Mortality of Philadelphia for 1858 : report on meteorology and epidemics : read before the College of Physicians of Philadelphia, February 2, 1859 / by Wilson Jewell.

[Extracted from The American Journal of the Medical Sciences for April, 1859.]

Mortality of Philadelphia for 1858.

REPORT

ON

METEOROLOGY AND EPIDEMICS.

READ BEFORE

THE COLLEGE OF PHYSICIANS OF PHILADELPHIA,

FEBRUARY 2, 1859.

BY

WILSON JEWELL, M. D.

In submitting the annual report to the College, on meteorology and epidemics, I have occasion anew to refer to the incompleteness of the tables and computations, the inevitable result of inherent difficulties from defective returns under the existing law for the registration of deaths.

The best estimate of the health of our city can only be derived from its records of mortality as compared with those of former years and other cities. The value, therefore, of such a record, depends upon its accuracy and truthfulness.

Our statistics, however, are, like many elsewhere collected, not only imperfect in systematic arrangement, but very general, and, in some instances, of doubtful character. This latter defect is attributable in a great measure to the irresponsible sources from which they emanate, and to the frequent false returns made by ignorant and knavish pretenders in medicine, between whom and the scientific and educated physician the statute-books of our commonwealth, as well as a misguided public, recognize no distinction.

While it is humiliating to refer to the existence of such irregularities, it is no less essential, in order that proper allowance be made for the incongruities which may be discovered in these records of mortality.

But, notwithstanding the imperfections alluded to, fragments of reliable information have been gathered through these channels, from which may

be drawn truthful conclusions bearing upon the relative cause and effect of disease, as it has prevailed from year to year in the midst of our population.

Nor are these scanty records less useful for stimulating us with enlarged desires to secure the collection of more perfect returns, not only of deaths, but of births and marriages, until the vital statistics of our extended municipality shall become a stand-point from which we may not only look abroad, and, with some degree of precision, discover and investigate the nature and cause of our prevalent diseases, but provide adequate means to guard against the introduction of those deleterious agents that vitiate our atmosphere, or in other ways become the causes of sickness and death in our community.

I shall not therefore be considered ultra in my opinion if I affirm, that our mortality tables for Philadelphia never can be otherwise than as represented, until a more complete system of registration has been secured by legislative enactment. In this connection I cannot resist adverting to the many imperfections in the nomenclature of diseases, as employed by those who furnish the certificates of death received at the health office in our city. I refer more especially to the entire absence of a uniform method in reporting the causes of death. Very few of our physicians adhere to any one particular nosological arrangement. Indeed, I apprehend that many, whose duty it becomes to give certificates of death, have so limited an appreciation of this important department of science, that they feel no incentive to answer its demands; while to the unscrupulous pretender, who never looks beyond the sordid motive of pecuniary gain in the pursuit of his calling, it is a question of entire indifference what name he shall give the disease of which his patient died, admitting that he possesses sufficient intelligence to inform himself of the true cause of death. I do not make these remarks in a censorious spirit, nor from a belief that this want of accuracy is peculiar to our own city. Similar imperfections exist elsewhere, in other cities, and, in some instances, to a far greater extent. The true cause of the irregularity to which I have reference will be found in the absence of a uniform and approved nosological classification of diseases.

A careful comparison of the record of deaths for 1858 with that of the two preceding years, will present a single feature which can only be attributed to the defective plan now pursued in certifying to and in recording deaths. In the table of mortality for 1857, as reported to the College, the causes of death are represented by 201 distinct names, and in 1856 by 195; in the one under consideration, for 1858, there will be found only 112, less by 86 than the average of those in the two preceding years. In presenting this statement, I do not desire to be understood as entertaining for a single moment the opinion, that the causes of death from one year to another should correspond in every particular, both as to numbers and variety; but while I take a common sense view of this subject, and make careful allowance for changes and inaccuracies in each tabulated record of names of dis-

eases, I cannot understand on what principle so great a difference should occur as that referred to, especially when there are no deaths recorded from some of the most frequent forms of disease.

Under the title of cancer and scirrhus will be found 125 deaths, but in no instance is the special organ or structure involved, designated. Nor are there deaths named in the table from any form of disease of the uterus or ovaries, except the 36 deaths from puerperal fever, which fall below the usual amount for the year. Deaths from hemorrhage of the lungs, stomach, or bowels, disease of the bladder or kidneys, are all wanting. It is asking too much to believe that during the year there had not been a single death from any of these diseases. The fact should not be overlooked, however, that the unusual health of our population might possibly have exerted an influence upon the change in the causes of death to which I have reference. Still, I am not disposed to advocate the idea, that this apparent exemption from sickness would effect an alteration to the like extent as manifested in the record, much less from the same class of diseases. It must have resulted from other and less legitimate causes.

The only rational causes I can educe for the absence of these terms from the record are the loose and imperfect system of registration, a defective classification of diseases, and, last, though not least, sheer carelessness and incompetence in many to investigate the cause of death.

This entire subject of registration and classification of diseases in this country is now commanding more attention than ever before. Physicians, men of science, statesmen, and political economists are becoming interested in those great principles which involve the science of life, and are thoroughly investigating their influence.

Eight of these United States have at this time in successful operation well regulated and reliable plans, legally enforced, to register the births, marriages, and deaths in their respective commonwealths. In several other States the subject has been agitated, and preliminary steps taken to secure similar laws. Pennsylvania still slumbers over these vital interests of humanity. Other and less important claims she watches with an Argus eye, but can behold no wisdom in watching over the health and the lives of her citizens.

I am happy to announce, however, that another effort, bearing the approval of this College, is now in progress to procure a law for Philadelphia only, for the registration of births, marriages, and deaths. I confidently hope that the next report on this subject will embrace so desirable an improvement, and harbinger the dawn of a new era, in the collection and analyzation of the vital statistics of our city. In this event, the foundation for a superstructure will be laid, that shall augment in value and importance from year to year, as the work progresses, until it shall exhibit a proud monument, teeming on every side with reliable data, for the employment

of the intellect and industry of a future statistician, out of which he may determine with accuracy the growth or the decay of the public health.

Nor will the advantage be confined to our own city. I flatter myself, that, if the law is secured, its usefulness will be made so evident in a few years, that the necessity for one embracing the entire State will be so widely recognized, that no difficulty will be experienced in obtaining its passage through the Legislature.

The report of that distinguished statistician, Edward Jarvis, M. D., of Mass., presented at the last session of the American Medical Association, on the law of registration, is replete with interest. It evinces a sound knowledge of the subject, and reflects great credit upon its author, placing him high in the list of writers on medical literature and medical statistics. In this article a statistical nosology is furnished, for the consideration of the profession, which is a revision of the one adopted by the association in 1847. Dr. Farr's plan of classification of diseases, as followed by the Registrar-General of England in his valuable reports, is also appended; and the writer says, "it is worth our consideration whether it would not be better to adopt this system for the American States, although looking to its merits alone, it may be inferior to that already in use."

Highly as I appreciate the experience and judgment of Dr. Jarvis in all matters that appertain to sound logic in medical statistics, and much as I may approve the motive that directed the above opinion, I am not ready to indorse it. There is no reason why we should not establish a system of statistical nosology peculiarly our own. We are not only capable, but our national character, our social condition, our climate, our physical and mental peculiarities, our habits and manners, and our principles of free government, all seem to urge upon us strong claims for an American system of classification of diseases.

At present this question is an unsettled one in our country. Doubtless it will remain so for some time, or until the combined judgments of the States shall see eye to eye in behalf of those vital interests of health and life, which are intimately allied to this whole subject.

When that enlightened period arrives, and it may not be far distant—when each State shall be prepared to enact uniform laws of registration, then will be the proper time (and the appointment of a medical commission, embracing delegates from all the States, suggests itself to my mind as the only sure provision) for arranging and securing a system of classification of diseases, which shall not only be uniform in its arrangement, but acceptable, efficient, and permanent in its operation.

For present use, the nomenclature of the American Medical Association, adopted in 1847, with a few slight alterations, may answer our purpose. It is concise, simple, easily understood, and available.

The annexed record contains an abstract from observations on the

atmosphere and its phenomena, as made by my friend, Jas. A. Kirkpatrick, A. M., Professor of Civil Engineering in the Philadelphia High School, whose kindness I must again acknowledge.

These observations have been prepared with great care for the Smithsonian Institution, at Washington, and may be relied upon for their accuracy.

From this abstract we learn that the mean temperature for the year was 55.20°, an increase of 1.72° over that of 1857, and a higher mean temperature by 1.31° than for the last seven years.

The maximum temperature for the year was 96½°. This was on the 28th of June. The minimum temperature was 10° on the 5th and 6th of March.

The warmest days were the 28th of June and the 11th of July—the mean temperature being 89.2°.

The coldest day was the 5th of March, when the mean of the thermometer was 14.3°.

February was the coldest month in the year—the mean temperature being 30.11°.

July was the warmest month—the mean heat being 79.20°.

The monthly range of the thermometer for the year was 86½°, and the daily range 5.18°.

The mean of the thermometer for the summer was 77.24°, and for the winter 37.22°.

The least variable month was May, the range standing 35°.

The barometer ranged for the year, monthly, 1.325 inch—while the annual mean was 29.885 inches; nearly equivalent to the mean for seven years.

The highest point of pressure shown by the barometer was on the 8th of January, when it stood 30.531 inches; and the lowest was on the 21st of December, 29.206 inches.

The due point in its maximum for the year was 78.5°, and the minimum 13.5°.

The relative humidity of the atmosphere in its maximum was 100 per cent., while the minimum per cent. was 18.

The amount of rain that fell during the year was 41.059 inches, which was less than the rain in 1857 by 7.389 inches. The greatest depth of rain and snow in any month was in December, amounting to 5.459 inches. The least quantity was in March, only 1.124 inch.

The rain for the year was 2.94 inches less than for the last seven years.

