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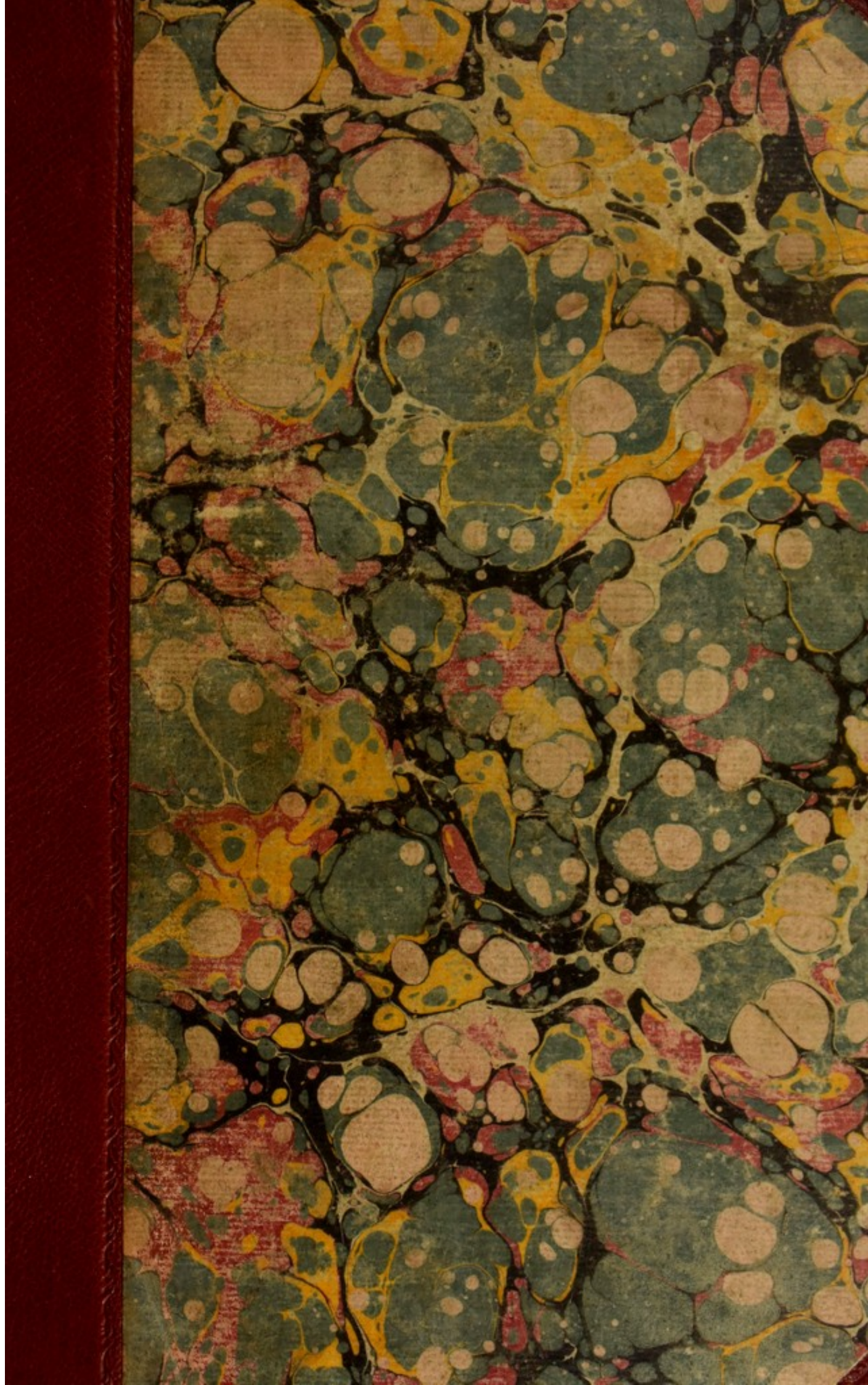
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O B S E R V A T I O N S
ON THE
INCREASE AND DECREASE
OF
DIFFERENT DISEASES,
AND PARTICULARLY OF THE PLAGUE.

BY WILLIAM HEBERDEN, JUN. M.D. F.R.S.

LONDON:

PRINTED FOR T. PAYNE, AT THE MEWS-GATE.

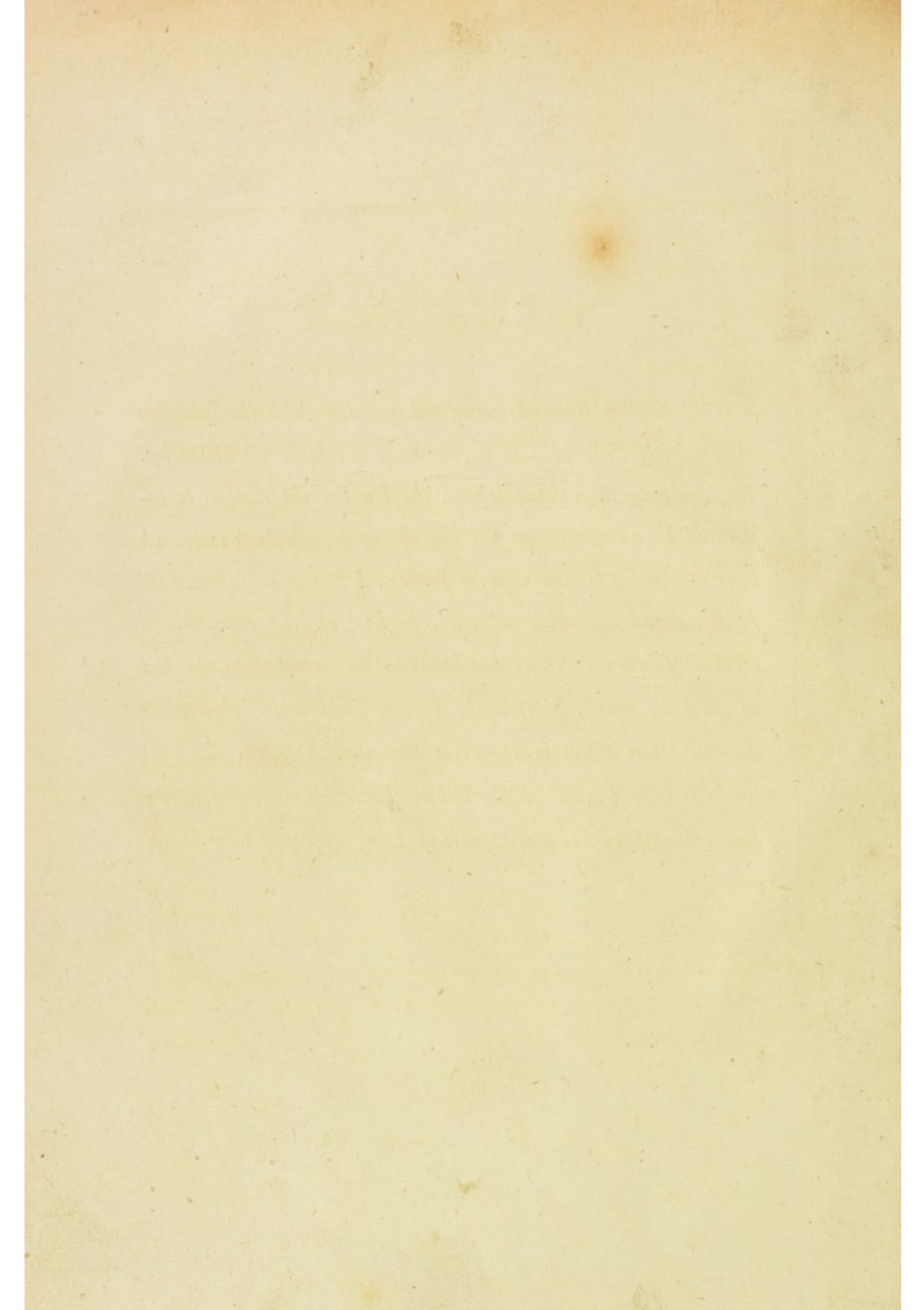
1801.

ROYAL SOCIETY

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ADVERTISEMENT.

THE following Remarks were put together with the intention of subjoining them to a new edition of the Bills of Mortality. In submitting them separately to the Public, the Author is influenced by no vanity, or self-conceit, no forwardness to broach new opinions, nor any wish to support a favourite system. If he has stated any thing as fact, he has at least endeavoured to do it fairly; or if he has hazarded any conclusions, he has at the same time laid open the sources from which they were drawn. His object is to direct the attention of the Medical world to a subject which has hitherto been very much neglected; and which appears to him capable of being employed to valuable purposes.



P R E F A C E.

PEOPLE have fallen into two opposite errors concerning the Bills of Mortality. Some have considered their authority as too vague to be made the foundation of any certain conclusions; and others have built upon this foundation, without sufficiently considering its real defects. Both parties are equally in the wrong.

THE agreement of the Bills with each other, does alone carry with it a strong proof, that the numbers under the several articles are by no means set down at random; but must be taken from the uniform operation of some permanent cause. While the gradual changes they exhibit in particular diseases, correspond to the alterations which in time are known to take place in the channels through which the great stream of mortality is constantly flowing.

