baker; fell into a fire during a fit, and severely burnt his left arm from shoulder to hand; was proceeding favourably, when, on sixth day, he had an apoplectic seizure, which carried him off in 2 hours. Decomposition took place so rapidly, that in 12 hours after death a *P.M.* examination could not be made.

**PARALYSIS.**—Male 1, Female 0: Total 1.

No. 143.—M. 45, farmer's labourer. Paraplegia, about 10 weeks.—*P.M.* Inflammation of the lower extremity of the spinal marrow, without softening; slight thickening of the sheath; superficial ulceration of the canal of the 2nd, 3rd, and 4th lumbar vertebræ.

**ANEURYSM.**—Males 2, Female 0: Total 2.

No. 141.—M. 42, carpenter. Large aneurysm of the arch of aorta; (symptoms many months;) bursting into right pleura; instantaneous death.—*P.M.* Right pleura full of blood, proceeding from a fissure of the sac of three-fourths of an inch in length.

No. 154.—M. 56, farmer's labourer, formerly soldier. Small aneurysm of the arch of aorta; (symptoms many months;) pressing upon and ulcerating into the trachea; sudden death.—*P.M.*

**DISEASE OF HEART.**—Males 5, Female 0: Total 5.

No. 142.—M. 38, groom. Great and general hypertrophy of heart; no valvular disease; incipient granular disease of both kidneys; albuminous urine; anasarca, ascites, hydropericardium, double hydrothorax, in short almost universal dropsy. Symptoms of only 2 months' duration; sudden death from suffocation.—*P.M.*

No. 146.—M. 55, mechanic. Dilatation of the heart, with slight valvular disease of some years' duration; hydrothorax.—*P.M.*

No. 174.—M. 27, sawyer. Enlarged flabby heart of uncertain duration; congestion of lungs: hydrothorax, 12 hours.—*P.M.*

No. 166.—M. 73, farmer's labourer. Admitted for retention of urine; sudden death, probably from disease of heart.—*No P.M.*

No. 217.—M. 25, labourer; admitted for disease of heart of fifteen weeks' duration; died 2 weeks after admission.—*P.M.* Pericardium distended with turbid serum, heart covered with recently effused lymph; medullary disease of left ventricle, implicating aortic valves; heart hypertrophied.

**BRONCHITIS.**—Male 0, Female 1: Total 1.

No. 211.—F. 55, servant; admitted for chronic ophthalmia; died 5 weeks after admission of diffused bronchitis of 3 days' duration.

**PNEUMONIA.**—Males 2, Female 0: Total 2.

No. 162.—M. 21. Pneumonia, 10 days. History doubtful: probably following delirium tremens.

No. 208.—M. 51, labourer; admitted for disease of liver; 9 weeks after admission was attacked with pneumonia, of which he died in 7 days.—*P.M.* Lower lobes of both lungs hepatized; cirrhosis of liver.

**ULCERATION OF INTESTINES.**—Male 1, Female 0: Total 1.

No. 184.—M. 16, labourer; admitted for diarrhoea of 9 months' duration, with slightly albuminous urine; died 3 weeks after admission.—*P.M.* Ulceration of small and large intestines; great thickening of the ureters and pelves of kidneys; tubercular deposits in both lungs.

See also *Typhus.*

**DISEASE OF LIVER.**—Male 1, Female 1: Total 2.

No. 175.—F. 20, servant. Granular degeneration of liver; ascites, 14 months; anasarca of lower extremities; pleurisy, 1 month.—*P.M.*

No. 216.—M. 73, porter; cirrhosis of liver; ascites and general dropsy; great enlargement of heart.—*P.M.*

**NEPHRIA.**—Males 2, Female 1: Total 3.

No. 152.—F. 30. Admitted for total suppression of urine; died comatose 2 days after admission; acute pericarditis, 24 hours.—*No P.M.*

No. 179.—M. 15, farmer's labourer. Admitted for general dropsy; albuminuria; died of suffocation in about 30 hours.—*P.M.* Hydrothorax of both sides; congestion of both lungs; hydropericardium; slight hypertrophy of the heart; no valvular disease; ascites; both kidneys granular, and congested, with the tubuli loaded with blood globules.