Following this meteorological record, will be found the several tables of mortality analytically arranged.

General Abstract of Meteorological Observations, made at Philadelphia, Pa., during the year 1858.

By JAMES A. KIRKPATRICK, A. M., Prof. of Civil Engineering in the Philadelphia High School.

1858.	THERMOMETER.									BAROMETER REDUCED TO 32° F.							
							RANGE.		Mean of daily oscillations.							RANGE.	
MONTHS.	7 A. M.	2 P. M.	9 P. M.	Mean.	Max.	Min.	Monthly.	Mean daily.		7 A. M.	2 P. M.	9 P. M.	Mean.	Max.	Min.	Monthly.	Mean daily.
	°	°	°	°	°	°	°	°	°	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
January . . .	36.65	45.44	40.34	40.81	62	22	40	5.94	14.0	29.970	29.925	29.959	29.951	30.531	29.410	1.121	.208
February . . .	24.84	34.95	30.52	30.11	53	11	42	6.08	14.4	29.907	29.848	20.867	29.874	30.253	29.404	.849	.190
March	34.11	47.71	40.19	40.69	71	10	61	5.98	17.1	29.829	29.777	29.815	29.807	30.271	29.306	.965	.171
April	47.00	59.40	51.15	52.52	84	33	51	7.03	17.3	29.774	29.729	29.751	29.751	30.049	29.325	.724	.150
May	55.26	64.79	57.87	59.31	81	46	35	5.48	14.6	29.819	29.790	29.809	29.805	30.250	29.386	.864	.158
June	73.78	83.57	75.28	77.55	96½	53	43½	4.39	18.3	29.836	29.797	29.808	29.813	30.041	29.605	.436	.072
July	75.13	85.31	77.23	79.22	95½	60	35½	3.67	17.2	29.845	29.805	29.831	29.827	30.124	29.534	.590	.094
August	70.08	81.03	73.77	74.96	90	54	36	4.42	16.1	29.843	29.809	29.836	29.829	30.098	29.550	.548	.095
September . . .	61.32	76.03	66.37	67.92	88	41	47	4.05	19.7	29.944	29.892	29.925	29.922	30.217	29.343	.874	.135
October	53.32	66 63	58.53	59.49	90	35	55	5.32	17.3	29.934	29.876	29.918	29 906	30.318	29.382	.936	.143
November . . .	38.52	46.23	41.90	42.22	68	24	44	3.53	12.3	29.805	29.780	29.807	29.797	30.060	29.430	.630	.136
December . . .	34.50	40.97	37.47	37.65	63	15	48	6.30	11.8	30.002	29.955	29.966	29.974	30.459	29.206	1.253	.206
Annual means .	50.38	61.00	54.22	55.20	96½	10	86½	5.18	15.8	29.875	29.832	29.858	29.855	30.531	29.206	1.325	.146
Winter	32.97	41.92	37.05	37.32	64	11	53	5.91	13.9	29.931	29.881	29.912	29.908	30.531	29.266	1.265	.201
Spring	45.46	57.30	49.74	50 84	84	10	74	6.16	16.3	29.807	29.765	29.792	29.788	30.271	29.306	.965	.160
Summer	73.00	83.30	75.43	77.24	96½	53	43½	4.16	17.2	29.841	29.804	29.825	29.823	30.124	29.534	.590	.087
Autumn	51.06	62.96	55.60	56.54	90	24	66	4.30	16.4	29.891	29.849	29.883	29.874	30.318	29.343	.975	.138
For seven years .				53.89	100½	—5½	105½	5.52					29.880	30.709	28.895	1.814	.151

Meteorological Observations—Continued.

1858.	Relative Humidity.					Force of Vapour.						Winds.	Clouds. Tenths of sky covered.			Dew-point.				
Months.	7 A.M.	2 P.M.	9 P.M.	Max.	Min.	7 A.M.	2 P.M.	9 P.M.	Max.	Min.	Rain and melted snow.	Monthly resultant; No. of times in 1000.	7 A. M.	2 P. M.	9 P. M.	7 A.M.	2 P.M.	9 P.M.	Max.	Min.
	Per ct.	Per ct.	Per ct.	Per ct.	Per ct.	Inch.	Inch.	Inch.	Inch.	Inch.	Inches.					°	°	°	°	°
January . . .	75	59	69	96	26	.171	.187	.182	.505	.078	2.686	N. 54° 44′ W., 299	5.9	6.4	5.1	29.40	31.19	30.76	59.3	12.9
February . . .	71	54	67	96	26	.102	.111	.119	.246	.042	2.393	N. 64° 32′ W., 302	6.1	6.1	4.5	16.70	19.32	21.02	39.8	—0.7
March	65	44	58	90	18	.138	.162	.156	.448	.023	1.124	N. 71° 0′ W., 398	4.9	4.6	3.0	23.10	25.31	25.86	55.9	—13.5
April	71	49	66	96	23	.238	.248	.256	.505	.089	4.681	N. 3° 38′ E., 104	6.4	6.9	6.0	37.59	38.06	39.64	59.3	15.8
May	75	60	72	97	26	.330	.366	.352	.691	.191	5.308	N. 63° 26′ E., 210	7.8	6.9	6.2	46.87	49.07	48.32	68.3	29.2
June	72	55	72	94	31	.606	.627	.641	.934	.361	4.205	N. 71° 34′ W., 234	5.3	5.9	4.1	63.78	64.85	65.42	77.2	50.0
July	72	50	69	86	32	.632	.615	.657	.975	.368	1.454	S. 37° 42′ W., 173	4.8	5.2	2.6	65.09	64.10	66.26	78.5	50.5
August	78	55	71	95	37	.589	.583	.605	.864	.319	5.157	N. 77° 28′ W., 55	5.6	6.2	4.5	63.03	62.52	63.71	74.9	46.7
September . .	79	50	72	95	34	.451	465	.483	.792	.166	1.389	S. 88° 38′ W., 258	3.9	3.9	2.5	54.61	55.35	56.65	72.3	29.9
October . . .	79	53	73	97	24	.238	.351	.373	.591	.126	1.778	S. 84° 48′ W., 202	5.3	5.1	4.3	46.62	47.06	49.81	63.7	23.5
November . . .	79	61	73	96	33	.192	.195	.204	.361	.090	5.225	N. 41° 5′ W., 309	6.5	6.8	6.5	32.43	32.23	33.82	5.00	16.1
December . . .	80	69	78	100	33	.169	.172	.188	.424	.071	5.459	N. 34° 26′ W., 245	7.6	7.2	6.3	28.82	30.80	31.11	60.3	10.9
Annual means .	75	55	70	100	18	.330	.340	.351	.975	.023	41.059	N. 61° 40′ W., 180	5.8	5.9	4.6	42.34	43.32	44.36	78.5	—13.5
Winter	75	58	70	96	26	.153	.161	.165	.526	.042	10.582	N. 59° 2′ W., 277	6.4	6.0	4.6	25.82	27.23	27 95	60.4	—0.7
Spring	70	51	65	97	18	.235	.259	.255	.691	.023	11.113	N. 27° 25′ W., 123	6.4	6.1	5.1	35.85	37.48	37.94	68.3	—13.5
Summer . . .	74	53	71	95	31	.609	.608	.634	.975	.319	10.816	S. 82° 39′ W., 127	5.2	5.8	3.7	63.97	63.82	65.13	75.5	46.7
Autumn . . .	79	55	73	97	24	.327	.337	.353	.792	.090	8.592	N. 71° 43′ W., 233	5.2	5.3	4.4	44.55	44.88	46.76	72.3	16.1
For seven years.		58		100	16		.344		.975	.023	43.153	N. 73° 33′ W., 215					44.40		78.5	—13.5