THAT there are, however, many and very great imperfections in the Bills of Mortality, cannot be doubted. For, first, the births include only those who are baptized according to the rites and usage of the Church of England. By which
means

means all Jews, Quakers, Papists, and the very numerous body of Dissenters, are omitted. And though some among the poorer sort both of Papists, and Dissenters, who live at a distance from their respective burial-grounds, and cannot bear the expence of being carried thither, are buried according to the rites of the Established Church, and consequently have a place in the register ; yet the numbers so accounted for, must be very few compared with the deficiencies.

SECONDLY : Of those who are of the Church of England, a very large proportion are either buried in the country, or in burial grounds adjacent to London, but without the Bills. The burials also in St. Paul's Cathedral, in Westminster Abbey, the Temple, the Rolls, Lincoln's Inn, St. Peter's in the Tower, the Charterhouse, the several Hospitals of the metropolis, and other places which are not parochial cemeteries, are for that reason omitted. Besides which, the great parishes of Marybone, and Pancras, have never yet had a place in the Bills of Mortality. In the former of these alone, the burials, on an average of five years, from 1795 to 1799 inclusive, amounted annually to 1,550 (*a*).

THIRDLY : Many abortives and still-born, making together above 700 in the year, are noticed in the deaths, but not in the births.

FOURTHLY,

(*a*) Mr. Pennant, in his Account of London, says, it is the opinion of Mr. Richardson, who has served the parish offices, that there are nearly as many buried from London, at different burial grounds, without, as within the limits of the Bills of Mortality.

FOURTHLY: The mistakes and misrepresentations, to which the particular diseases are liable, are too obvious to be insisted upon. Yet it deserves to be repeated, that even in these smaller divisions of the subject, the correspondence of one year, and of one week, with another, is such, as must convince every attentive observer, that a considerable degree of credit is due to their report.

ERRATUM:

Page 95. Note (*p*) for page 66, read page 31.

T A B L E I.

OF THE ANNUAL CHRISTENINGS AND BURIALS
IN LONDON for each Year of the Eighteenth Century;
Together with the Proportion out of every Thousand, who
have died by Bowel Complaints, Small Pox, Palsy, Measles,
or Childbirth.—*From the Bills of Mortality.*

TABLE I.

Years - -	1701	1702	1703	1704	1705	1706	1707	1708	1709	1710	Average
CHRISTENED	15616	15687	15448	15895	16145	15369	16066	15862	15220	14928	15623
BURIED - -	20471	19481	20720	22684	22097	19847	21600	21291	21800	24620	21461
Flux - - }											
Colic - - }	60.8	67	53	56	52.6	50.4	45.9	41.1	42.4	32.9	50.2
Gripes - - }											
Small Pox -	53.1	15.9	43.3	66.1	49.7	36	49.9	79.2	46.6	126.7	56.6
Apoplexy - }											
Palfy - - }	8	6.9	7.6	6.4	7.1	7.8	7.2	8	7.4	6.6	7.3
Suddenly - }											
Measles - -	0.2	1.4	2.4	0.5	14.5	18	1.7	5.9	4	7.3	5.5
Childbed - }											
Miscarriage }	10.9	11.4	10.5	11.7	13	11.9	11.9	11.5	9.8	8.8	11.1

Years - -	1711	1712	1713	1714	1715	1716	1717	1718	1719	1720	Average
CHRISTENED	14706	15660	15927	17495	17234	17421	18475	18307	18413	17479	17111
BURIED - -	19833	21198	21057	26569	22232	24436	23446	26523	28347	25454	23909
Flux - - }											
Colic - - }	36.7	32.5	33.8	30.2	32.3	33.9	35.8	39.1	39.5	38.3	35.2
Gripes - - }											
Small Pox -	45.7	92.5	76.8	106	48	99.4	94.4	71	114.1	56.7	80.4
Apoplexy - }											
Palfy - - }	9	7.4	9.3	7.5	8.4	7.3	10.3	8.5	8.5	9.9	8.6
Suddenly - }											
Measles - -	4.8	3.6	2.9	5.2	1.3	11	1.5	18.5	8.5	8.3	6.5
Childbed - }											
Miscarriage }	9.8	9.8	8.4	11.6	12.5	9.4	10.3	9.9	10.3	10.2	10.2

TABLE I.—*continued.*

Years - -	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730	Average
CHRISTENED	18370	18339	19203	19370	18859	18808	18252	16652	17060	17118	18203
BURIED - -	26142	25750	29197	25952	25523	29647	28418	27810	29722	26761	27492
Flux - - }											
Colic - - }	32.6	32.2	36.3	34.1	26.4	25.4	24.3	20.2	19.3	18.5	26.9
Gripes - - }											
Small Pox -	91.3	84.3	112.8	47.2	125	53	83.7	75.2	95.9	71.6	84
Apoplexy - }											
Palsy - - }	9.6	8.6	8.2	9.6	8.7	8	8	7.2	7.4	10	8.5
Suddenly - }											
Measles - -	9.1	4.4	7.9	4.5	2.7	8.6	2.5	3	1.3	11.6	5.6
Childbed - }											
Miscarriage }	11.5	11.4	10	9.5	10.4	8.3	7.9	7.7	8.4	10	9.5

Years - -	1731	1732	1733	1734	1735	1736	1737	1738	1739	1740	Average
CHRISTENED	17830	17788	17465	17630	16873	16491	16760	16060	16181	15231	16830
BURIED - -	25262	23358	29233	26062	23538	27581	27823	25825	25432	30811	26492
Flux - - }											
Colic - - }	15.7	15.9	12.2	14.9	14.7	14.3	13	11.9	11.7	10.3	13.4
Gripes - - }											
Small Pox -	105.6	51.3	47.2	103.4	67.8	109.6	74.4	61.1	66.5	85.2	77.1
Apoplexy - }											
Palsy - - }	11	11.4	9.0	8.4	10	9.1	9.9	8.9	9	8.8	9.5
Suddenly - }											
Measles - -	4.1	1.3	20.8	0.7	0.4	6.1	4.5	8.3	12.8	1.4	7.0
Childbed - }											
Miscarriage }	10.3	9.5	10.3	10.5	8.3	7.4	10.1	10	10.3	7.5	9.4

TABLE I.—*continued.*

Years - -	1741	1742	1743	1744	1745	1746	1747	1748	1749	1750	Average
CHRISTENED	14957	13751	15050	14261	14078	14577	14942	14153	14260	14548	14458
BURIED - -	32169	27483	25200	20606	21296	28157	25494	23869	25516	23727	25352
Flux - - }											
Colic - - }	9.6	5.7	6.6	4.7	8.7	6.4	7.6	7	7.5	7.4	7.1
Gripes - - }											
Small Pox -	61.7	52.1	81.1	79.2	57.4	115.5	54.3	74.6	102.9	51.8	72
Apoplexy - }											
Palfy - - }	8.6	10.5	11	12.4	12	11.2	9.6	12.6	12.7	14	11.4
Suddenly - }											
Measles - -	1.3	35.8	0.7	0.2	0.6	8.9	3.1	0.4	4.1	13.5	6.8
Childbed - }											
Miscarriage }	8.1	7.5	7.1	9	9.4	6.8	8.3	8.5	7.3	9.7	8.1

Years - -	1751	1752	1753	1754	1755	1756	1757	1758	1759	1760	Average
CHRISTENED	14691	15308	15444	14947	15209	14830	14053	14209	14253	14951	14789
BURIED - -	21028	20485	19276	22696	21917	20872	21313	17576	19604	19830	20460
Flux - - }											
Colic - - }	6.6	6.6	7.3	6	4.3	4	3.5	3.5	4.3	2.7	4.8
Gripes - - }											
Small Pox -	47.5	173.4	40.7	104.3	90.4	77.3	154.7	72.7	132.4	104.5	102.7
Apoplexy - }											
Palfy - - }	13.5	12.6	15.6	13.6	12	15	12.2	14.7	11.7	14.4	13.5
Suddenly - }											
Measles - -	1	5.4	13.3	0.5	19.2	7.5	1.1	39.7	16.6	8.8	11.5
Childbed - }											
Miscarriage }	8.4	7.9	9.1	9.6	9.5	8.6	8.4	10.6	10.3	12	9.4

TABLE I.—*continued.*

Years - -	1761	1762	1763	1764	1765	1766	1767	1768	1769	1770	Average
CHRISTENED	16000	15351	15133	16801	16374	16257	15980	16042	16714	17109	16176
BURIED - -	21063	26326	26143	23202	23230	23911	22612	23639	21847	22434	23441
Flux - - }											
Colic - - }	4	7.9	3.4	3.4	2.8	2.8	3.2	4.1	3	3.5	3.8
Gripes - - }											
Small Pox -	72.6	105.2	137.7	103.4	108.6	97.2	96.8	128.3	89.4	88.6	102.7
Apoplexy - }											
Palsy - - }	15.7	13.6	11.4	12.6	11.4	12.9	14	9.7	12	13	12.6
Suddenly - }											
Measles - -	19	4.6	23.4	2.8	2.3	20	3.5	17.3	4	14.5	11.1
Childbed - }											
Miscarriage }	14	10.6	9.9	10.2	10.8	8.5	7.8	9	8.6	12.2	11.1