No. 181.—M. 15. Albuminuria; purpura, and anasarca, 5 months; hydro-pericardium, 3 days.—*P.M.* Enlarged, flabby heart; no valvular disease; both kidneys granular and mottled.

No. 191.—M. 34, labourer; admitted for nephria; died 18 days after admission of peritonitis of 24 hours' duration.—*P.M.* Remains of former peritonitis; peritoneum intensely injected, containing a pint of turbid fluid with flakes of lymph; both kidneys in the second stage of granular disease.

DIABETES.—Male 1, Female 0: Total 1.

No. 172.—M. 32, farmer's labourer. Diabetes, of uncertain duration.

STONE.—Males 3, Female 0: Total 3.

No. 187.—M. 15, labourer; admitted for stone in bladder of 9 years' duration; on day appointed for operation was attacked with peritonitis, and died in 24 hours.—*P.M.* Pelvic portion of peritoneum intensely injected, containing about half a pint of turbid fluid with shreds of lymph; a phosphatic calculus, the size of a walnut, in bladder, and a spindle-shaped lithic acid one, the size of a bean, in the prostatic portion of urethra; a small abscess in cellular tissue between vesiculæ seminales.

No. 214.—M. 3; stone in bladder, of uncertain duration; operation followed by great collapse; death in 24 hours.

No. 215.—M. 5, labourer's son; stone in bladder of one year's duration; while waiting for operation, was attacked with peritonitis, of which he died in 24 hours.—*P.M.* Peritoneum intensely injected, containing a small quantity of turbid fluid; a stone in the bladder the size of a bullet, composed of lithate of ammonia.

OVARIAN DROPSY.—Total 1.

No. 136.—F. 57, wife of a porter. Ovarian dropsy of about 18 months' duration.—*P.M.* Left ovary converted into a tumour full of cysts, containing a semi-fluid substance of the consistency of treacle, partly white, partly yellow; and also one very large cyst, with very thin parietes, containing about 30 pints of a brown grumous fluid.

DISEASE OF UTERUS.—Total 1.

No. 202.—F. 38, labourer's wife; admitted for ulceration of os and cervix uteri. Death from peritonitis of 48 hours' duration.—*P.M.* Malignant ulceration of os and cervix uteri, which had perforated the peritoneum, where it is reflected from uterus to rectum; pelvic peritoneum injected, and containing a considerable quantity of turbid fluid.

DISEASE OF JOINTS, &c.—Male 0, Female 1: Total 1.

No. 173.—F. 19. Exostosis of femur, of 10 months' duration; amputation; secondary hæmorrhage on the 6th day; death from exhaustion on the 14th.

BURNS.—Male 1, Females 2: Total 3.

No. 140.—F. 6, daughter of a farmer's labourer. Burnt on arms, neck, and chest, from her clothes taking fire; died in 2 days.

No. 148.—M. 4. Burnt on arms, neck, and chest, from his clothes taking fire; died in 5 days.

No. 169.—F. 8. Burnt on arms, neck, and chest, from her clothes taking fire; died in 6 hours.

FRACTURES.—Males 6, Female 0: Total 6.

No. 155.—M. 35, railway labourer. Fracture of pelvis, from being run over by a wagon while working on an unfinished railway; died in about 3 hours.—*P.M.*

No. 161.—M. 60, labourer. Fracture of pelvis, from being run over by a cart laden with stones; died in about 4 hours.

No. 167.—M. 31, carter. Fracture of skull, from being run over (while intoxicated) by the wheel of a cart; died in about 4½ hours.—*P.M.*

No. 198.—M. 81, labourer; from having been run over by a wagon, had sustained a fracture of left thigh in two places, a comminuted fracture of right thigh, extending through condyles into knee joint, a laceration of skin of right leg, exposing tendo Achillis, followed by mortification of limb as high as the knee death in five days.