TABLE I.—*Mortality for the year* 1858, *Collated from*

DISEASES.	FIRST QUARTER, Commencing January 2, 1858.									SECOND Commencing					
	Jan.		Feb.		March.		Adults.	Minors.	Total.	April.		May.		June.	
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.
Abscess	5	1	1	4	2	3	10	6	16	1	1	..	..	1	..
Albuminuria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Aneurism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Apoplexy	5	1	6	4	11	1	27	1	28	3	6	6	5	8	7
Asphyxia	..	..	..	..	..	..	..	..	..	..	1	4	1	2	..
Asthma	..	..	..	..	1	..	1	..	1	2	..	..	..	2	1
Cancer and scirrhus	2	7	1	6	3	6	23	2	25	1	6	3	8	4	9
Caries	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..
Catarrh	4	1	..	..	4	3	..	12	12	2	3	2	2	..	1
Casualties	13	6	13	5	17	6	40	2	60	11	7	6	3	10	6
Burns and scalds	1	3	1	..	4	6	5	10	15	1	2	..	2	2	1
Drowned	6	..	3	1	4	..	13	1	14	8	2	12	..	16	..
Fracture	1	..	1	..	1	1	3	1	4	..	..	..	..	..	..
" of pelvis	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..
Poisoning	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Suicide	2	..	1	..	2	5	9	1	10	1	..	..	2	2	..
Cholera infantum	..	1	..	..	2	..	..	3	3	2	1	4	1	32	29
" morbus	..	..	..	1	1	1	1	2	3	1	..	2	1	2	2
Cirrhosis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Childbed	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..
Concussion of the brain	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Congestion of the brain	11	11	6	6	5	5	14	30	44	8	10	11	3	15	11
" " liver	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..
" " lungs	2	1	..	7	3	4	8	9	17	2	5	5	4	2	8
Consumption of the lungs	77	79	63	70	84	85	391	67	458	86	69	53	77	81	67
Convulsions	21	30	22	27	31	26	11	146	157	28	10	14	21	46	31
Croup	20	12	21	13	17	22	..	105	105	8	8	9	6	14	12
Cyanosis	4	1	2	..	1	2	..	10	10	2	1	..	2	4	2
Coup de soleil	..	..	..	..	..	..	..	..	..	..	..	..	..	20	3
Coxalgia	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..
Constipation	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..
Debility	15	23	17	17	28	20	76	44	120	15	20	19	14	12	8
Diabetes	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..
Diarrhœa	2	3	..	3	2	2	6	6	12	3	..	5	3	1	..
Disease of the bladder	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" " brain	6	2	4	4	9	4	8	21	29	7	4	14	2	14	8
" " chest	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1
" " heart	5	11	8	11	14	12	36	25	61	9	4	8	9	13	11
" " liver	3	4	..	..	7	4	12	6	18	2	3	5	8	5	2
" " lungs	3	..	3	2	3	2	7	6	13	3	4	2	1	..	..
" " spine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
" " stomach and bowels	1	1	..	..	2	2	5	1	6	4	2	..	..	..	..
Dropsy	18	12	17	11	16	15	37	52	89	3	3	..	..	..	..
" of the brain	1	1	..	4	12	13	3	28	31	15	11	15	9	23	14
" " chest	..	..	..	..	3	3	6	..	6	7	7	8	10	4	4
" " heart	..	..	..	1	..	1	1	1	2	1	..	1	3	4	2
Dysentery	1	2	2	..	4	4	7	6	13	1	1	3	2	7	11
Dyspepsia	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..
Effusion on the brain	6	2	3	3	3	3	2	18	20	2	2	3	..	3	2
Enlargement of the heart	..	..	..	1	..	1	..	2	2	..	..	..	1	..	..
Epilepsy	1	1	..	..	..	..	1	1	2	..	..	..	..	..	..
Erysipelas	2	3	4	4	5	8	17	9	26	3	2	2	2	4	4
Fever, bilious	..	1	1	..	1	2	5	..	5	..	..	..	1	2	..
" brain	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
" congestive	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..
" intermittent	..	1	..	1	..	..	1	1	2	..	..	..	..	..	..
" nervous	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
" puerperal	..	..	..	..	..	1	1	..	1	..	7	..	3	..	7
" remittent	..	..	1	1	..	..	1	1	2	..	1	1	1	..	..
" scarlet	21	21	18	20	19	21	1	119	120	9	18	18	9	6	8
" typhoid	8	3	9	10	14	7	33	18	51	5	8	3	4	4	5
" typhus	4	1	4	3	5	4	11	10	21	4	2	2	3	2	2
" " icterodes	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gangrene	..	..	1	1	2	1	3	2	5	..	..	..	..	..	1
Gout	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hemorrhage	2	..	3	..	3	2	6	4	10	4	5	2	2	1	4
Hernia	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..
Hooping-cough	1	3	4	4	2	8	..	22	22	5	8	4	3	8	21
Hydrophobia	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..

Returns made to the Health Office. By WILSON JEWELL, M. D.

QUARTER, April 3, 1858.			THIRD QUARTER, Commencing July 3, 1858.									FOURTH QUARTER, Commencing October 2, 1858.									Total for the year.
			July.		Aug.		Sept.					Oct.		Nov.		Dec.					
Adults.	Minors.	Tota	M.	F.	M.	F.	M.	F.	Adults.	Minors.	Total.	M.	F.	M.	F.	M.	F.	Adults.	Minors.	Total.	
2	1	3	4	..	..	1	..	1	5	1	6	1	2	..	..	3	..	4	2	6	31
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	1	1	2	2
32	3	35	6	1	7	3	4	3	23	1	24	2	1	7	5	3	6	24	..	24	111
..	8	8	4	3	5	..	3	..	1	14	15	2	..	..	1	7	4	4	10	14	37
5	..	5	..	1	1	..	..	1	2	1	3	1	..	..	..	..	2	3	..	3	12
27	3	30	2	7	4	17	3	10	36	7	43	1	8	5	8	3	2	24	3	27	125
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	10	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	22
28	15	43	11	3	5	4	21	6	23	27	50	6	3	9	2	17	1	25	13	38	191
..	8	8	..	1	..	1	3	..	1	4	5	2	5	2	5	5	8	6	21	27	55
25	13	38	26	1	9	1	19	1	35	22	57	10	..	4	2	2	..	15	3	18	127
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	5
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
4	1	5	3	2	..	1	..	1	7	..	7	2	1	1	..	..	..	4	..	4	26
..	69	69	151	128	117	102	39	38	..	575	575	4	8	..	3	..	..	..	15	15	662
5	3	8	12	11	5	7	4	2	34	7	41	..	..	1	..	..	..	1	..	1	53
..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
16	42	58	19	20	16	22	14	6	34	63	97	1	6	7	7	16	5	19	23	42	241
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
10	16	26	2	5	1	1	3	3	10	5	15	4	1	1	3	5	6	9	11	20	78
381	52	433	55	62	47	68	72	87	350	41	391	45	55	51	55	92	79	359	18	377	1659
10	140	150	30	48	23	25	28	18	14	158	172	23	25	24	16	20	22	8	122	130	609
1	56	57	7	3	5	8	6	4	1	32	33	13	9	22	11	20	22	..	97	97	292
1	10	11	..	..	1	2	2	1	..	6	6	4	2	..	1	3	2	..	12	12	39
22	1	23	3	..	..	..	..	..	2	1	3	..	..	..	..	..	..	..	..	..	26
2	1	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
51	37	88	20	22	24	12	38	17	60	73	133	13	14	20	13	27	29	55	61	116	457
2	..	2	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	3
6	6	12	32	23	19	13	8	9	24	80	104	3	1	1	2	3	..	7	3	10	138
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1
19	30	49	7	6	6	5	10	1	11	24	35	4	..	5	2	5	5	12	9	21	134
3	..	3	..	1	..	..	..	1	1	1	2	1	2	..	..	1	2	5	1	6	11
40	14	54	9	6	8	10	12	5	34	16	50	4	5	10	11	10	10	40	10	50	215
19	6	25	..	..	3	3	3	2	8	3	11	2	2	3	2	3	2	12	2	14	68
4	6	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	23
..	..	..	1	..	1	..	1	..	1	2	3	..	..	..	1	..	1	..	2	2	5
4	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
4	2	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	95
4	83	87	21	17	19	19	9	7	2	90	92	10	8	7	7	7	12	6	45	51	261
36	4	40	4	9	7	6	8	9	37	6	43	5	7	9	6	11	13	50	1	51	140
10	1	11	2	2	1	2	2	1	8	2	10	1	..	1	1	1	..	4	..	4	27
8	17	25	33	28	43	41	23	18	53	133	186	2	3	1	3	4	3	7	9	16	240
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
4	8	12	9	3	4	4	1	5	5	21	26	2	3	3	2	3	1	5	9	14	72
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
12	5	17	2	1	2	2	4	..	4	7	11	3	..	..	..	1	..	2	2	4	58
3	..	3	4	1	7	5	6	1	18	6	24	3	4	2	1	1	..	9	2	11	43
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
15	2	17	..	6	..	5	..	2	11	2	13	..	2	..	..	..	3	5	..	5	36
..	3	3	..	..	..	..	2	3	2	3	5	1	1	3	2	..	..	6	1	7	17
4	64	68	4	3	4	4	..	5	1	19	20	7	7	3	3	7	6	2	31	33	241
21	8	29	7	3	13	9	15	10	35	22	57	14	9	7	5	14	11	46	14	60	197
10	5	15	5	4	3	1	2	4	14	5	19	1	3	2	1	5	4	13	3	16	71
..	..	..	..	..	7	2	4	3	14	2	16	..	..	..	..	..	..	..	..	..	16
..	1	1	3	..	1	..	3	2	1	8	9	..	..	..	1	..	..	..	1	1	16
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	1
14	4	18	3	1	2	1	3	4	9	5	14	1	3	1	3	1	3	7	5	12	54
..	1	1	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	3	1	4	5
..	49	49	7	8	15	13	5	11	1	58	59	5	5	2	6	2	3	..	..	..	153
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1

TABLE I.—*Mortality*

DISEASES.	FIRST QUARTER, Commencing January 2, 1858.									SECOND Commencing					
	Jan.		Feb.		March.		Adults.	Minors.	Total.	April.		May.		June.	
	M.	F.	M.	F.	M.	F.				M.	F.	M.	F.	M.	F.
Icterus	..	2	3	..	..	1	3	3	6	2	..	..	1	..	..
Inanition	3	4	1	3	3	7	3	18	21	4	2	4	1	6	3
Inflammation of the bladder	1	..	..	1	..	..	1	1	2	1	..	..	..	..	..
" " brain	16	11	13	8	16	8	19	53	72	22	5	9	6	16	14
" " bronchi	3	5	2	5	5	4	11	13	24	5	7	3	3	7	5
" " chest	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..
" " heart	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
" " kidneys	1	..	1	..	..	..	2	..	2	..	1	..	..	..	..
" " liver	..	1	4	3	..	..	7	1	8	1	..	..	..	3	2
" " lungs	18	6	34	15	30	31	48	86	134	25	16	28	24	29	25
" " peritoneum	1	..	..	3	..	4	5	3	8	3	6	3	2	3	4
" " pleura	..	1	..	1	..	..	2	..	2	..	..	..	..	..	..
" " stomach & bowels	5	7	8	7	12	10	24	25	49	5	12	10	10	17	12
" " throat	..	..	..	..	2	..	..	2	2	2	2	..	..	..	..
Intemperance	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Intussusception	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Malformation	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..
Mania	..	..	..	1	..	..	1	..	1	..	1	1	..	..	..
Mania à potu	7	..	4	2	6	2	..	..	21	4	..	3	2	10	1
Marasmus	10	8	16	12	21	13	3	77	80	20	17	18	8	27	20
Measles	..	..	..	1	..	..	..	1	1	..	1	..	2	2	2
Mortification	..	..	..	..	1	3	..	4	4	..	1	..	..	1	1
Obstruction of the bowels	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..
Old age	3	8	7	14	9	15	56	..	56	18	17	18	19	20	30
Osteo-sarcoma	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..
Neuralgia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palsy	2	1	7	5	4	5	24	..	24	4	2	3	2	8	4
Purpura	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rheumatism	2	2	..	..	4	4	10	2	12	5	6	1	..	1	..
Scrofula	1	1	1	3	7	4	9	8	17	1	..	3	3	2	3
Smallpox	..	..	..	..	1	..	1	..	1	..	..	1	..	1	1
Softening of the brain	..	..	..	..	1	..	1	..	1	1	..	..	1	..	..
Sore throat	1	1	1	1	..	..	..	4	4	..	..	..	..	..	..
Stillborn	31	11	32	22	31	25	..	152	152	25	19	24	15	31	20
Syphilis	..	..	1	..	..	..	..	1	1	..	..	..	1	..	1
Tabes mesenterica	1	3	1	3	5	4	1	16	17	2	1	..	2	1	2
Teething	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Tetanus	..	..	..	..	1	..	1	..	1	1	1	..	..	2	..
Tumours	..	..	..	..	..	1	1	..	1	..	1	1	1	..	1
Strangury	2	1	1	..	1	1	1	5	6	..	2	..	..	..	..
Ulceration	..	..	..	1	..	..	1	..	1	..	..	..	..	..	..
Unknown	6	7	8	2	17	8	32	16	48	10	5	10	7	13	7
Worms	..	..	1	..	..	..	..	1	1	..	..	1	..	..	..
Uremia	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..
Totals of the sex	392	330	387	359	526	467	1133	1328	2461	437	371	390	342	580	464
Monthly totals	722		746		993		..	..	..	808		732		1044	
From the almshouse	39		43		54		..	..	..	49		61		79	
From the country	..		3		..		..	..	..	8		5		13	
People of colour	39		65		61		..	..	..	71		42		72	