Years - -	1771	1772	1773	1774	1775	1776	1777	1778	1779	1780	Average
CHRISTENED	17072	17916	16805	16998	17629	17280	18300	17300	16769	16634	17170
BURIED - -	21780	26053	21656	20884	20514	19048	23334	20399	20420	20517	21460
Flux - - }											
Colic - - }	2.5	2.7	2.7	3.8	4	2.9	2.1	2.9	4.2	4.5	3.2
Gripes - - }											
Small Pox -	76.5	153.5	48.1	119.1	130.2	90.9	110.1	70.2	122.2	42.5	96.3
Apoplexy - }											
Palsy - - }	13.4	12.4	13.1	13.5	13.6	16.8	14.1	14.8	12.6	16.8	14.1
Suddenly - }											
Measles - -	5.3	8.1	9.2	5.8	13.8	8	6.2	19.1	4.8	13.2	9.3
Childbed - }											
Miscarriage }	8.2	7.5	9	9.9	9.3	10.2	9.6	8.6	10.4	9.3	9.2

TABLE I.—*continued.*

Years - -	1781	1782	1783	1784	1785	1786	1787	1788	1789	1790	Average
CHRISTENED	17026	17101	17091	17179	17919	18119	17508	19559	18163	18980	17862
BURIED - -	20709	17918	19029	17828	18919	20454	19349	19697	20749	18038	19269
Flux - - }											
Colic - - }	4.5	2.4	3.4	1	1.6	1.5	0.7	1.5	1.3	0.6	1.8
Gripes - - }											
Small Pox -	169.5	35.5	81.6	97.7	105.3	60.5	126	55.8	101.1	89.8	92.2
Apoplexy - }											
Palsy - - }	13.4	19.5	15.4	15.2	16.5	15	12.8	14.8	14.4	15.5	15.2
Suddenly - }											
Measles - -	9.7	9.4	9.7	1.6	1	39.5	4.6	2.8	26	6.6	11
Childbed - }											
Miscarriage }	10.1	7.7	7.6	7.6	8.8	10	11.3	10	8.5	8.3	9

Years - -	1791	1792	1793	1794	1795	1796	1797	1798	1799	1800	Average
CHRISTENED	18496	19348	19108	18689	18361	18826	18645	17927	18970	19176	18754
BURIED - -	18760	20213	21749	19241	21179	19288	17014	18155	18134	23068	19680
Flux - - }											
Colic - - }	0.8	0.5	1.1	0.9	0.9	1.1	0.9	1.4	0.7	1	0.9
Gripes - - }											
Small Pox -	94.5	78.4	109.7	100.7	49.5	183.9	30.7	128.7	61.3	104.7	94.2
Apoplexy - }											
Palsy - - }	15	15	16.2	14.7	14.2	15.4	18.4	17.1	19.5	16.3	16.2
Suddenly - }											
Measles - -	6.6	22.5	11.4	9	15.6	15.9	13	10.8	12.3	17.2	13.4
Childbed - }											
Miscarriage }	8.5	10	8.7	9.5	7	10.5	12.2	8	7.4	7.3	8.9

TABLE II.

OF Ten different Articles extracted from the LONDON WEEKLY
 BILLS OF MORTALITY, shewing their Variations every Week
 for Ten Years.

TABLE II.

WEEKLY BILLS of MORTALITY. — 1763.	Whole Number buried.	Under two years.	Above sixty years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tions.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
4 Jan. - -	641	197	93	11	2	113	73	9	0	106
11 Jan. - -	565	162	84	6	3	104	55	5	0	108
18 Jan. - -	583	146	86	11	8	118	61	1	0	107
25 Jan. - -	621	149	105	5	13	103	62	3	2	113
1 Feb. - -	687	216	128	14	10	129	59	2	3	125
8 Feb. - -	612	152	120	5	8	106	76	4	1	84
15 Feb. - -	520	146	86	4	6	93	43	2	3	96
22 Feb. - -	551	158	86	6	5	108	69	3	1	79
1 Mar. - -	469	126	65	6	5	108	54	1	2	67
8 Mar. - -	513	153	86	3	7	103	64	0	0	65
15 Mar. - -	404	98	76	3	0	93	29	1	2	51
22 Mar. - -	552	157	87	3	3	114	75	2	1	73
29 Mar. - -	443	135	59	4	3	106	53	3	2	52
5 Apr. - -	448	131	79	6	6	85	62	1	2	57
12 Apr. - -	484	147	78	5	4	108	63	0	3	57
19 Apr. - -	477	141	68	6	7	83	49	0	8	61
26 Apr. - -	505	140	76	5	6	105	83	0	7	54
3 May - -	461	135	70	3	9	101	36	0	7	61
10 May - -	567	159	85	9	12	105	68	0	12	77
17 May - -	484	155	60	6	3	81	70	0	15	52
24 May - -	452	152	70	5	2	88	54	2	14	49
31 May - -	537	179	72	7	10	118	43	1	15	67
7 June - -	524	174	70	7	7	87	69	1	23	64
14 June - -	537	167	75	6	2	90	64	0	31	62
21 June - -	466	142	58	6	3	83	72	0	36	57
28 June - -	552	159	74	2	4	104	71	1	34	83

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1763.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
5 July - -	533	161	60	5	11	96	82	0	34	69
12 July - -	517	163	64	11	7	76	60	1	36	80
19 July - -	506	175	56	4	2	90	66	3	51	78
26 July - -	486	192	46	3	5	78	62	3	20	87
2 Aug. - -	436	157	43	6	2	62	55	1	33	86
9 Aug. - -	460	192	47	5	2	65	62	3	26	69
16 Aug. - -	462	160	46	6	7	74	63	3	27	73
23 Aug. - -	548	146	72	1	4	105	75	1	15	66
30 Aug. - -	418	163	24	3	2	65	57	2	21	47
6 Sept. - -	478	174	69	5	1	74	67	2	16	59
13 Sept. - -	477	162	49	2	4	80	73	2	18	46
20 Sept. - -	516	185	60	6	4	90	73	6	14	51
27 Sept. - -	565	212	55	3	6	105	84	2	20	69
4 Oct. - -	485	174	68	6	4	83	64	5	13	50
11 Oct. - -	404	138	55	3	0	77	55	1	7	46
18 Oct. - -	473	153	69	6	2	97	77	4	4	47
25 Oct. - -	498	168	80	15	2	81	75	1	5	65
1 Nov. - -	384	122	55	3	6	79	55	2	4	45
8 Nov. - -	478	136	67	9	4	92	75	2	4	56
15 Nov. - -	362	112	49	3	6	72	67	2	7	46
22 Nov. - -	498	167	70	8	4	91	77	1	6	62
29 Nov. - -	511	172	78	8	4	91	77	1	6	57
6 Dec. - -	564	169	87	3	2	126	90	2	5	54
13 Dec. - -	480	163	58	9	4	110	85	1	1	38
20 Dec. - -	484	160	66	6	2	93	83	0	3	53
27 Dec. - -	380	125	41	2	5	77	59	1	4	37

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1764.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
3 Jan. - -	585	207	76	8	7	116	84	4	4	44
10 Jan. - -	462	153	71	6	8	89	63	2	3	44
17 Jan. - -	499	176	69	7	4	97	78	2	0	37
24 Jan. - -	505	160	90	7	7	105	81	2	2	41
31 Jan. - -	466	142	62	4	7	95	86	2	1	26
7 Feb. - -	483	149	68	4	4	110	63	1	2	31
14 Feb. - -	504	162	84	5	8	103	79	3	4	28
21 Feb. - -	491	159	86	5	6	99	82	2	0	33
28 Feb. - -	447	130	70	10	6	86	70	3	2	27
6 Mar. - -	466	131	84	6	3	102	74	1	2	37
13 Mar. - -	519	158	99	3	2	94	80	1	1	41
20 Mar. - -	481	137	90	5	4	91	88	3	1	27
27 Mar. - -	463	147	83	6	4	99	72	2	1	29
3 Apr. - -	455	131	82	4	4	103	84	0	2	24
10 Apr. - -	402	109	59	6	1	93	76	0	2	22
17 Apr. - -	433	143	57	9	10	100	63	0	1	29
24 Apr. - -	405	129	60	3	2	89	62	1	0	33
1 May - -	405	131	57	11	4	76	62	3	0	37
8 May - -	435	130	61	7	4	92	56	0	0	47
15 May - -	420	129	67	7	5	87	69	0	4	30
22 May - -	381	126	51	3	1	76	52	1	0	32
29 May - -	409	120	51	3	2	80	69	5	2	39
5 June - -	421	138	47	1	5	93	58	3	1	39
12 June - -	415	132	71	6	5	83	72	1	2	44
19 June - -	407	135	49	6	6	79	62	5	1	55
26 June - -	398	126	52	4	3	60	70	2	1	44