No. 201.—M. 53, labourer; admitted for concussion of the brain, caused by a fall from a load of barley; died 27 days after the accident.—*P.M.* Fissure of right parietal and temporal bone, no depression, hæmorrhage on surface of brain; softening of the brain opposite the fissure.

No. 210.—M. 19, servant; admitted for loss of power in lower extremities consequent on jumping from a height of 14 feet headlong into deep water; died 3 months after admission with bed sores.—*P.M.* No lesion to the spinal cord or canal could be detected.

WOUNDS.—Males 5, Female 1: Total 6.

No. 159.—F. 23, spinster, farmer's labourer. Lower part of right fore-arm cut off by a thrashing machine; absorption of matter from the wound; abortion in 17 days; died the following day.—*P.M.* No appearance of injury except in the arm; left arm much swollen, and likely to mortify.

No. 185.—M. 38, paper-maker; right arm squeezed between the rollers of a paper machine; amputation just below shoulder joint; death in 60 hours.—*P.M.* Cellular tissue of axilla and side of chest emphysematous and infiltrated with sero-purulent fluid.

No. 194.—M. 74, labourer; by a fall with his right knee upon a bill-hook, the joint was laid open, the patella being cut across; gradually sank and died in 48 hours.

No. 200.—M. 50, labourer; admitted for cut throat; died on thirteenth day from diffused cellular inflammation of left arm, probably from the absorption of some animal poison; death in 24 hours, from commencement of cellular inflammation.

No. 205.—M. 67, labourer; deep wound from a reaping-hook in calf of left leg, dividing posterior tibial artery and veins; these were tied, but he had lost so much blood before admission, that he died in 48 hours.—*P.M.*<sup>b</sup>

No. 207.—M. 73, labourer; left leg all but severed from thigh, by an incised wound through the knee joint, from a fall, with knee in a bent position, upon a scythe, which had cut through the upper part of patella, and had completely separated the posterior two thirds of the condyles of femur from the shaft of the bone; vessels and nerves in popliteal space uninjured. Amputation was performed through the wound; gradually sank, and died 5 days after the accident.

<sup>b</sup> There is a full account of this case by Mr. Hussey in the *London Medical Gazette*, Jan. 1851.

*Cases of Amputation, Lithotomy, and Hernia in the Infirmary during the years 1849, '50<sup>a</sup>.*

AMPUTATION.

No. b	Date of operation	Sex	Age	Limb removed	Nature of disease.	Duration of disease	Date of discharge	Result
149	1849 Apr. 2	F.	21	left thigh	disease of knee	12 mths.	1849 May 9	cured
150 <sup>c</sup>	Apr. 16	F.	43	right thigh	disease of knee	2 yrs.	Apr. 20	died
151 <sup>c</sup>	Apr. 23	F.	15	left thigh	disease of knee	9 yrs.	May 10	died
153	May 22	M.	41	right leg	gun-shot wound	21 days	July 4	cured
154	Aug. 1	M.	34	left thigh	compound fracture &c. on railway	....	Dec. 12	cured
155	Aug. 23	M.	26	left thigh	gangrene following simple fracture of thigh (rupture of popliteal artery)	....	Oct. 24	cured
157	Sept. 21	F.	29	left up. arm	disease of elbow	9 mths.	Oct. 24	cured
158	Nov. 1	F.	22	left thigh	disease of knee	16 mths.	Dec. 26	cured
159 <sup>d</sup>	Nov. 5	F.	19	right thigh	disease of knee	10 mths.	Nov. 19	died
160 <sup>e</sup>	Nov. 12	M.	18	right thigh	disease of knee	9 mths.	1850 May 26	died
162	Dec. 21	M.	16	right leg	compound fracture, &c.	....	Mar. 13	cured
164 <sup>f</sup>	1850 Feb. 1	M.	38	right up. arm	laceration by machinery	[9 hrs.]	Feb. 4	died
165	Feb. 4	M.	35	left thigh	gangrene after ligature of femoral artery for aneurysm, Nov. 26.	....	Mar. 13	cured
167	Mar. 21	M.	35	right thigh	disease of knee	18 mths.	May 8	cured
169	June 24	M.	19	right leg	sloughing after compound fracture, &c. on railway	....	Aug. 7	cured
170	Aug. 2	F.	45	right leg	compound fracture, &c. by machinery	....	Oct. 2	cured
171 <sup>g</sup>	Aug. 14	M.	70	left thigh	injury to knee by a scythe	[few hrs.]	Aug. 19	died
171 <sup>h</sup>	Aug. 23	M.	57	r. fore arm	laceration by machinery	....	Oct. 30	cured
172	Sept. 10	M.	30	l. fore arm	laceration by machinery	....	Oct. 16	cured
173	Sept. 10	F.	50	right leg	disease of ankle	5 mths.	Nov. 6	cured