for 1858—Continued.

QUARTER, April 3, 1858.			THIRD QUARTER, Commencing July 3, 1858.									FOURTH QUARTER, Commencing October 2, 1858.									Total for the year.
dults.	Minors.	Total.	July.		Aug.		Sept.		Adults.	Minors.	Total.	Oct.		Nov.		Dec.		Adults.	Minors.	Total.	
			M.	F.	M	F.	M.	F.				M.	F.	M.	F.	M.	F.				
2	1	3	..	..	2	1	..	..	1	2	3	1	..	..	2	..	1	2	2	4	16
6	14	20	8	3	10	4	5	4	4	30	34	..	3	1	4	5	3	..	16	16	91
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
13	59	72	29	14	23	14	21	13	11	103	114	3	8	14	8	12	12	14	43	57	315
7	23	30	2	6	2	3	5	6	11	13	24	4	2	1	6	2	7	14	8	22	100
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
1	..	1	..	..	..	..	1	1	2	..	2	..	2	..	..	..	..	1	1	2	7
6	..	6	2	2	1	1	3	3	9	3	12	..	..	..	1	1	2	4	..	4	30
42	105	147	23	17	19	22	21	12	15	99	114	18	16	23	20	52	38	36	131	167	562
13	8	21	4	2	3	3	..	3	12	3	15	1	1	1	1	4	3	7	4	11	55
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
33	33	66	23	17	12	11	17	24	52	52	104	4	10	4	7	16	13	40	14	54	273
..	4	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	1	1	..	1	..	..	1	..	..	..	1	..	1	2
..	..	..	1	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	2
2	..	2	2	..	..	2	1	..	5	..	5	..	..	..	1	..	..	1	..	1	9
20	..	20	7	..	9	3	10	2	30	1	31	3	1	5	1	3	..	13	..	13	85
11	99	110	31	31	55	45	29	24	11	204	215	12	10	7	7	14	8	8	50	58	463
..	7	7	2	3	4	2	..	..	1	10	11	..	1	4	..	3	1	..	9	9	28
1	2	3	..	..	1	..	..	..	1	..	1	..	2	..	..	..	..	1	1	2	10
1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2
122	..	122	19	22	12	12	15	18	98	..	98	7	12	12	13	11	27	82	..	82	358
..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	1
22	1	23	5	5	5	3	6	2	25	1	26	7	4	2	5	6	8	31	1	32	105
..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1
10	3	13	1	..	..	1	1	1	2	2	4	2	..	1	1	..	1	4	1	5	34
3	9	12	4	3	3	..	6	2	6	12	18	2	..	..	3	1	1	..	7	7	54
1	2	3	..	..	1	1	1	..	..	3	3	..	..	..	..	..	..	..	..	..	7
2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
..	134	134	18	15	18	12	27	24	..	114	114	25	17	24	20	23	26	..	135	135	535
1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
1	7	8	4	7	3	1	4	4	2	21	23	1	..	3	2	2	..	..	8	8	56
..	1	1	1	1	2	2	2	2	..	10	10	..	..	1	..	..	..	..	1	1	12
1	3	4	1	..	2	2	1	..	4	2	6	1	..	..	..	1	..	1	1	2	13
4	..	4	..	1	..	..	..	4	4	1	5	..	..	..	..	..	..	..	..	..	10
1	1	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8
..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
34	18	52	12	13	8	6	9	7	31	24	55	6	4	5	3	7	3	18	10	28	183
..	1	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	3
3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
1233	1351	2584	708	602	630	571	566	459	1272	2264	3536	303	299	327	298	467	422	1086	1030	2116	10697
..	..	..	1310		1201		1025		..	..	..	602		625		889		..	..	..	..
..	..	..	58		58		51		..	..	..	30		24		27		..	..	..	573
..	..	..	9		1		6		..	..	..	3		1		3		..	..	..	52
..	..	..	70		50		46		..	..	..	31		26		38		..	..	..	611

TABLE I.—*Mortality for* 1858—Continued.

	FIRST QUARTER, COMMENCING JANUARY 2, 1858.						SECOND QUARTER, COMMENCING APRIL 3, 1858.					
	Jan.	Feb.	h.	dults.	Minors.	Totals.	April.	Ma .	June.	Adults.	Minors.	Totals.
Under 1 year . . .	194	186	248	..	..	628	199	193	303	..	..	695
From 1 to 2 years . .	116	96	113	..	..	325	85	57	105	..	..	247
" 2 to 5 " . .	38	56	89	..	..	183	66	60	99	..	..	225
" 5 to 10 " . .	22	23	39	..	..	84	31	16	28	..	..	75
" 10 to 15 " . .	13	11	14	..	..	38	13	11	9	..	..	33
" 15 to 20 " . .	18	26	27	..	..	71	23	21	31	..	..	75
" 20 to 30 " . .	89	77	112	..	..	278	87	92	102	..	..	281
" 30 to 40 " . .	68	92	90	..	..	250	75	72	100	..	..	247
" 40 to 50 " . .	48	48	68	..	..	164	64	59	76	..	..	199
" 50 to 60 " . .	35	35	61	..	..	131	44	44	56	..	..	144
" 60 to 70 " . .	35	45	49	..	..	129	52	47	56	..	..	155
" 70 to 80 " . .	31	28	49	..	..	108	43	35	39	..	..	117
" 80 to 90 " . .	14	20	22	..	..	56	22	23	33	..	..	78
" 90 to 100 " . .	1	2	11	..	..	14	4	2	7	..	..	13
" 100 to 110 " . .	..	1	1	..	..	2	..	..	..	..	..	..
Total of monthly mortality	722	746	993	..	..	..	808	732	1044	..	..	..
Total males for the quarter	..	..	..	..	..	1305	..	..	..	..	..	1407
" females "	..	..	..	..	..	1156	..	..	..	..	..	1177
" adults "	..	..	..	1133	..	..	..	..	..	1233	..	..
" minors "	..	..	..	..	1328	..	..	..	..	..	1351	..
" for the quarter . .	..	..	..	..	..	2461	..	..	..	..	..	2584

	THIRD QUARTER, COMMENCING JULY 3, 1858.						FOURTH QUARTER, COMMENCING OCTOBER 2, 1858.					
	July.	Aug.	Sept.	Adults.	Minors.	Totals.	Oct.	Nov.	Dec.	Adults.	Minors.	Totals.
Under 1 year . . .	584	516	305	..	..	1405	173	174	231	..	..	578
From 1 to 2 years . .	145	156	116	..	..	417	51	55	78	..	..	184
" 2 to 5 " . .	95	69	61	..	..	225	40	51	68	..	..	159
" 5 to 10 " . .	28	17	16	..	..	61	12	9	15	..	..	36
" 10 to 15 " . .	22	19	18	..	..	59	13	5	13	..	..	31
" 15 to 20 " . .	22	40	36	..	..	98	11	10	27	..	..	48
" 20 to 30 " . .	99	95	119	..	..	313	65	76	94	..	..	235
" 30 to 40 " . .	81	57	99	..	..	237	68	62	87	..	..	217
" 40 to 50 " . .	59	74	81	..	..	214	54	46	80	..	..	180
" 50 to 60 " . .	57	52	62	..	..	171	47	38	67	..	..	152
" 60 to 70 " . .	49	45	39	..	..	133	31	45	37	..	..	113
" 70 to 80 " . .	43	37	45	..	..	125	20	33	53	..	..	106
" 80 to 90 " . .	20	22	22	..	..	64	10	11	31	..	..	52
" 90 to 100 " . .	5	1	5	..	..	11	7	8	8	..	..	23
" 100 to 110 " . .	1	1	1	..	..	3	..	1	..	..	..	1
" 110 to 120 " . .	..	..	..	..	..	..	..	1	..	..	..	1
Total of monthly mortality	1310	1201	1025	..	..	..	602	625	889	..	..	..
Total males for the quarter	..	..	..	..	..	1906	..	..	..	..	..	1097
" females "	..	..	..	..	..	1630	..	..	..	..	..	1019
" adults "	..	..	..	1272	..	..	..	..	..	1086	..	..
" minors "	..	..	..	..	2264	..	..	..	..	..	1030	..
" for the quarter . .	..	..	..	..	..	3536	..	..	..	..	..	2116