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1764.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
3 July --	402	119	51	2	2	76	70	2	2	55
10 July --	409	124	45	3	7	82	60	2	2	63
17 July --	367	135	50	6	3	68	61	0	0	42
24 July --	404	172	40	5	6	77	68	2	0	54
31 July --	328	136	52	6	8	63	57	2	1	56
7 Aug. --	395	153	41	7	3	68	60	3	0	48
14 Aug. --	338	122	49	1	2	45	69	1	2	42
21 Aug. --	388	151	48	7	3	55	73	1	0	44
28 Aug. --	475	180	40	4	3	78	95	0	0	62
4 Sept. --	457	189	49	7	5	65	86	2	0	56
11 Sept. --	484	190	65	4	5	76	82	2	1	52
18 Sept. --	486	215	56	7	1	86	80	3	2	63
25 Sept. --	468	191	59	2	5	80	86	4	1	36
2 Oct. --	477	171	67	5	4	85	88	2	0	52
9 Oct. --	390	154	53	1	1	63	63	2	0	50
16 Oct. --	466	163	50	2	6	83	81	3	2	57
23 Oct. --	451	156	51	6	2	87	89	1	0	64
30 Oct. --	440	135	57	9	4	89	63	2	2	69
6 Nov. --	405	127	50	6	5	84	66	1	2	58
13 Nov. --	538	153	80	14	10	88	106	0	1	88
20 Nov. --	394	134	43	6	8	73	80	1	0	46
27 Nov. --	523	145	74	8	7	106	98	0	1	66
4 Dec. --	503	136	77	8	1	95	93	1	0	69
11 Dec. --	531	147	76	9	5	95	92	0	0	83
18 Dec. --	474	147	82	8	2	73	93	1	5	59
25 Dec. --	374	91	56	4	2	71	62	0	0	48

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1765.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
1 Jan. - -	511	150	74	10	7	91	92	3	0	72
8 Jan. - -	517	151	89	8	3	109	83	0	0	60
15 Jan. - -	485	157	72	5	5	96	76	2	3	48
22 Jan. - -	482	142	73	6	1	91	89	0	0	70
29 Jan. - -	423	113	65	3	1	75	71	1	0	55
5 Feb. - -	435	147	71	3	3	85	63	0	1	50
12 Feb. - -	527	159	93	5	6	100	92	0	2	43
19 Feb. - -	532	174	91	8	6	84	98	1	0	51
26 Feb. - -	655	196	103	7	9	114	106	1	5	58
5 Mar. - -	531	178	96	8	3	120	94	1	0	48
12 Mar. - -	496	202	78	5	5	118	81	0	0	44
19 Mar. - -	558	157	96	2	8	100	88	0	1	59
26 Mar. - -	534	158	86	12	7	107	96	1	0	39
2 Apr. - -	432	112	78	7	9	81	62	0	1	42
9 Apr. - -	373	126	51	3	7	67	53	1	1	27
16 Apr. - -	440	89	65	5	1	92	83	2	0	29
23 Apr. - -	409	129	64	3	6	82	76	0	1	33
30 Apr. - -	421	132	75	8	5	69	83	0	0	34
7 May - -	369	127	55	0	3	85	71	1	1	18
14 May - -	322	118	35	3	5	56	55	1	0	24
21 May - -	409	157	62	3	4	74	61	0	2	31
28 May - -	398	118	57	3	3	80	82	0	1	25
4 June - -	322	107	46	1	3	69	56	1	1	26
11 June - -	412	139	59	11	3	86	70	0	1	24
18 June - -	357	130	51	4	5	63	59	0	0	39
25 June - -	417	141	68	4	5	85	72	1	0	38

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1765.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
2 July - -	322	125	48	5	6	52	48	0	2	40
9 July - -	390	125	50	7	5	88	62	1	0	31
16 July - -	315	126	38	3	2	62	48	1	2	35
23 July - -	377	134	56	5	5	67	56	2	0	44
30 July - -	352	144	32	4	6	57	62	1	3	47
6 Aug. - -	357	139	43	4	1	54	67	1	3	43
13 Aug. - -	364	154	54	5	8	44	80	5	1	50
20 Aug. - -	381	162	43	7	1	42	75	2	1	51
27 Aug. - -	487	198	68	7	10	65	87	3	1	67
3 Sept. - -	451	179	50	3	10	63	72	1	0	70
10 Sept. - -	479	232	45	8	6	68	58	4	0	68
17 Sept. - -	478	215	60	3	2	84	66	2	0	52
24 Sept. - -	464	232	52	5	4	69	63	3	2	47
1 Oct. - -	498	216	57	7	9	82	80	4	2	47
8 Oct. - -	507	230	53	2	5	75	64	5	1	70
15 Oct. - -	480	202	43	1	6	86	78	4	1	72
22 Oct. - -	469	184	61	2	3	76	78	2	2	56
29 Oct. - -	428	139	55	4	4	96	74	0	0	65
5 Nov. - -	450	152	69	10	3	74	72	0	2	46
12 Nov. - -	478	157	77	5	3	81	86	2	1	47
19 Nov. - -	511	148	90	9	6	91	82	1	1	66
26 Nov. - -	500	188	69	6	2	88	80	2	0	59
3 Dec. - -	513	174	71	9	9	103	70	0	0	57
10 Dec. - -	564	171	88	5	7	106	85	0	3	73
17 Dec. - -	516	154	75	7	2	102	74	0	1	68
24 Dec. - -	500	148	87	12	3	101	77	1	1	54
31 Dec. - -	577	169	115	9	11	112	77	2	2	50

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1766.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
7 Jan. - -	546	186	111	8	7	109	79	1	3	64
14 Jan. - -	520	184	79	7	5	102	72	2	1	50
21 Jan. - -	560	158	97	12	5	105	75	1	0	60
28 Jan. - -	598	166	127	7	4	118	79	2	1	67
4 Feb. - -	530	136	103	9	2	102	90	0	1	58
11 Feb. - -	560	188	88	10	7	110	78	1	1	58
18 Feb. - -	522	178	93	9	7	103	65	1	3	51
25 Feb. - -	514	151	93	7	1	83	93	1	4	56
4 Mar. - -	471	156	75	5	3	101	61	1	8	45
11 Mar. - -	473	139	81	3	3	112	68	1	7	49
18 Mar. - -	495	167	80	6	4	95	80	1	5	54
25 Mar. - -	510	159	66	3	5	103	82	0	11	62
1 Apr. - -	485	148	71	5	8	94	63	0	12	54
8 Apr. - -	589	176	103	6	9	126	84	0	11	67
15 Apr. - -	491	187	57	6	4	90	85	1	13	59
22 Apr. - -	480	158	74	8	4	88	60	2	14	69
29 Apr. - -	431	149	66	8	1	77	63	1	9	56
6 May - -	439	127	68	4	3	95	73	0	4	51
13 May - -	401	135	55	2	1	75	74	1	15	44
20 May - -	528	180	78	7	5	106	95	4	16	51
27 May - -	428	136	62	6	6	83	69	0	16	38
3 June - -	453	138	69	5	2	83	64	1	24	53
10 June - -	449	142	59	3	5	83	79	0	25	56
17 June - -	393	155	40	1	5	78	47	0	24	39
24 June - -	368	136	47	3	6	69	49	2	15	45
1 July - -	433	136	63	13	7	84	64	0	13	53

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1766.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
8 July - -	391	149	52	7	2	65	64	0	24	25
15 July - -	374	121	51	5	0	67	61	0	29	33
22 July - -	381	126	62	6	3	76	52	1	14	37
29 July - -	340	124	38	8	1	69	39	1	13	38
5 Aug. - -	404	179	44	6	4	72	56	0	18	38
12 Aug. - -	385	139	49	4	6	76	54	3	15	34
19 Aug. - -	325	111	44	4	2	70	40	1	11	27
26 Aug. - -	337	132	47	3	4	62	59	0	5	23
2 Sept. - -	351	138	45	5	1	63	67	1	8	36
9 Sept. - -	363	150	38	6	5	64	61	1	9	28
16 Sept. - -	444	165	59	9	2	75	78	2	7	26
23 Sept. - -	393	148	52	6	4	77	54	3	11	34
30 Sept. - -	365	140	41	4	0	68	72	3	3	19
7 Oct. - -	486	217	71	2	9	98	65	1	2	43
14 Oct. - -	462	166	66	4	6	100	78	2	6	24
21 Oct. - -	436	172	55	2	6	94	63	5	6	22
28 Oct. - -	374	144	51	5	1	79	60	2	7	27
4 Nov. - -	403	142	64	7	4	78	69	1	1	24
11 Nov. - -	399	158	66	6	4	75	68	1	9	26
18 Nov. - -	483	135	58	2	2	90	91	3	4	48
25 Nov. - -	459	148	63	3	4	92	84	1	4	36
2 Dec. - -	416	131	64	6	11	85	75	4	4	27
9 Dec. - -	427	134	69	7	3	94	76	0	6	31
16 Dec. - -	454	124	66	1	5	107	76	1	6	35
23 Dec. - -	386	120	55	5	8	88	58	1	3	35
30 Dec. - -	445	114	76	4	2	106	72	1	5	32