<sup>a</sup> Extracted (with a few trifling alterations,) from Mr. Hussey's Statistical Report of Cases of Amputation, &c., in *Trans. of the Prov. Med. and Surg. Assoc.*, vol. xix.

<sup>b</sup> The numbers in this column refer to the case as entered in the Register of Operations.

<sup>c</sup> "A married woman, of 43, with disease of the knee of 2 years' standing, died on the 5th day exhausted:" and, "A girl, of 15, with disease of the knee of 9 years' standing, died in 17 days exhausted." [See List of Deaths in Infirmary, under *Scrofula*, Nos. 149, 150.]

<sup>d</sup> "A young woman, of 19, with disease of the knee of 10 months' duration, died the 15th day exhausted. She had secondary hæmorrhage the 7th day after amputation." [See List of Deaths in Infirmary, under *Disease of Joints, &c.*]

<sup>e</sup> "A lad, of 18, with disease of the knee of 9 months' duration, died in the 7th month, with diarrhœa. Examination *post-mortem* showed ulceration of the ilium, with peritonitis, and tubercles deposited throughout the lungs. He did not, after the operation, recover his health sufficiently to allow of his being discharged from the Infirmary before his death." [See List of Deaths in Infirmary, under *Scrofula*, No. 193.]

<sup>f</sup> "A paper-maker, of 38, with laceration of the whole upper extremity from the hand nearly to the shoulder, and extending into the axilla, the wrist and elbow joints having been also laid open, died on the 4th day, having gradually sunk." [See List of Deaths in Infirmary, under *Wounds*, No. 185.]

<sup>g</sup> "A man, of 70, died the 6th day. He had fallen with his knee bent on a scythe, which passed through the patella, and separated the posterior two-thirds of the condyles of the femur, with part of the shaft, from the rest of the bone. The popliteal vessels were not wounded, and there had been very little hæmorrhage. The operation was, in fact, little more than completing the separation of the limb. He went on favourably till the 4th day, when he began to sink rapidly." [See List of Deaths in Infirmary, under *Wounds*, No. 207.]

LITHOTOMY.

No.	Date of operation	Sex	Age	Nature of calculus.	Duration of disease	Date of discharge	Result
152	1849 Apr. 23	M.	7	{ oxalate of lime, coated by phosphate of lime, with a little phosphate of ammonia and magnesia, the size of a small bean }	4 yrs.	1849 May 30	cured
156	Sept. 7	F.	8	{ oxalate of lime, coated by lithate of ammonia, 90 gr. }	....	Oct. 4	cured
163	Dec. 31	M.	32	lithic acid and lithate of ammonia	sev. mths.	Mar. 6	cured
[A] <sup>h</sup>	1850 Oct. 25	M.	2½	triple phosphate, (?) 46 gr.	....	1850 Oct. 26	died

HERNIA.