TABLE II.—*Mortality from Diseases of the Lungs and Air-passages.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Abscess, pulmonary	1	...	...	...	...	...	...
Angina pectoris	5	1	...	...	...	...	...
Apnœa	1	...	...	...	...	...	...
Asphyxia	28	15	37	...	8	15	14
Asthma	21	33	12	1	5	3	3
Catarrh	...	33	22	12	10	...	...
Collapse of lungs	1	...	...	...	...	...	...
Congestion of the lungs	97	132	78	17	26	15	20
Consumption, laryngeal	1	...	...	...	...	...	...
" of the lungs	1501	1544	1659	458	433	391	377
Croup	268	256	292	105	57	33	97
Disease of the chest	6	7	11	...	3	2	6
" lungs	37	53	23	13	10	...	...
Dropsy of the chest	61	48	140	6	40	43	51
Effusion on the chest	7	3	...	...	...	...	...
" lungs	4	4	...	...	...	...	...
Emphysema	2	1	...	...	...	...	...
Empyema	2	1	...	...	...	...	...
Gangrene of the lungs	...	1	...	...	...	...	...
Hemorrhage from the lungs	28	18	...	...	...	...	...
Influenza	2	9	...	...	...	...	...
Inflammation of the bronchi	250	179	100	24	30	24	22
" " chest	7	16	1	1	...	...	...
" " larynx	34	14	...	...	...	...	...
" " lungs	379	504	562	134	147	114	167
" " pleura	16	27	2	2	...	...	...
" " trachea	9	11	...	...	...	...	...
Ulceration of larynx	2	...	...	...	...	...	...
Totals	2770	2910	2939	773	769	640	757
Hooping-cough	77	51	153	22	49	59	23
Totals	2847	2961	3092	795	818	699	780
Total mortality, exclusive of stillborn	11722	10338	10162				
Per cent. from diseases of the lungs	22.77	28.13	30.43				
Per cent. from consumption of the lungs	12.80	14.93	16.33				

TABLE III.—*Deaths from Consumption of the Lungs, during each Month in the year* 1858, *at fourteen distinct periods of life, with the Sexes designated for each month.*

AGES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Under 1 year . . .	3	2	...	2	1	1	...	...	...	...	...	...	9
From 1 to 2 years . .	7	2	3	2	...	...	...	...	...	...	...	...	14
" 2 to 5 " . .	...	1	3	3	2	1	...	...	...	...	...	...	10
" 5 to 10 " . .	4	1	5	2	1	3	1	1	...	...	...	...	18
" 10 to 15 " . .	3	1	1	3	3	1	3	2	1	...	...	...	18
" 15 to 20 " . .	6	16	9	11	5	11	3	19	11	6	2	10	109
" 20 to 30 " . .	45	48	58	43	50	52	41	31	64	27	45	50	554
" 30 to 40 " . .	34	33	38	39	31	37	25	26	37	32	22	44	398
" 40 to 50 " . .	25	11	15	25	19	25	16	20	18	11	15	26	226
" 50 to 60 " . .	13	9	18	14	9	12	17	12	17	15	9	25	170
" 60 to 70 " . .	10	8	16	7	9	3	7	4	7	3	12	9	95
" 70 to 80 " . .	6	1	2	3	...	2	3	...	3	1	1	5	27
" 80 to 90 " . .	...	...	1	1	...	...	1	...	1	3	...	2	9
" 90 to 100 " . .	...	...	...	...	...	...	...	...	...	2	...	...	2
" 100 to 110 " . .	...	...	...	...	...	...	...	...	...	...	...	...	...
Male	77	63	84	86	53	81	55	47	72	45	51	92	806
Female	79	70	85	69	77	67	62	68	87	55	55	79	853
Monthly totals . . .	156	133	169	155	130	148	117	115	159	100	106	171	1659
Quarterly totals . . .	458			433			391			377			1659

TABLE IV.—*Mortality from Diseases of the Nervous System.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Abscess of the brain	2	...	...	...	...	...	...
Apoplexy	123	115	111	28	35	24	24
Chorea	2	1	...	...	...	...	...
Catalepsy	1	...	...	...	...	...	...
Coma	2	1	...	...	...	...	...
Compression of the brain	8	...	...	...	...	...	...
Concussion of the brain	...	7	1	...	1	...	...
Congestion of the brain	177	201	241	44	58	97	42
Convulsions	603	556	609	157	150	172	130
Coup de soleil	2	6	26	...	23	3	...
Cramp	11	10	...	...	...	...	...
Disease of the brain	107	100	134	29	49	35	21
Dropsy of the brain	242	173	261	31	87	92	51
Effusion of the brain	94	92	72	20	12	26	14
Epilepsy	24	18	2	2	...	...	...
Hysteria	3	...	...	...	...	...	...
Inflammation of the brain	329	306	315	72	72	114	57
" " tympanum	...	...	...	...	...	...	...
Irritation of brain and spinal marrow	...	...	...	...	...	...	...
Mania or insanity	12	7	9	1	2	5	1
Mania à potu	43	62	85	21	20	31	13
Neuralgia	1	...	1	...	...	...	1
Palsy	104	92	105	24	23	26	32
Softening of the brain	40	14	3	1	2	...	...
" " spinal marrow	2	...	...	...	...	...	...
Teething	29	17	12	...	1	10	1
Tetanus	13	11	13	1	4	6	2
Trismus	2	2	...	...	...	...	...
Totals	1976	1791	2000	431	539	641	389
Puerperal convulsions	2	1	...	...	...	...	...
" mania	...	...	...	...	...	...	...
Totals	1978	1792	2000	431	539	641	389
Total mortality, exclusive of stillborn	11722	10338	10162				
Per cent. of total mortality	16.87	17.33	19.58				

TABLE V.—*Mortality from Diseases of the Organs of Nutrition.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Abscess	40	35	31	16	3	6	6
" abdominal	...	...	...	...	...	...	...
" of the liver	1	1	...	...	...	...	...
Cancer of the stomach and bowels	4	7	...	...	...	...	...
Cholera	16	3	...	...	...	...	...
" infantum	722	534	662	3	69	575	15
" morbus	35	10	53	3	8	41	1
Cirrhosis of the liver	6	3	...	...	...	...	...
Colic	17	7	...	...	...	...	...
Constipation	3	...	1	1	...	...	...
Consumption of the bowels	3	5	...	...	...	...	...
Diarrhœa	149	119	138	12	12	104	10
Disease of the liver	27	41	68	18	25	11	14
" stomach and bowels	27	17	12	6	6	...	...
Dropsy	213	239	95	89	6	...	...
" abdominal	8	6	...	...	...	...	...
Dysentery	301	198	240	13	25	186	16
Dyspepsia	...	2	1	1	...	...	...
Gout	7	5	1	...	...	...	1
Icterus	21	11	16	6	3	3	4
Ileus	1	...	...	...	...	...	...
Inflammation of the liver	39	25	30	8	6	12	4
" " peritoneum	68	56	55	8	21	15	11
" " stomach and bowels	184	299	273	49	66	104	54
Intussusception	6	4	2	...	...	1	1
Marasmus	484	506	463	80	110	215	58
Obstruction of the bowels	9	2	2	...	2	...	...
Scrofula	61	51	54	17	12	18	7
Tabes mesenterica	36	44	56	17	8	23	8
Tuberculosis	...	...	...	...	...	6	...
Ulceration of the stomach and bowels	15	6	...	...	...	...	...
Totals	2503	2236	2253	347	382	1314	210
Total mortality, exclusive of stillborn	11722	10338	10162				
Per cent. of total mortality	21.35	21.62	22.17				

TABLE VI.—*Mortality from Diseases of the Urino-Genital Organs.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Albuminuria	9	7	1	...	...	...	1
Amenorrhœa	2	...	...	...	...	...	...
Cancer of mamma	2	...	...	...	...	...	...
" uterus	5	4	...	...	...	...	...
Childbed	2	7	1	1	...	...	...
Chlorosis	2	1	...	...	...	...	...
Convulsions, puerperal	2	1	...	...	...	...	...
Diabetes	...	7	3	...	2	1	...
Disease of the bladder	1	1	1	...	...	...	1
" kidneys	16	8	...	...	...	...	...
" ovaries	1	2	...	...	...	...	...
" prostate gland	1	...	...	...	...	...	...
" uterus	5	2	...	...	...	...	...
Dropsy, ovarian	1	...	...	...	...	...	...
Fever, puerperal	69	49	36	1	17	13	5
Hemorrhage from uterus	7	5	...	...	...	...	...
Inflammation of the bladder	8	9	3	2	1	...	...
" " kidneys	7	7	7	2	1	2	2
" " prostate gland	...	...	...	...	...	...	...
" " uterus	15	8	...	...	...	...	...
Mania, puerperal	...	...	...	...	...	...	...
Rupture of the bladder	...	...	...	...	...	...	...
" urethra	...	1	...	...	...	...	...
" uterus	...	...	...	...	...	...	...
Stone in bladder	...	...	...	...	...	...	...
Strangury	...	...	8	6	2	...	...
Suppression of urine	...	3	...	...	...	...	...
Syphilis	5	2	3	1	2	...	...
Tumour, ovarian	1	1	...	...	...	...	...
Ulceration of the uterus	...	1	...	...	...	...	...
Totals	161	126	63	13	25	16	9
Total mortality, exclusive of stillborn	11722	10338	10162				
Per cent. of total mortality	1.37	1.21	0.62				