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1767.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
6 Jan. - -	391	113	69	6	7	93	51	0	4	43
13 Jan. - -	532	144	92	11	5	120	87	0	10	38
20 Jan. - -	519	129	100	16	6	126	63	2	1	42
27 Jan. - -	503	136	94	12	4	107	81	1	1	33
3 Feb. - -	468	127	84	8	2	107	76	2	0	31
10 Feb. - -	446	108	72	6	3	96	79	0	2	25
17 Feb. - -	439	137	80	5	3	101	80	1	0	18
24 Feb. - -	413	111	67	7	3	102	61	0	0	24
3 Mar. - -	404	134	69	7	4	96	59	1	1	22
10 Mar. - -	416	144	67	9	3	86	62	0	0	21
17 Mar. - -	457	140	73	9	5	90	86	0	0	20
24 Mar. - -	439	148	64	10	5	105	65	0	0	27
31 Mar. - -	432	162	71	5	3	86	59	1	1	24
7 Apr. - -	472	177	70	2	8	88	79	1	1	25
14 Apr. - -	392	126	53	7	3	75	72	2	3	16
21 Apr. - -	419	137	60	3	4	90	70	1	1	35
28 Apr. - -	519	205	58	10	6	109	73	5	2	28
5 May - -	462	167	79	8	2	90	69	1	1	29
12 May - -	441	158	65	4	1	78	61	0	3	49
19 May - -	448	153	70	6	3	96	69	1	3	39
26 May - -	422	142	75	2	3	87	75	0	2	36
2 June - -	385	139	56	7	2	80	62	0	0	39
9 June - -	408	142	66	3	5	84	61	0	3	41
16 June - -	423	146	57	3	4	68	72	0	2	38
23 June - -	431	146	56	6	1	87	57	1	1	48
30 June - -	457	149	78	7	4	85	70	2	2	51

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1767.	Whole Number buried.	Under two years.	Above fixty years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Loosenefs.	Measles.	Small Pox.
7 July - -	476	129	81	5	4	86	95	1	1	49
14 July - -	358	128	37	4	3	61	71	3	0	29
21 July - -	398	131	54	8	3	81	71	1	0	46
28 July - -	399	120	73	3	5	57	83	1	1	42
4 Aug. - -	339	102	40	7	3	64	53	4	1	47
11 Aug. - -	407	136	59	8	4	77	71	1	1	51
18 Aug. - -	350	108	43	3	2	59	70	1	1	58
25 Aug. - -	371	160	51	2	0	52	68	3	0	44
1 Sept. - -	352	140	43	5	0	60	40	3	1	43
8 Sept. - -	384	138	37	6	4	60	67	4	0	54
15 Sept. - -	338	144	36	4	2	48	56	2	1	47
22 Sept. - -	358	145	56	5	2	57	52	1	0	55
29 Sept. - -	388	165	42	3	1	62	70	4	1	42
6 Oct. - -	444	184	43	4	1	99	62	9	0	54
13 Oct. - -	469	177	57	4	3	75	78	2	4	44
20 Oct. - -	437	196	57	10	2	69	64	6	2	54
27 Oct. - -	396	134	49	3	4	61	73	0	1	64
3 Nov. - -	564	229	69	2	4	96	91	1	5	64
10 Nov. - -	450	176	55	7	1	72	78	0	0	59
17 Nov. - -	446	157	52	6	2	77	83	1	0	67
24 Nov. - -	487	173	54	2	2	80	84	0	2	61
1 Dec. - -	544	176	82	6	7	110	110	3	3	57
8 Dec. - -	475	160	67	13	5	93	91	0	1	48
15 Dec. - -	613	206	80	6	4	101	113	1	2	109
22 Dec. - -	495	157	62	4	5	76	97	0	2	74
29 Dec. - -	441	195	63	5	2	94	77	2	2	61

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1795.	Whole Number buried.	Under two years.	Above sixty years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
6 Jan. - -	244	66	51	4	1	73	20	0	5	17
13 Jan. - -	532	129	139	13	6	158	49	0	9	14
20 Jan. - -	637	141	145	11	5	164	81	2	9	17
27 Jan. - -	543	128	143	11	5	157	42	0	3	24
3 Feb. - -	867	153	239	13	5	273	66	0	4	18
10 Feb. - -	735	133	203	11	6	231	55	0	5	21
17 Feb. - -	678	148	171	7	4	198	61	1	4	13
24 Feb. - -	635	145	150	12	8	155	49	1	9	19
3 Mar. - -	687	169	168	6	5	202	63	0	7	9
10 Mar. - -	568	155	131	6	3	142	54	1	4	5
17 Mar. - -	540	158	102	7	2	161	45	0	8	14
24 Mar. - -	446	146	82	4	5	111	41	0	5	9
31 Mar. - -	483	164	89	7	4	128	34	0	4	8
7 Apr. - -	339	111	65	6	1	97	35	0	3	5
14 Apr. - -	491	166	84	5	2	125	43	1	4	6
21 Apr. - -	426	146	54	3	3	127	48	1	10	5
28 Apr. - -	462	143	71	2	3	129	42	0	4	3
5 May - -	427	150	81	7	3	113	27	1	5	9
12 May - -	365	135	45	3	0	109	37	0	4	5
19 May - -	441	139	64	5	4	120	40	0	13	18
26 May - -	303	95	43	10	2	102	21	0	0	3
2 June - -	419	124	62	2	6	128	41	1	3	9
9 June - -	348	111	57	2	2	89	38	0	5	15
16 June - -	341	87	63	9	3	105	35	1	4	14
23 June - -	281	83	48	8	3	99	26	0	4	9
30 June - -	342	105	43	3	4	98	34	0	5	18

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1795.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
7 July - -	245	72	41	5	1	68	30	0	5	13
14 July - -	362	86	63	12	0	92	39	0	5	23
21 July - -	273	95	42	8	2	95	28	0	6	16
28 July - -	303	108	42	3	2	89	29	0	6	25
4 Aug. - -	225	79	30	4	1	66	22	0	6	14
11 Aug. - -	193	59	24	1	3	51	24	0	0	15
18 Aug. - -	266	91	32	3	1	59	35	0	4	15
25 Aug. - -	232	74	34	3	0	62	24	0	1	11
1 Sept. - -	266	104	36	4	1	50	25	0	9	23
8 Sept. - -	398	172	57	4	3	81	31	0	3	21
15 Sept. - -	281	121	28	6	1	58	32	1	14	11
22 Sept. - -	247	113	24	2	2	42	16	1	6	23
29 Sept. - -	311	142	37	4	1	79	27	1	3	27
6 Oct. - -	410	184	58	7	5	90	26	1	16	28
13 Oct. - -	321	129	42	4	5	60	38	1	12	23
20 Oct. - -	360	151	39	4	1	79	43	1	8	47
27 Oct. - -	340	120	34	4	2	73	37	1	12	41
3 Nov. - -	320	129	34	3	0	82	28	1	14	27
10 Nov. - -	351	132	51	4	1	68	33	1	7	52
17 Nov. - -	595	186	76	5	5	175	47	0	15	67
24 Nov. - -	276	92	33	4	2	73	24	0	8	29
1 Dec. - -	691	193	103	5	3	204	56	0	7	62
8 Dec. - -	497	185	82	3	1	112	49	0	8	75
15 Dec. - -	233	67	39	5	1	61	27	0	11	28
22 Dec. - -	340	131	46	6	4	82	28	1	15	68
29 Dec. - -	253	70	26	2	3	56	27	0	11	47

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1796.	Whole Number buried.	Under two Years.	Above sixty Years.	Apoplexy, Palsy, Suddenly.	Childbed and Miscar- riage.	Consump- tion.	Fever.	Colic, Flux, Gripes, Looseness.	Measles.	Small Pox.
5 Jan. - -	300	100	35	7	5	79	34	0	3	42
12 Jan. - -	273	87	37	5	1	53	25	1	9	32
19 Jan. - -	313	113	29	4	2	77	29	0	0	51
26 Jan. - -	257	96	20	11	2	47	23	0	1	44
2 Feb. - -	328	110	32	6	1	86	23	0	10	36
9 Feb. - -	363	122	44	7	6	93	33	0	4	62
16 Feb. - -	329	123	41	4	2	89	21	0	5	43
23 Feb. - -	372	119	65	6	3	90	31	0	7	51
1 Mar. - -	339	125	48	4	2	86	20	0	3	39
8 Mar. - -	323	112	45	6	2	91	17	0	6	47
15 Mar. - -	384	129	48	7	4	92	24	0	10	47
22 Mar. - -	363	130	48	6	2	92	30	0	4	33
29 Mar. - -	293	97	38	8	0	76	19	0	3	33
5 Apr. - -	415	147	57	4	3	116	28	0	5	50
12 Apr. - -	420	134	64	7	6	92	29	0	3	45
19 Apr. - -	366	146	42	3	3	84	22	0	4	44
26 Apr. - -	400	136	65	6	3	96	22	1	5	52
3 May - -	312	105	49	3	6	72	19	0	3	49
10 May - -	334	128	38	1	3	67	27	0	4	60
17 May - -	328	95	55	10	3	71	29	0	3	55
24 May - -	375	141	39	5	2	69	35	0	6	90
31 May - -	382	112	46	3	6	92	35	0	5	77
7 June - -	378	140	43	4	4	86	34	1	0	83
14 June - -	320	122	28	2	1	70	20	0	0	96
21 June - -	333	112	39	5	4	60	31	0	4	88
28 June - -	318	115	42	5	4	61	20	0	11	73