No.	Date of operation	Sex	Age	Situation	How long strangul.	Previous existence and history	Contents	Date of discharge	Result
147	1849 Jan. 29	M.	60	{ femoral, left side }	48 hrs.	{ 3 yrs., returnable, no truss worn }	intestine	1849 Feb. 28	cured
148	Mar. 22	M.	34	{ inguinal, rht. side }	36 hrs.	{ congenital, truss worn till 7 or 8 yrs. ago }	{ very large coil of intestine }	Apr. 18	cured
168	1850 May 1	M.	26	{ femoral, rht. side }	18 hrs.	{ since childhood, reducible, no truss worn }	intestine	1850 July 31	cured

The cost of each *full* bed in '49 was about £29.10s., in '50 about £28.5s., both which sums are rather moderate when compared with other provincial hospitals. The average length of time spent in the house by each In-patient in '49 was about 7 weeks, in '50 about half a day less. This is about a week longer than the average number of days that In-patients remain elsewhere, and tended to make the cost of each In-patient rather high, viz. about £3.19s. in '49, and about £3.15s. in '50. The average cost of each Out-patient was about 3s. in '49, and about 3d. less in '50, both which sums are rather high<sup>i</sup>.

<sup>h</sup> "A boy, of 2½, died the next day, exhausted. The calculus, composed of phosphate of ammonia and magnesia, (?) and 46 grains in weight, was held in a pouch at the fundus of the bladder, and great difficulty was found in seizing it, until it was brought within reach of the forceps by pressing firmly above the pubes.....*Post-mortem* examination was not made." [See List of Deaths in Infirmary, under *Stone*, No. 214.]

<sup>i</sup> In making these calculations the whole cost of the establishment was divided among the In-patients, with the exception of drugs, surgical instruments, &c., which were divided equally among *all* the patients. The result is not offered as being perfectly accurate, but as being probably as near an approximation to the truth (especially for the purpose of comparison with other provincial hospitals,) as the case admits of.

ERRATA.

There are numerous errors in the preceding pages, some no doubt due to the compositor, but many more for which the Editor alone is responsible. Happily most of them are of little or no real consequence; and therefore, instead of enumerating all of these, it seemed better to explain how they were occasioned, so that the experience gained in preparing this book may perhaps be useful to others.

In estimating the number of inhabitants, where no better means of judging could be procured, it was assumed that the parochial population had increased at the same uniform rate between '41 and '50 as between '31 and '41<sup>a</sup>. This turned out to be incorrect, and accordingly the estimates in the *Monthly* and *Quarterly* Reports are too high by more than 1000, and the calculations based upon them cannot be entirely depended on. The estimate at p. 89, and the calculations in the *Annual* Reports and in the Appendix, are probably sufficiently accurate for all ordinary purposes.

It was not known at first that Isis Row, Thames Street, and some more houses near Folly Bridge, do not belong to the Oxford District, but to the Cumnor Sub-District. This was another source of numerous minute errors in some of the earlier *Monthly* and *Quarterly* Reports, which however are believed to have been corrected in the *Annual* Reports.

It was intended originally to arrange both Births and Deaths according to the date at which these events took place, not according to the date of registration. In the case of the Births this plan was soon found to be impracticable on account of the length of time (amounting to several weeks,) that sometimes elapses before an infant's birth is registered; but, as the Deaths are generally registered within a few days after they occur, no such impossibility existed in their case, and they were therefore arranged according to the dates at which they occurred. However this plan occasioned an increase of trouble more than equivalent to any advantage derived from it; and for all ordinary statistical purposes the date of registration is as good as the date of death. Only it must be borne in mind that sometimes the mortality of March, June, Sept., and Dec. is swelled by a number of Coroners' Inquests, the registration of which has been put off till the end of the quarter. Several unimportant errors are due to this cause<sup>b</sup>.

Some errors occurred at first in classifying the causes of death from too great an anxiety to follow the mode adopted at the General Register Office. For instance, in the Abstracts of the Causes of Death made at that Office the term "*inanition*" is understood to signify *want of breast milk*, and accordingly at first whenever the word occurred in the Oxford Register the Deaths were classed under that head. It was, however, afterwards ascertained positively that the medical practitioner who chiefly used the term did not intend it to signify *want of breast milk*, but *congenital debility*, and several minute alterations were consequently rendered necessary. The examination of the depositions of witnesses at the Coroners' Inquests explained the causes of several deaths that had been registered as "Sudden, by Visitation of God."