TABLE VII.—*Mortality from Fevers.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Fever	10	3	...	...	...	...	...
" bilious	24	25	43	5	3	24	11
" cerebral	...	2	1	...	1	...	...
" congestive	3	5	1	1	...	...	...
" continued	...	2	...	...	...	...	...
" enteric	...	2	...	...	...	...	...
" gastric	2	4	...	...	...	...	...
" hectic	2	2	...	...	...	...	...
" intermittent	14	5	2	2	...	...	...
" malignant	...	...	...	...	...	...	...
" nervous	7	9	1	...	1	...	...
" pernicious	...	...	...	...	...	...	...
" puerperal	69	49	36	1	17	13	5
" remittent	22	23	17	2	3	5	7
" scarlet	992	704	241	120	68	20	33
" typhoid	229	175	197	51	29	57	60
" typhus	49	38	71	21	15	19	16
" " icterodes	5	...	16	...	...	16	...
" yellow	...	...	...	...	...	...	...
Totals	1428	1048	626	203	137	154	132
Total mortality, exclusive of stillborn	11722	10338	10162				
Per cent. of total mortality	12.18	10.13	6.16				

TABLE VIII.—*Mortality from Measles.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Measles	141	56	28	1	7	11	9

TABLE IX.—*Causes assigned for Death where the number is* 90 *and upward.*

DISEASES.	ANNUAL AGGREGATES.			QUARTERS OF 1858.			
	1856.	1857.	1858.	1st.	2d.	3d.	4th.
Apoplexy	123	115	111	28	35	24	24
Casualties	158	118	191	60	43	50	38
Cholera infantum	722	534	662	3	69	575	15
Consumption of the lungs	1501	1544	1659	458	433	391	377
Congestion of the brain	177	201	241	44	58	97	42
" " lungs	97	132	...	...	...	...	...
Convulsions	603	556	609	157	150	172	130
Croup	268	256	292	105	57	33	97
Debility	430	378	457	120	88	133	116
Diarrhœa	149	119	138	12	12	104	10
Disease of the brain	107	100	134	29	49	35	21
" heart	179	222	215	61	54	50	50
Dropsy	213	239	95	89	6	...	...
" of the brain	242	173	261	31	87	92	51
Dysentery	301	198	240	13	25	186	16
Effusion on the brain	94	92	...	...	...	...	...
Erysipelas	100	95	...	...	...	...	...
Fever, scarlet	992	704	241	120	68	20	33
" typhoid	229	175	197	51	29	57	60
Hooping-cough	...	...	153	22	49	59	23
Inanition	114	...	91	21	20	34	16
Inflammation of the brain	329	306	315	72	72	114	57
" " bronchi	250	179	100	24	30	24	22
" " lungs	379	504	562	134	147	114	167
" " stomach and bowels	184	299	174	49	66	104	54
Marasmus	484	506	463	80	110	215	58
Measles	141	...	...	...	...	...	...
Old age	172	195	358	56	122	98	82
Palsy	104	92	105	24	23	26	32
Smallpox	390	...	...	...	...	...	...
Stillborn	612	557	535	152	134	114	135
Unknown	257	291	183	48	52	55	28
Drowned	105	134	127	14	38	57	18

TABLE X.—*Deaths, with the Sexes, for each Month in the Year, and the Number at Sixteen Distinct Periods of Life, with the Percentages to Total Mortality, Exclusive of the Stillborn—also the Stillborn Children for each Month, and their Sexes.*

Months.	Stillborn.			Males.	Females.	Boys.	Girls.	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	110 to 120.	Total.
	M.	F.	Total.																					
January	31	11	42	392	330	228	173	194	116	38	22	13	18	89	68	48	35	35	31	14	1	...	...	722
February	32	22	54	387	359	208	190	186	96	56	23	11	26	77	92	48	35	45	28	20	2	1	...	746
March	31	25	56	526	467	282	248	248	113	89	39	14	27	112	90	68	61	49	49	22	11	1	...	993
April	25	19	44	437	371	218	199	199	85	66	31	13	23	87	75	64	44	52	43	22	4	...	...	808
May	24	15	39	390	342	214	144	193	57	60	16	11	21	92	72	59	44	47	35	23	2	...	...	732
June	31	20	51	580	464	322	253	303	105	99	28	9	31	102	100	76	56	56	39	33	7	...	...	1044
July	18	15	33	708	602	486	410	584	145	95	28	22	22	99	81	59	57	49	43	20	5	1	...	1310
August	18	12	30	632	569	443	374	516	156	69	17	19	40	95	57	74	52	45	37	22	1	1	...	1201
September	27	24	51	566	459	305	247	305	116	61	16	18	36	119	99	81	62	39	45	22	5	1	...	1025
October	25	17	42	303	299	151	149	173	51	40	12	13	11	65	68	54	47	31	20	10	7	...	...	602
November	24	20	44	327	298	160	144	174	55	51	9	5	10	76	62	46	38	45	33	11	8	1	1	625
December	23	26	49	468	421	229	203	231	78	68	15	13	27	94	87	80	67	37	53	31	8	...	...	889
Totals	309	226	535	5716	4981	3246	2734	3306	1173	792	256	161	292	1107	951	757	598	530	456	250	61	6	1	10697
Per ct. of totals				53.45	46.55	30.35	25.62	37.25	11.54	7.78	2.52	1.57	2.86	10.89	9.35	7.45	5.88	5.21	4.48	2.46	0.60	.05	.009	

Table I. The whole number of deaths returned for the year has been 10,697. This amount indicates a falling off of 201, or nearly 2 per cent., from the deaths of 1857. Fixing the population at 600,000, which, I believe, is a fair estimate, the death returns furnish a favourable indication of the health of our city, and give one death to every 56 of its inhabitants.

Of the deaths recorded, 5,715 were males and 4,982 females, presenting an excess of deaths in the male sex equivalent to 14.70 per cent. For the last ten years the mortality records of Philadelphia give an excess of male deaths equal to 15.58 per cent. The average of deaths for each quarter of the year is 2,674; for each month $891\frac{5}{12}$; for every day $29\frac{1}{3}$.

According to the seasons of the year, so are the rates of death determined for each quarter. The first quarter furnished 2,461, the second 2,584, the third 3,536, and the fourth 2,116. The second or spring quarter yielded an increase of 5 per cent. over those of the first quarter, embracing two of the winter months. The third quarter, which rates the highest in mortality, and includes the summer and autumn in part, gave 36.76 per cent. more than the second quarter, and 43.60 per cent. than the first quarter. The fourth or last quarter, in which the deaths were reduced to 2,116, showed a decrease of 40.15 per cent. from those in the third. A large proportion of the increase of mortality in the third quarter may be safely charged to the diseases of the organs of nutrition, embracing many of the zymotic class.

Appended to this table will be found the number of deaths returned from the almshouse, or Blockley Hospital; they amount to 573. Also the mortality among the coloured population, which was 611. The number of interments in the city burial-grounds of bodies brought from other counties and States amounted to 52. I make these statements from the record, but their accuracy is very doubtful. From a more reliable source I learn that while there has been an annual increase of the inmates of the Blockley Almshouse—our great pauper establishment—the rate of mortality shows a reduction from 21.89 per cent. in 1854 to 14.50 per cent. in 1858.

In order to arrive at a safer estimate of the deaths from diseases alone, it seems proper to deduct those in the table registered under external causes, as well as those from debility, malformation, old age, unknown causes, stillborn, and those from the country, amounting in all to 1,967, or 18 per cent. of the whole. By this calculation we reduce the deaths from certified diseases to 8,730. Taking this as the correct standard of deaths from disease during the year, and it gives us only 1 death in every 67 of the population.

Table II. presents the deaths returned to the health office from those diseases to which the lungs and air-passages are liable. They amount to 3,092,

or 30.43 per cent. of the entire number of deaths for the year.[1] This percentage is higher by 2.30 per cent. than the preceding year, and shows an increase of deaths from this class over any former year, in proportion to the annual mortality.

The deaths from croup have increased 14 per cent. over those for 1857, and amount to 292, or 9.44 per cent. of the mortality from diseases of the air-passages. The deaths in the first and fourth quarters, which include the winter months, more than double those for the second and third quarters of the year. The steady increase of croup, according to the tables of mortality for this city, cannot have escaped the attention of the Fellows of the College. It is one of those diseases peculiar to childhood, and most prevalent between the ages of one and five years; it is not often met with in early infancy, although during this year 110 of the deaths were under one year of age. Boys are said to be more liable to croup than girls, according to the known statistics of writers. The present year fully confirms this opinion. 160 of the deaths were boys and 130 girls, showing an increase of 23½ per cent. of the former over the latter. The distinct character of the disease causing death, whether pseudo-membranous or catarrhal croup, is rarely designated in the certificate, and hence it is impossible to ascertain the comparative mortality of the two forms of this frequent and too often fatal disease among children. A more complete system of classification of diseases, as well as of registration of deaths, would, if practically carried out, supply a necessary want in our mortality statistics of this as well as other diseases.

The deaths from dropsy of the chest present an increase of 191.73 per cent. above those recorded for 1857. This augmentation will be found to belong to the last half of the year, and occurred principally among adults. The cause in all probability may be looked for in the unusual prevalence of inflammatory affections of the bronchial passages and lungs, the result of a catarrhal epidemic influence in the atmosphere.

This catarrhal disease furnished 140 deaths, or 4.52 per cent. of the mortality assigned to this class.

Inflammation of the lungs contributed 562, or 18 per cent., of the deaths in this table, and inflammation of the bronchia 100, or 3 per cent. Only two deaths are ascribed to inflammation of the pleura, one to inflammation of the chest, none to that of the larynx or trachea. This is an unusual occurrence.

Hooping-cough will be seen to have supplied more deaths than for the two previous years combined, viz., 153, an increase of 200 per cent. over those for 1857.

The extreme prevalence of catarrhal diseases in our city during the last

[1] It will be understood that the calculations in these tables having reference to the entire mortality are prepared by excluding the stillborn, unless otherwise expressed.

four months of the year, amounting almost to an epidemic influenza, may in some degree account for the increase of deaths as indicated in the table.

Table III. In this table I have set apart the deaths from consumption of the lungs which have been recorded during the year. I have also designated the sexes, and have shown the total of deaths for every decennial period.