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1796.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropsy.
5 July - -	328	105	32	59	6	60	16	46	4	12
12 July - -	402	129	40	98	7	81	40	69	1	10
19 July - -	384	122	46	71	7	69	32	64	12	11
26 July - -	342	116	40	77	7	61	35	60	0	12
2 Aug. - -	324	116	30	80	2	80	17	57	6	12
9 Aug. - -	346	141	36	62	9	61	19	59	2	6
16 Aug. - -	306	119	25	69	5	62	19	49	1	8
23 Aug. - -	285	111	31	51	4	47	15	55	2	8
30 Aug. - -	373	140	35	78	3	75	34	73	6	22
6 Sept. - -	368	147	34	80	7	65	29	88	2	12
13 Sept. - -	447	185	48	85	6	91	36	83	4	13
20 Sept. - -	316	128	26	55	5	54	28	44	1	11
27 Sept. - -	433	184	47	74	2	60	48	79	8	18
4 Oct. - -	366	144	39	58	6	62	19	73	1	12
11 Oct. - -	411	160	45	86	5	77	31	86	6	10
18 Oct. - -	303	139	35	57	7	67	26	63	3	7
25 Oct. - -	332	120	43	83	5	68	35	66	1	16
1 Nov. - -	424	136	68	96	8	96	36	74	6	21
8 Nov. - -	416	149	45	101	8	104	30	101	2	16
15 Nov. - -	444	145	61	113	4	113	46	82	9	15
22 Nov. - -	295	106	33	81	7	69	25	64	9	19
29 Nov. - -	383	140	63	91	9	80	38	90	12	19
6 Dec. - -	293	80	45	89	4	70	27	48	4	2
13 Dec. - -	1223*	342	226	332	16	309	95	275	47	29
20 Dec. - -	257	93	38	65	4	66	22	49	11	9
27 Dec. - -	206	64	35	51	3	65	20	46	7	9

* The Parish of St. George, Middlesex, gave in the Number for the whole Year, amounting to 532.

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1797.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropfy.
3 Jan. - -	544	161	90	148	14	147	45	105	16	23
10 Jan. - -	438	118	82	108	7	127	41	79	22	17
17 Jan. - -	290	87	63	71	5	73	31	55	13	13
24 Jan. - -	435	133	85	117	9	135	43	75	17	14
31 Jan. - -	421	134	82	110	10	118	31	72	20	24
7 Feb. - -	341	97	62	85	9	92	27	71	15	10
14 Feb. - -	304	78	53	85	7	104	31	54	9	10
21 Feb. - -	367	103	66	99	7	116	26	77	18	15
28 Feb. - -	393	108	81	104	5	102	33	77	21	21
7 Mar. - -	491	117	111	144	10	139	45	86	31	18
14 Mar. - -	412	109	104	103	8	116	30	78	27	20
21 Mar. - -	387	83	104	113	12	111	26	66	29	22
28 Mar. - -	508	113	126	139	9	151	39	99	30	30
4 Apr. - -	371	103	82	91	7	114	29	75	15	20
11 Apr. - -	309	80	53	92	9	73	32	63	15	15
18 Apr. - -	326	103	52	79	3	97	33	80	5	13
25 Apr. - -	371	105	59	121	3	101	31	82	30	20
2 May - -	362	92	78	105	9	110	35	78	14	17
9 May - -	300	85	43	91	3	92	31	62	8	14
16 May - -	328	92	54	94	5	105	22	73	3	16
23 May - -	309	78	46	102	7	92	22	54	2	30
30 May - -	271	73	47	77	6	73	24	67	3	15
6 June - -	265	82	38	72	6	75	28	61	3	9
13 June - -	257	66	46	79	2	77	18	63	6	11
20 June - -	326	97	49	96	7	99	35	67	3	18
27 June - -	256	69	40	82	3	85	22	64	1	16

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1797.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropsy.
4 July - -	292	86	46	87	4	90	24	60	5	19
11 July - -	236	77	27	70	4	71	20	48	4	14
18 July - -	274	76	48	92	1	94	22	48	2	12
25 July - -	192	57	23	59	6	38	22	48	3	16
1 Aug. - -	289	98	38	74	7	79	24	74	1	10
8 Aug. - -	243	78	44	66	3	69	25	65	2	10
15 Aug. - -	333	112	45	91	5	92	35	83	7	14
22 Aug. - -	247	96	32	65	3	63	22	76	4	9
29 Aug. - -	263	107	30	70	7	47	24	73	2	13
5 Sept. - -	262	120	28	54	6	44	21	95	1	8
12 Sept. - -	261	92	35	78	2	65	28	69	9	15
19 Sept. - -	288	112	44	68	3	65	24	77	6	18
26 Sept. - -	289	117	41	63	9	65	24	90	3	9
3 Oct. - -	264	94	33	79	3	54	36	63	5	20
10 Oct. - -	255	81	44	66	3	60	24	65	6	11
17 Oct. - -	293	83	28	101	6	81	38	73	5	13
24 Oct. - -	206	81	31	52	2	56	17	53	1	13
31 Oct. - -	304	92	47	88	6	68	31	64	14	13
7 Nov. - -	360	119	60	83	6	96	26	92	1	13
14 Nov. - -	263	78	43	81	6	71	22	65	9	22
21 Nov. - -	383	107	47	123	4	108	42	85	13	13
28 Nov. - -	337	118	55	92	6	99	19	99	4	18
5 Dec. - -	422	115	63	122	8	130	45	102	13	27
12 Dec. - -	625	180	107	159	11	204	50	159	14	33
19 Dec. - -	180	49	33	56	7	53	10	42	6	15
26 Dec. - -	205	64	36	63	2	50	18	41	6	12

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1798.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropsy.
2 Jan. - -	349	119	41	86	7	100	23	91	8	18
9 Jan. - -	280	78	38	81	10	77	25	69	13	15
16 Jan. - -	396	114	83	103	8	93	39	99	14	16
23 Jan. - -	295	83	54	82	14	84	28	69	12	15
30 Jan. - -	305	104	45	83	6	93	24	81	9	14
6 Feb. - -	314	81	63	86	10	91	23	63	8	22
13 Feb. - -	405	120	68	102	5	109	40	88	13	22
20 Feb. - -	391	100	78	127	6	116	44	69	16	23
27 Feb. - -	495	132	96	138	9	133	33	109	17	30
6 Mar. - -	403	112	68	114	9	125	27	88	16	22
13 Mar. - -	320	95	63	75	7	99	18	68	12	14
20 Mar. - -	328	102	48	102	10	96	28	67	18	24
27 Mar. - -	380	120	68	106	4	119	29	96	12	20
3 Apr. - -	360	115	51	101	6	112	27	87	11	15
10 Apr. - -	252	76	39	62	3	69	27	47	9	18
17 Apr. - -	415	131	51	111	5	122	31	95	10	18
24 Apr. - -	340	94	40	106	6	84	44	62	9	18
1 May - -	372	95	58	113	10	98	29	72	10	19
8 May - -	304	80	38	92	3	90	19	78	7	14
15 May - -	349	99	44	109	6	99	33	54	11	14
22 May - -	308	89	38	91	10	88	25	59	3	19
29 May - -	266	72	37	72	4	69	33	40	7	18
5 June - -	329	97	47	99	5	81	29	58	7	12
12 June - -	346	104	47	104	2	96	39	68	5	11
19 June - -	321	87	45	94	6	80	29	69	5	12
26 June - -	349	112	49	99	5	92	34	72	5	10

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1798.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropfy.
3 July - -	308	96	44	82	2	71	29	58	5	10
10 July - -	267	78	45	66	6	66	30	48	5	11
17 July - -	329	98	47	77	4	96	33	49	5	14
24 July - -	335	121	35	93	4	86	30	67	7	9
31 July - -	396	149	48	91	11	65	37	80	5	10
7 Aug. - -	329	118	40	77	7	83	35	86	2	12
14 Aug. - -	302	114	47	62	3	58	30	73	3	12
21 Aug. - -	387	151	46	90	5	73	39	73	6	18
28 Aug. - -	311	114	39	69	8	54	28	65	0	19
4 Sept. - -	358	144	33	72	9	80	39	85	6	8
11 Sept. - -	372	159	39	73	1	90	34	78	6	10
18 Sept. - -	432	188	57	75	3	88	29	108	10	13
25 Sept. - -	341	122	46	72	9	60	42	62	2	15
2 Oct. - -	416	141	32	101	3	86	56	70	6	12
9 Oct. - -	311	121	37	59	2	54	34	58	4	12
16 Oct. - -	333	107	42	85	4	70	42	55	5	11
23 Oct. - -	422	133	58	104	8	98	45	74	4	16
30 Oct. - -	300	93	45	70	3	59	40	52	1	7
6 Nov. - -	422	117	56	102	8	106	39	68	8	15
13 Nov. - -	353	112	31	80	4	86	42	53	7	16
20 Nov. - -	334	105	46	90	5	83	37	50	9	10
27 Nov. - -	403	116	62	98	8	89	56	75	11	7
4 Dec. - -	556	160	89	128	5	116	59	100	5	19
11 Dec. - -	481	147	67	117	10	98	49	75	20	17
18 Dec. - -	395	118	57	88	4	89	49	79	18	10
25 Dec. - -	448	120	86	110	3	127	52	90	7	12