<sup>a</sup> The population of Oxford (exclusive of Colleges and Halls, and public buildings,) increased 2718 between '31 and '41, or 13.68 per cent.; and 1962, or 8.68 per cent., between '41 and '51.

	'31	'41	'51
Parochial population of Oxford ..	19,675	22,593	24,555
Extra-parochial do. .. .. .	2,160	2,181	1,925
	22,035	24,774	26,480

<sup>b</sup> It may be mentioned that the number of errors caused by the omission of one single death in any month varied from about 5 to about 30, according to the greater or less time that the original error remained undetected.

I.

pp. 2, 3. The death of the infant ascribed to "Disease of Heart" (Class V.) should be transferred to "Malformations" (Class XII.); and two deaths ascribed to "Apoplexy," and "Convulsions" (Class IV.) should be transferred to "Sudden" (Class XVI.).

p. 4. The estimated height of the Barometer Cistern above the Sea level given in this and the three following Reports (250 feet) appears from some recent investigations to be too great. The height given in the later Reports (210 feet) is probably not far from the truth.

p. 4. ll. 6, 7. For 5120 read 5290, and for 1540 read 1590.

pp. 7, 11. The *Inquest* on a boy, living in St. Aldate's parish, who was drowned, was held in *Febr.*, but his *death* occurred in *Jan.*

p. 7, last line. For *Influenza*, read *Measles*.

p. 8, ll. 5, 7. For 5780 read 5620, and for 1680 read 1630.

pp. 10, 11. The death of the infant ascribed to "Want of Breast Milk" (Class XVII.) should be transferred to "Premature Birth and Debility" (Class XIII.).

p. 15. The deaths in St. Aldate in '44, '5 were 14 instead of 12, making the number of deaths in the South District 43, and the total 163.

p. 15. In '45, '6 the deaths in the Workhouse were 2 instead of 1, and one of the deaths attributed to St. Michael should be transferred to St. Ebbe, making the number of deaths in the Central, South, and Extra-Parochial Districts respectively 36, 28 and 7, and the total 110.

p. 15. In Jan. '47 three deaths attributed to Holywell, St. Martin, and St. Aldate, should be transferred respectively to St. Michael, All Saints, and St. Ebbe.

pp. 16, 18. In Dec. '44 and Dec. '45 the three deaths ascribed to "Hanging, &c." (Class XVII.) should be transferred to "Premature Birth and Debility" (Class XIII.).

pp. 16, 18. In Jan. '45 one additional death is to be ascribed to "Phthisis," and one to "Hydrocephalus," making the number of deaths in the month 57, and in the quarter 163.

pp. 16, 17, 18, 19. In Jan. '46, and Jan. '48, and Feb. '49 the four deaths ascribed to "Want of Breast Milk" (Class XVII.) should be transferred to "Premature Birth and Debility" (Class XIII.).

pp. 16, 18. In Feb. '46 an additional death is to be ascribed to "Phthisis," making the number of deaths in the month 42, and in the quarter 110.

pp. 16, 17, 18, 19. In Feb. '46 and Feb. '48 the two deaths ascribed to "Rheumatism" (Class X) should be transferred to "Rheumatic Fever" (Class I.).

pp. 17, 19. In Feb. '47 the death put down as "Sudden" (Class XVI.) should be transferred to "Disease of Heart" (Class V.).

p. 18. In Jan. '47 one of the deaths attributed to "Disease of Lungs" (Class VI.) should be transferred to "Pneumonia."

pp. 36, 38. In Apr. '47 one of the deaths put down as "Sudden" (Class XVI.) should be transferred to "Fistula" (Class III.), the other to "Apoplexy" (Class IV.).