The annual mortality from this dreaded scourge of the human family is placed at 1,659. Of this number, 806 were males and 853 females; the excess of deaths among females is peculiar to all mortality tables in all places. In the present instance it was equal to about 6 per cent.

The deaths from this disease contribute more than half of those classed with diseases of the lungs and air-passages, while they furnish 16.33 per cent. of the total mortality.

The increase of the deaths from consumption above those for 1857 is equal to 7.45 per cent.

Estimating the population at 600,000, the ratio of deaths to population was as 1 to every 361.66, or 2.76 in every thousand.

According to this table, and it does not differ materially from others that I have prepared for this region, the decennial period in which the deaths from consumption of the lungs are most frequent is that between 20 and 30 years. The next in frequency is between 30 and 40. This result would confirm the opinions of Sir James Clark and of Louis on this point.

There is no period of life, however, even from infancy (which interesting season is thought to be very prolific of consumption) down to extreme old age, in which there will not be found recorded, deaths from the ravages of this hereditary pestilence. In the accompanying table you will find 9 deaths under 1 year, and 2 over 90 years; while the intervening periods gave larger proportions, marking a gradual increase up to 30 years, when they as gradually declined.

The highest monthly mortality was in December, 171; the next March, 169; the next September, 159. October and November furnish the lowest number—100 in the former, and 106 in the latter.

Table IV. contains the numerical estimate of the deaths during the year from diseases appertaining to the nervous system. They amount to 1,990, or 19.58 per cent. of the entire mortality.

Under the separate titles of convulsions and congestion, dropsy, inflammation, and disease of the brain, will be found 1,560 deaths. These diseases belong peculiarly to children, and we may safely infer that 78 per cent. of the deaths from affections of the nervous system are contributed by our infantile population.

Convulsions, by itself, gives a large proportion, equal to 609, or 6 per cent.

Twenty-six deaths are noticed from coup de soleil, or sunstroke. Twenty-three of the deaths occurred in June, and of these, twenty-one were in the last week of the month; during this term, the thermometer stood at its highest point for the year, 96½ on the 28th. These deaths were the result of the extreme heat of the season.

The deaths from mania-à-potu were 85, an increase of 37 per cent. above those for 1857, and a larger annual mortality than for several years back.

Table V. enumerates the deaths for the year from diseases peculiar to the organs of nutrition, amounting to 2,253, and equal to 22.17 per cent. of the entire mortality.

Under this head is placed cholera infantum, a summer disease of infancy, confined principally to the crowded suburbs and badly-ventilated districts of our large cities and towns. The third quarter of the year, embracing July, August, and September, together with the month of June, furnishes almost the entire mortality. The whole number for the year was 662, equivalent to about 14 per cent. of the deaths for the year, in children under five years of age.

Marasmus (?).—Under this term will be found 463 deaths; the months of June, July, August, and September furnishing 262 of this number. This also is one of those diseases—or, more properly, results of disease—peculiar to children, and found prevailing extensively in large cities during the warm season. It seems to be a favourite name with many physicians, and an easy mode of certifying to deaths of a chronic form in children where doubt exists in the mind as to the real nature of the case. I believe it to be the sequel of several varieties of disease of the organs of nutrition in children; and, with that understanding, the numerous deaths ascribed to marasmus obviously belong to those affections, and are placed to their account.

The third quarter of the year, which includes almost the entire warm season, contributes a large portion of the deaths under this head. It will be seen, also, that the increase is from those affections which are generally classified with the zymotic or epidemic. The entire number for the quarter is 1,314, constituting 58 per cent. of the deaths in this class; while the epidemic diseases alone, in the quarter, are 1,093, or 48 per cent.

Table VI. Here will be found the deaths assigned to those diseases which belong to the kidneys, bladder, and the organs of generation. They consist, this year, of a limited percentage when compared with the whole mortality. There is a falling off of one-half from those of last year; they number 63. Of these, puerperal fever deaths make 36, or more than half. In 1857 the largest proportion of deaths from this fever were in the first quarter, the coldest period of the year. This year, almost the entire mortality was in warm weather.

Table VII. The mortality from fevers during 1858 is shown in this table.

A comparison with the fever table of 1857 is the best evidence of the exemption of our city in 1858 from the destructive influence of this class of diseases upon its citizens. The former year they numbered 1,048, in the latter 626, presenting a decrease equal to 40 per cent. In 1856 the proportion of deaths from fevers to the entire mortality was 1 in 8; this year (1858) they are only 1 in 16.

This great difference is explained in part by the falling off in the deaths from scarlet fever. In the two years preceding 1858 they amounted to 1,696; during this year they were only 241.

To the entire mortality, fever deaths rate only 6 per cent.

Typhoid and typhus fevers have increased in the number of their deaths since 1857 at the rate of 25 per cent.

If the record of deaths be considered a fair index, our city has been peculiarly exempt from the ordinary forms of autumnal fevers. The few cases I have observed invariably partook of a mild type, and were easily managed. Intermittent fever and its varieties, considered as of miasmatic origin, which were exceedingly prevalent, a few years ago, in the urban as well as in the suburban districts during the fall months, were neither fatal nor numerous. It has been remarked that this more common type of fever seemed to be gradually disappearing from our vicinity as an endemic, or to be yielding in form to those of an asthenic character, as the typhoid or enteric.

After an experience of thirty-four years, and a somewhat familiar acquaintance with the endemics of the county, I have never known the outer districts of our city to have enjoyed a larger share of health than during the past year, especially as regards the ravages from fever. The common bilious fevers have been few in number; and when found, their active inflammatory type was doubtful, and features were presented, which corresponded with those above alluded to, of an enteric character.

One of the local causes of this comparative immunity of the suburban districts of the city from miasmatic fevers, in addition to the meteorological or climatic changes may be found, especially during the past two years, in the almost entire suspension of those rapid and extensive improvements which for years have been in progress along the outskirts of the city. In the prosecution of these changes, streets were opened and graded, which required the digging down of embankments and the filling up of excavations; the removal of earth was needed also from cellars dug for new buildings, and in the levelling of lots.

The great amount of loose and new earth, thus exposed to the influence of heat and moisture, and the decomposition of vegetable remains contained therein, in connection with numerous collections of stagnant water, could not do otherwise than give rise to the exhalation of malaria, which, with other causes, highly favoured the appearance and extensive prevalence

of fevers. When the money panic of 1857 swept over the country, our city experienced its prostrating influence; business suddenly declined, property depreciated in value, building improvements at once ceased, and with these reversions an abatement of miasmatic fevers followed.

Sixteen deaths are recorded from typhus icterodes. As far as I could obtain correct information, these deaths were from undoubted cases of yellow fever. They all occurred in the months of August and September.

About the middle of July there was considerable anxiety in the community, in consequence of the arrival and detention at quarantine of a number of vessels from ports in the West Indies, where yellow fever was prevailing at the time of their sailing. Several of these vessels had cases of the fever on board in a most malignant form, when they dropped their anchors opposite the lazaretto. They received a visit from the physician at the station, Dr. L. S. Filbert, and the sick were immediately removed to the hospital. Other vessels had lost several of their seamen with yellow fever on the voyage, at sea, or in foreign ports, while others again arrived with their crews in health, having had no sickness during the voyage, but were detained for purification. In a few days, cases of yellow fever were received into the hospital from some of these vessels.

Every sanitary precaution was strictly observed by the officers at the station, to prevent the spread of the disease among the crews of the fleet riding quarantine, and to preserve the health of those persons remaining on board the infected vessels. These were moored at some distance north and east of the others, which were detained, not on account of sickness, nor because they came from infected ports, but because it was according to law.

Dr. Filbert received into the hospital from time to time, in all, twenty-seven cases of yellow fever. Four of these died; two within ten hours after admission. Two of the four had black vomit. This was a mortality of only fourteen per cent. to cases, and shows a result more favourable than is usual. The treatment followed by the doctor in these cases he has had the kindness to forward me, which I herewith transcribe in his own words.

"The treatment, which I am happy to say has proved very successful in my hands, was as follows: As soon as the patients (except the two who arrived in a dying condition) were received into the hospital, I had them immersed in a hot mustard-bath, after which, upon being wiped dry, they were put to bed, well covered with blankets, and bottles of hot water placed around their bodies and lower extremities, with the intention of producing diaphoresis. Entire rest in the recumbent position was strictly enjoined, and maintained throughout the treatment. As early as possible I administered the following remedies: R.—Hydr. chlor. mit. gr. vj; sulph. quin. gr. v; pulv. nitr. potas. gr. v; pulv. ipecac. gr. $\frac{1}{3}$. This prescription was repeated every three hours. The treatment had the desired effect of

producing copious perspiration. In from three to four days the fever abated.

"My object was to give a sufficient amount of calomel to move the bowels without the addition of other purgatives, at the same time to lay a mercurial foundation at the start. It may not be out of place to say, that in no instance did my patient give me trouble where mercurial action could be produced in due time. In those cases where there was much gastric distress, I applied mustard to the epigastric region. Ice was allowed, as much as the patient desired."

The great solicitude felt by the lazaretto physician, for a faithful discharge of his duties under the trying circumstances in which he found himself placed, and his unremitted attention to the sick, were calculated to depress the energies of his nervous system; while his frequent visits to the infected ships from day to day, in order that those left on board might have his protection, exposed him to the influence of a poisoned atmosphere, and he contracted the fever, which proved to be a mild case. He convalesced on the sixth or seventh day of his sickness.

Unfortunately two infected vessels escaped the vigilance of the officers at the lazaretto, and either evaded the laws or the restrictions of the Board of Health, or else through a misunderstanding, had received permits to leave and thus found their way to the city, where they discharged their cargoes and their crews. In a few days after their arrival, several cases of yellow fever made their appearance among the persons employed about these vessels, and in the vicinity of their moorings.