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. 1799.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropsy.
1 Jan. - -	364	107	72	91	10	98	40	59	9	14
8 Jan. - -	458	161	69	104	4	107	50	92	18	16
15 Jan. - -	478	137	88	135	6	113	32	90	28	26
22 Jan. - -	496	127	86	153	3	128	60	82	38	25
29 Jan. - -	408	129	70	103	7	90	41	88	21	7
5 Feb. - -	395	103	86	105	10	93	32	75	26	18
12 Feb. - -	479	147	86	135	8	130	48	115	20	20
19 Feb. - -	494	135	85	133	7	140	45	91	38	26
26 Feb. - -	429	117	85	116	9	88	44	73	33	11
5 Mar. - -	385	110	71	97	8	106	29	69	26	15
12 Mar. - -	339	84	73	86	9	88	38	71	15	14
19 Mar. - -	329	86	56	94	11	97	23	62	11	21
26 Mar. - -	291	80	47	84	5	73	29	63	11	13
2 Apr. - -	433	102	94	120	9	148	32	84	21	23
9 Apr. - -	434	125	83	115	5	126	48	109	11	23
16 Apr. - -	431	113	93	105	11	118	30	88	24	21
23 Apr. - -	267	76	42	82	6	88	22	74	12	9
30 Apr. - -	395	119	63	113	8	115	42	95	13	24
7 May - -	280	86	53	80	3	75	22	67	6	13
14 May - -	244	53	39	90	0	71	37	46	13	16
21 May - -	472	132	116	117	14	145	25	107	15	25
28 May - -	398	108	81	104	6	114	39	81	14	22
4 June - -	301	88	59	79	4	97	24	66	6	14
11 June - -	284	90	50	69	7	76	18	65	8	17
18 June - -	236	61	51	81	3	69	33	49	10	15
25 June - -	321	96	51	99	4	98	36	65	12	23

TABLE II.—*continued.*

WEEKLY BILLS of MORTALITY. — 1799.	Whole Number buried.	Under two Years.	Above sixty Years.	Between twenty and fifty Years.	Apoplexy, Palsy, Suddenly.	Consump- tion.	Fever.	Convul- sions.	Asthma.	Dropsy.
2 July - -	262	66	57	71	7	74	27	58	10	18
9 July - -	271	69	50	86	5	83	35	40	3	18
16 July - -	321	66	63	98	11	87	29	63	6	25
23 July - -	263	85	49	71	6	64	19	60	3	19
30 July - -	200	72	31	54	2	55	20	50	2	13
6 Aug. - -	300	90	52	85	9	87	25	69	7	16
13 Aug. - -	297	89	43	72	5	80	24	77	5	12
20 Aug. - -	248	74	38	64	10	67	25	51	7	12
27 Aug. - -	184	62	27	43	3	56	16	49	6	7
3 Sept. - -	275	79	56	72	6	69	29	63	7	9
10 Sept. - -	231	72	27	73	5	59	21	56	0	20
17 Sept. - -	212	64	34	50	6	49	27	31	8	12
24 Sept. - -	296	84	43	79	5	86	37	67	7	18
1 Oct. - -	255	90	37	65	2	62	34	55	4	13
8 Oct. - -	394	124	46	118	8	119	33	109	2	18
15 Oct. - -	318	88	35	110	3	81	51	60	4	16
22 Oct. - -	292	93	47	74	9	76	33	70	3	11
29 Oct. - -	310	104	45	85	7	86	35	70	6	16
5 Nov. - -	298	88	53	81	7	56	35	68	9	17
12 Nov. - -	337	98	57	95	6	85	35	76	7	25
19 Nov. - -	284	81	47	89	9	80	23	53	6	12
26 Nov. - -	409	133	62	103	12	112	34	72	13	23
3 Dec. - -	389	122	79	86	11	88	34	84	14	19
10 Dec. - -	786	207	140	235	14	175	78	158	40	44
17 Dec. - -	272	72	47	64	4	73	24	40	19	18
24 Dec. - -	318	79	55	97	10	79	40	58	23	17
31 Dec. - -	358	108	70	89	6	100	31	79	10	24

PART I.

OF THE
INCREASE AND DECREASE.
OF
DIFFERENT DISEASES.

THE fluctuation observable in certain diseases may be considered under two distinct points of view: the first comprehending their variations in different years; the second those which take place in different parts of the same year. Each of them affords matter of curiosity, and useful information.

THE two preceding Tables exhibit a method in which such observations may safely be conducted. For, whatever errors be supposed to have crept into the registers from which they are formed, yet when taken together, and considered on an extensive scale, they must be admitted to constitute a very unexceptionable basis for medical reasoning. And the several objects being thus brought nearer to each other, and seen as it were side by side, the judgment may be formed not only much more easily, but, it is apprehended, much more certainly also, than could be done in any other manner. Another
great.

great advantage resulting from such tables is, that they do of themselves often suggest conclusions, which correct, or perhaps wholly contradict, the expectations raised upon no better foundation than vague conjecture, or popular opinion.

THE particular articles, of which these tables are composed, were selected as being those from which most was expected to be learned. It should however be noticed, that the weekly table is not perfectly uniform; for, instead of being made out from ten years in succession, five were chosen at one time, and five others after an interval of above thirty years: to afford an opportunity of comparing the two periods with each other. Besides, from July 1796, an alteration may be observed in the mode of keeping them. But this, which was introduced to satisfy some views of the author, it is hoped will rather prove an advantage, than any embarrassment, to those who may be inclined to examine it; and therefore has not since been changed.

1. OF the variation in the whole numbers christened and buried.

THE annual mortality appears by the parish clerks returns to have increased from the beginning of the century to the year 1720; to have been at its greatest height from 1720 to 1750; and from that time gradually to have decreased.

IN the mean time, the christenings increased from 1700 to 1727; then decreased to 1740; were at the lowest between

1740 and 1760; and from that time have gradually increased.

THAT both the christenings and burials should have become more frequent during the first thirty years, can be no matter of surprize, when we consider the increase both in number, and size, of the out-parishes. For it will be found upon examination, that the increase has been confined to them alone.

ON the other hand, the subsequent decrease of burials has taken place only in the city parishes; and is, no doubt, owing to people living wider, and taking up more room than formerly. They no longer submit to the inconvenience of being crowded several together under a single roof. But many merchants with their families, and many merchants' clerks also, who used all to live in the same house, now retire, especially when they are sick, to others situated without the limits of the bills of mortality, or at least without the city.

IN the first five years of the century, the average numbers dying annually in each of the four divisions into which the parishes are distributed, were as follows :

Within the Walls.	Without the Walls.	Out Parishes.	Westminster.
2,192 - - - -	6,873 - - - -	6,223 - - - -	3,285
between the years 1740 and 1745 they were			
2,328 - - - -	6,975 - - - -	11,784 - - - -	6,164
and from 1790 to 1795 they were			
1,374 - - - -	4,108 - - - -	9,600 - - - -	5,110

AND

AND though London has been very much extended, and the number of its inhabitants proportionally enlarged within the last thirty years ; yet this having taken place principally in the parish of Mary-le-bone, which is not included in the bills of mortality, it therefore makes no addition to the yearly accounts.

It is not easy to account for the diminution of christenings between the years 1740 and 1760. But it may be observed, that the number of females buried in the same twenty years not being sensibly lessened, the defect, however that should happen, seems to have arisen from the smaller proportion among them who bore children.

WHATEVER be the cause of this, the christenings appear in fact to have been fewest at a time when the burials were nearly at the highest. Hence the difference of the numbers christened and buried is greater between the years 1740 and 1750, than at any preceding or subsequent period. This difference diminished afterwards ; but still continued very considerable till about 1770. Now, it was from an average of ten years taken in this interval, namely from 1759 to 1768, that Dr. Price constructed his (*a*) tables of the probabilities of life, and from which he deduced the population of London. The excess of the burials above the christenings amounted at that time to nearly one-third (*b*) of the whole
number

(*a*) Tab. XIII. and XV. of his Observations on Reverfionary Payments,
5th edit.