pp. 37, 39. In March '48 the death ascribed to "Dis. of Heart" (Class IV.) should be transferred to "Dis. of Lungs" (Class V.); and in May '48 the death ascribed to "Sudden" (Class XVI.) should be transferred to "Convulsions" (Class IV.).

p. 46, line 4 from bottom. For *June*, read *July*.

pp. 57, 59. In June '48 one of the deaths ascribed to "Apoplexy" (Class IV.) should be transferred to "Dis. of Heart" (Class V.); as should also the death ascribed to "Sudden" (Class XVI.) in Aug. '48.

p. 60, l. 12 from bottom. For *all the deaths except one*, read *almost all the deaths*.



pp. 61, 62, 63. One of the deaths ascribed to "Premature Birth and Debility" (Class XIII.) should be transferred to "Diarrhœa" (Class I.); the death ascribed to "Ascites" (Class VII.) should be transferred to "Dis. of Liver;" and the death of a boy, aged 8, living in St. Ebbe's parish, is to be added to "Fractures and Contusions" (Class XVII.), making the total number of deaths 110.

pp. 65, 66. The average number of Births in Oct. is 67.9, or 70, when corrected for increase of population.

p. 82. It is probable that the number of Deaths in Class XIII. should be 33 instead of 34, and the total number of Deaths 662 instead of 663.

p. 88. The number of Illegitimate Births in the Workhouse in '49 is given as 8, whereas the total number of Births was only 6. The Writer is unable to correct this error, which may possibly have arisen from confounding the *Oxford* Workhouse with the *Headington* Workhouse, both being in the same Registration Sub-District.

p. 96. ll. 32, 33. For *male* read *female*, and for *female* read *male*.

## II.

p. 4. ll. 6, 7. For 4480 read 4610, and for 810 read 830.

pp. 5, 6, 7. The death of a female aged 54, living in St. Clement's parish, should be added to "Apoplexy" (Class IV.), making the total number of deaths 59.

p. 12. l. 7. For 3870, read 3760.

pp. 13, 33. col. "Amount of Clouds." For 23.2 and 23.0 read 7.7.

pp. 25, 26, 27. The death of a male infant, living in St. Thomas' parish, should be added to "Convulsions" (Class IV.), making the total number of deaths 38.

pp. 35, 36, 38. The death of a member of the University, aged 22, is to be added to "Fractures and Contusions" (Class XVII.) in March '46:—the death of a male infant who was burnt to death in St. Mary-Magdalene parish, is to be transferred from April '46 to March '46:—and the death of an aged woman in March '46 is to be transferred from "Age" (Class XV.) to "Sudden" (Class XVI). The total number of deaths in March was 48, in April 47, and in the Spring 149.

pp. 45, 46, 47. The death of a male child, aged 3 who died of "Poison" (Class XVII.) in the parish of St. Giles', is omitted:—the total number of deaths therefore is 48.

p. 73. l. 5. For *Summer* read *Autumn*.

p. 82. It is probable that the number of Deaths in Class XVII. should be 30 instead of 29, and the total number of Deaths 602 instead of 601.

## III.

p. 1. The Population of Oxford in '41 was 24,774, not 27,443.

p. 18. In the week ending Sept. 29 *two* deaths from Cholera occurred in the *Workhouse*, *one* in the *County Gaol*, and *none* in the *Infirmary*.

It is believed that no other errors of consequence occur in these pages; but if any others are to be found the Reader will perhaps (especially if he has ever undertaken any similar work himself,) kindly excuse them, remembering that Χαλεπὸν ἄνθρωπον οὐκ ἀμαρτάνει ἐν πολλοῖς, τὰ μὲν ὄλως ἀγνοήσαντα, τὰ δὲ κακῶς κρίναντα, τὰ δὲ ἀμελέστερον γράψαντα. (Galen, *De Compos. Medicam sec. Locos*, ii. i. tom. xii. p. 535. ed. Kühn.)

Salus Populi Suprema Lex. (Cicero, *De Leg.* iii. 3.)

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