It has not been possible to ascertain the true number or exact locality of cases of yellow fever that were under treatment during its limited appearance in our city. The Board of Health, as I learn, preserved no record of the cases reported to them, and, besides, there were instances of the disease that never came to their knowledge.

From the most reliable information, there were between thirty and thirty-five cases. A number of them occurred in the vicinity of South and Front Streets. Several were in Kensington; while a few were under treatment in one or two of our public hospitals. Many of these cases could be traced to direct communication with the atmosphere of the vessels that had reached our wharves, coming directly from yellow fever ports, without having undergone quarantine; while with others no satisfactory information could be obtained as to the origin of the disease.

Twenty-five of these cases of fever were under the care of Dr. John Gegan, of South Front Street. His first case occurred two days after the arrival of the first vessel at Lombard Street wharf, in a baker, residing in Lombard Street near Front, who told the doctor he had been about the wharf for several days previous to his sickness. Five of the cases under the care of Dr. Gegan died—a mortality of twenty per cent. All of his

cases, with the exception of the night inspector of one of the above infected vessels, were in houses east of Second and south of Lombard Streets.

It becomes, therefore, a difficult question to decide upon the origin of these cases of yellow fever. Were they the offspring of a foreign poison, introduced by vessels from the West Indies, or are they to be regarded as the production of domestic causes? Were they the result of epidemic or endemic influences? That they were of sporadic or accidental origin, will, perhaps, be admitted. That the disease neither lasted until a frost should banish it from our midst, nor spread to any extent, are facts well known. The hygrometrical and the thermometrical conditions of the atmosphere were by no means favourable to its production, or administered to its extension; hence, the activity of the cause, whatever it might be, was soon exhausted for the want of these and other propitious circumstances.

The extensive prevalence of scarlet fever in our city for a number of years past, the fearful ravages it has committed by death in that portion of the population which, of all others, is the most interesting while it is the most cherished, and the increased attention that has been bestowed upon it of late by writers on medicine, would seem to claim for it, at our hands, rather more than an ordinary notice.

For this purpose I have taken the trouble to compile, from the mortality records, the following table, which gives us the deaths from scarlet fever in our city for a period of twenty-eight years, from 1831 to 1858, inclusive, with the ages and sexes for each decennial period :—

YEARS.	Males.	Females.	Boys.	Girls.	Under 1 year.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	Total.
From 1831 to 1840, ten years	968	1036	945	1010	181	353	915	433	58	15	25	14	4	6	..	..	2004
" 1841 to 1850, ten "	1267	1318	1255	1284	249	461	1216	545	52	16	26	12	6	2	..	..	2585
" 1851 to 1858, eight "	1740	1735	1712	1707	329	687	1574	722	82	25	33	17	4	..	1	1	3475
	3975	4089	3912	4001	759	1501	3705	1700	192	56	84	43	14	8	1	1	8064

During the twenty-three years preceding 1831, beginning with 1807, when the first annual statement of deaths in our city was published by the Board of Health—as prior to this event we have no authentic account of the mortality—there were only 162 deaths from scarlet fever. Within this interval of time there was a series of years, from 1812 to 1818, that a death from scarlet fever was unknown to the record; and from 1807 until 1812, only 13 deaths are to be found on the register.

In 1830 the deaths increased to 40, from 9 the previous year, and from the following year, 1831, when, as the above table indicates, they run up to 200, we may date the advent of this wide-spread and severe exanthe-

matous fever. Not only has it prevailed extensively, and with marked fatality, but during each successive decennial period it has steadily increased, provided the increased ratio of deaths be taken as the index of its prevalence.

All writers agree that no period is fixed for the duration of scarlet fever when it makes its appearance in an epidemic form, and it would not be an assumption of authority to assert, that the past twenty-eight years have proved a memorable epidemic cycle, especially when contrasted with the preceding period of twenty-three years, during which term only 162 deaths from this disease were returned out of 56,000 deaths. It has been conjectured by Dr. Emerson that in the period of exemption referred to, there may have been deaths from scarlet fever reported under the title of sore throat, which in all probability was the case. Making every allowance, however, for the 355 additional deaths thus recorded, it would not, in my opinion, change the proportional mortality between the two periods—since the like conjecture, for the returns of deaths from scarlet fever during the epidemic visitation, by other and vague terms, would far exceed those of the former period.

A careful inspection of the table will reveal several points of interest involved in the history and character of this dreaded malady. That it is a disease of infancy and childhood, scarce a doubt need be entertained. Of the 8,064 deaths which have occurred in this city since 1831, 7,665, or 95 per cent. were under ten years of age. Of the deaths recorded beyond 20 years, or in adult life, there were 151, not quite 2 per cent. Eight of these were between 50 and 60, one between 60 and 70, and one between 70 and 80 years of age, proving that the disease may attack the aged and terminate fatally.

Some diversity of opinion has been expressed as to the influence of scarlet fever upon the sexes. While one author decides that girls are more liable to it than boys, another claims the influence for the boys; while a third believes that under puberty, sex exerts no influence whatever, but beyond that age it is most frequently found among females.

It may be thought impossible, with our present imperfect and limited means of observation, to decide correctly this question. Should it never be settled, it is not one of vital importance. Nevertheless, I am of opinion that females are more subject to the disease than boys. The evidence for this opinion will be found in the accompanying table, unless it can be satisfactorily shown that the result there given of the excess of female deaths, was occasioned by a less resistance to a fatal termination of the disease, owing to their greater delicacy of conformation.

Of the deaths recorded in this table, 4,089 were females, and 3,975 were males, presenting an excess equal to 3 per cent. of female deaths over those in the male sex. This result, while it may conflict with the estimate of a

number of able writers, is in accordance with the experience and decision of the Registrar-General of England.

Table VIII. For several years a separate table has been prepared for measles, smallpox, and varioloid. The falling off in the deaths from smallpox and varioloid since 1855 has rendered a distinct notice unnecessary. Only seven deaths are registered from smallpox during the entire year, and of these victims, five were children. Not a death took place from varioloid. For measles the table has been continued, although it might with propriety be dispensed with, in the present instance, as the deaths from this exanthem have reached only 28 during the year. No epidemic of measles has prevailed, and the few isolated cases which made their appearance were generally mild in character. The last two quarters of the year show an increase in the deaths, the disease no doubt having been complicated with catarrhal inflammations, which were quite prevalent.

Table IX. In this group are those only, in which the deaths have exceeded ninety for the year.

A glance at the table will indicate a change in favour of 1858, as to its comparative health, with the results of the previous years appended thereto.

Consumption of the lungs produces the highest mortality. Cholera infantum is the next in the scale.

Disease of the heart, which in all probability stands for a variety of distinct morbid affections, the true diagnosis of which has either been overlooked through indifference, or waived in the absence of a knowledge of exploration according to modern investigations, numbers 215 of the entire mortality from diseases of the organs of circulation, which were 248.

The remarkable increase of deaths from old age, seen in this table, numbering 358, when compared with those in former years, will not escape attention. They more than double the number for either 1855 or 1856, and nearly double those for 1857. I shall not attempt any explanation, as it may be purely an accidental occurrence, although it might serve as an argument in favour of an approximation towards a higher average of human life in our city.

Table X. This is a useful table for the statistician. It presents at first sight an analysis of the annual mortality, numerically arranged. The stillborn, with the sexes for each month, are given. The deaths per month at each of the fifteen distinct periods of life, with the sexes, and the number of boys and girls under twenty years of age, are also enumerated. A calculation of percentages of deaths for each month to the whole number has been prepared, as well as for the several designated periods of life, all of which will be found available in making up comparative tables.

The stillborn children amounted to 535, which would be equal to 5 per cent. of the entire mortality for the year. This is a more favourable comparison than was presented last year, or for the seven previous years. The male stillborn exceeded the female by 36.72 per cent. This fact of the excess of stillborn males is noticed in the statistics of other cities.

The largest number of stillborn occurred in March—viz., 56; the lowest in August—viz., 30. The coldest months yielded the greatest amount of stillborn children.[1]

The mortality in children, or those deaths which have occurred before the twentieth year of life,[2] exclusive of stillborn, were 5,443, and make up 53.38 per cent. of the deaths. Those under one year, deducting the stillborn, amounted to 2,767, equivalent to 27.25 per cent. of the mortality, and constitute more than half of all the deaths under twenty years.

The deaths under five years amounted to 4,731, or 46.40 per cent. of the annual mortality. Between five years and twenty they were less than 7 per cent.

The mortality in infancy and childhood in our city will compare favourably with that of other large cities; still, the large number of deaths at these interesting periods of life demand a far greater share of attention from the medical profession and the corporate authorities than they now receive. It is a fact, and cannot be denied, that the prevalent causes for this heavy mortality in early life are preventable. The improper hygienic management of children, with regard to their diet, dress, exercise, and air, together with a neglect by the civil authorities of the enforcement of sanitary police measures, are mainly the agents that lay the foundation for the existence of infantile diseases, and thus invite this early harvest of death.

In adult life, that decade between 20 and 30 gave the highest mortality; it was equal to 10.89 per cent. The deaths beyond this period gradually declined, up to extreme old age. Two hundred and fifty deaths, or 2.46 per cent., took place in the decennial period between 80 and 90, sixty-one between 90 and 100, and seven died in their centennial term, one of whom was beyond 110 years.

The proportion of deaths in advanced life, when compared with the total mortality, and with the like proportion in former statistics, shows that the probabilities of life have been increased during the year. In the previous year (1857), although the mortality was greater in amount than this year, yet the aggregate ages were only 221,327 years, which made the duration of life $20\frac{1}{3}$ years; whereas this year (1858) the sum of the ages amounted to 238,585, which would increase the average existence of life to $23\frac{1}{2}$ years.

[1] No estimate can be formed of the number of stillborn to the births in our city, as the Board of Health have failed in securing the birth statistics for several years.

[2] In the tables these deaths are classified as minors, and those above twenty as adults.