(*b*) Vol. I. p. 340.

number of burials. At present, it is less than one-twentieth : nay, in the years 1790, 1797, and 1799, the excess was actually on the side of the christenings. Such a prodigious change ought, one would think, considerably to alter Dr. Price's conclusions. Some allowances are however to be made (*c*) ; particularly in consequence of an act of parliament passed in 1767, by which it is required that all parish infants shall be sent into the country in three weeks after their birth, to be nursed there till they are six years old. How many burials of children are taken out of the bills in consequence of this act, it is not easy to estimate ; but that it must be a large number, is rendered probable by the remarkable decrease of those reported to die under two years of age. Between the years 1728, when the ages were first set down, and 1738, their number amounted one year with another to above 10,000 ; in the next decad to above 9,000 ; in the decad following to 7,800 ; and between 1790 and 1800, to little more than 6,000 annually. It is to be hoped, however, that as this decrease began to take place before the date of the act in question, so its continuance since may in part be with justice attributed to the greater salubrity of the town (*c**).

2. THERE

(*c*) See of Dr. P.'s Work, Vol. I. p. 251. note.

(*c**) It appears from the books of the Foundling Hospital, that the mortality among the children under the age of twelve months, who are all put out to nurse in the country, has within the last thirty years, diminished in the proportion of twelve to seven. The average of the last ten years being only one in six.

Account of Foundling Hospital in London, 1799.

2. THERE is scarcely any fact to be collected from the bills of mortality more worthy the attention of physicians, than the gradual decline of the dysentery. In the seventeenth century, the number of deaths under the titles of *bloody-flux* and *griping in the guts*, appear never to have been less than one thousand, and some years to have exceeded four thousand; and for five and twenty years together, from 1667 to 1692, they every year amounted to above two thousand. But from the beginning of the eighteenth century things were materially changed. After the year 1733, the article of *griping in the guts* was joined to that of *colic*: taking then the three diseases of *bloody-flux*, *colic*, and *gripes*, we may observe their decrease to have been nearly as follows:

From 1700 to 1710 the average is about 1,070 annually.

1710 to 1720	- - - - -	770
1720 to 1730	- - - - -	700
1730 to 1740	- - - - -	350
1740 to 1750	- - - - -	150
1750 to 1760	- - - - -	110
1760 to 1770	- - - - -	80
1770 to 1780	- - - - -	70
1780 to 1790	- - - - -	40
1790 to 1800	- - - - -	20

Even in the years 1762 and 1780, when modern physicians have described the dysentery as epidemical in London, the amount of the same three articles was in the first year only 209, and in the last 93.

THE

THE cause of so great an alteration in the health of the people of England (for it is not confined to the metropolis) I have no hesitation in attributing to the improvements which have gradually taken place, not only in London, but in all great towns, and in the manner of living throughout the kingdom; particularly with respect to cleanliness and ventilation. For the reasons upon which this opinion is founded, I must refer the reader to what will be said hereafter (*d*) concerning the plague.

3. The inoculation of the small pox having been first used in England since the beginning of the eighteenth century, and having been now for many years generally adopted by all the middle and higher orders of society; it becomes an interesting enquiry to observe, from a review of the last hundred years, what have been the effects of so great an innovation, upon the mortality occasioned by that disease. But, however beneficial inoculation prove to individuals, or indeed to the nation at large, the bills of mortality incontestibly shew, that in London more persons have died of the small pox since the introduction of that practice.

THE poor, who have little care of preserving their lives beyond the getting their daily bread, make a very large part of mankind. Their prejudices are strong, and not easily overcome by reason. Hence, while the inoculation of the wealthy keeps up a perpetual source of infection, many others, who

(*d*) Part II.

who either cannot afford, or do not chuse, to adopt the same method, are continually exposed to the distemper. And the danger is still increased by the inconsiderate manner in which it has lately been the custom to send into the open air persons in every stage of the disease, without any regard to the safety of their neighbours. It is by these means, that while inoculation may justly be esteemed one of the greatest improvements ever introduced into the medical art, it occasions many to fall a sacrifice to what has obtained the distinction of the *natural* disease. This must always be an objection against making any great city the place for inoculation, until the practice is become universal among all ranks of people.

Out of every thousand deaths in the bills of mortality, the number attributed to the small pox during the first thirty years of the eighteenth century, before inoculation could yet have had any effect upon them, amounted to 74. During an equal number of years at the end of the century, they amounted to 95. So that, as far as we are enabled to judge from hence, they would appear to have increased in a proportion of above five to four.

I CANNOT refuse myself the satisfaction of stating on the other hand, from the printed accounts of the Small Pox Hospital, where from their numbers the truth can best be ascertained, that while by the natural small pox there die one in six, from the inoculated small pox three hundred and ninety-nine out of four hundred recover.

4. THE yearly sum of the deaths ranged under the heads of apoplexy, palsy, and suddenly, fluctuates without any certain increase or decrease till the beginning of the eighteenth century. From that time, the proportion they bear to the whole number of deaths may be observed to have been gradually, and constantly, increasing. It is now above double what it was an hundred years ago. To what cause then ought this to be attributed? Is it owing to any alteration in our manners? or in our diet? and what is that alteration? Some persons have accused spirituous liquors; some the use of tea; and other things. But I confess myself by no means satisfied either with the conjectures of others, or with any I have myself been able to form upon this subject. The fact however rests upon too strong evidence to be questioned.

5. THE deaths imputed to the measles are very remarkably different in different years; sometimes amounting to one thirtieth of the whole number of deaths, and at other times falling short of one in four thousand. Yet it is possible that this disease may not in reality be so very irregularly epidemical, or fatal. The scarlet fever, and malignant sore throat, often occasion such appearances upon the skin, as may easily be mistaken for the measles by better judges than the mothers and nurses, who thinking themselves able to distinguish this distemper, and equal to the management of it, often call in no other assistance. This mistake is well known to have been sometimes committed within these few years, during which the scarlet fever, and malignant sore throat, have been

so generally understood. It may perhaps have happened in every year, in which an extraordinary number of deaths are charged to the measles. If so, those two formidable distempers (if indeed they are two distinct distempers, and not one and the same) being disguised under the name of measles, may have been older, and more general, than is usually imagined (*e*).

6. THE table does not represent the mortality among lying-in women to be diminished in a degree equal to the truth. But it must be remembered, that the proportion dying on this account ought to be referred to the number of births, and not to the burials, as was there done for the sake of uniformity. Estimated in this way, the numbers would be materially altered. As for instance, out of every thousand deliveries during the first ten years, fifteen women would then appear to have died instead of eleven; and so of the rest.

THE following Table is inserted from the printed account of the British Lying-in Hospital in Brownlow-street, which gives a much more favourable statement of this matter:

(*e*) No less an author than Morton appears to have confounded together the measles and the scarlet fever. He says, in his 5th chap. *De Febre Scarlatina*, “Hunc morbum prorsus eundem esse cum morbillis censeo, et solo efflorescentiæ modo ab illis distare.”

ACCOUNT of the WOMEN DELIVERED, and CHILDREN BORN, in the BRITISH LYING-IN HOSPITAL, as also the TWINS, STILL-BIRTHS, and DEATHS, from the Time of its Institution, in November 1749, to the First of January 1801 inclusive.

A. D.	No. of Women Delivered.	Boys Born.	Girls Born.	Total No. of Children Born.	Women had Twins.	Children Still-born.	Children Died.	Women Died.	PROPORTION of DEATHS.	
									Of the Women.	Of the Children.
1749	3	3		3					1 in 42	1 in 15.
1750	175	93	84	177	2	11	5	3		
1751	337	181	160	341	4	15	9	12		
1752	433	236	201	437	4	22	27	14		
1753	284	141	146	287	3	10	21	10		
1754	321	175	151	326	5	9	66	12		
1755	370	190	185	375	5	8	34	9		
1756	370	188	184	372	2	8	10	3		
1757	478	262	219	481	3	12	22	7		
1758	521	277	254	531	10	6	16	8		
1759	472	253	226	479	7	12	14	6	1 in 50	1 in 20.
1760	427	228	206	434	7	11	58	26		
1761	390	197	198	395	5	20	31	12		
1762	397	199	199	398	1	8	38	7		
1763	414	209	212	421	7	15	32	10		
1764	366	191	178	369	3	15	17	7		
1765	560	311	258	569	9	12	20	9		
1766	588	293	304	597	9	25	17	10		
1767	571	303	272	575	4	7	10	4		
1768	588	301	288	589	1	5	2	3		
1769	561	292	280	572	11	14	13	7	1 in 53	1 in 42.
1770	472	225	249	474	2	13	9	28		
1771	541	266	282	548	7	17	14	4		
1772	596	320	286	606	10	25	17	4		
1773	627	336	298	634	7	19	14	4		
1774	553	292	266	558	5	36	3	18		
1775	570	295	280	575	5	22	13	21		
1776	543	276	275	551	8	26	9	3		
1777	602	312	293	605	3	24	24	6		
1778	572	281	298	579	7	19	18	11		

A. D.	No. of Women Delivered.	Boys Born.	Girls Born.	Total No. of Children Born.	Women had Twins.	Children Still-born.	Children Died.	Women Died.	PROPORTION of DEATHS.	
									Of the Women.	Of the Children.
1779	563	310	257	567	4	31	8	3	1 in 60	1 in 44.
1780	566	310	259	569	3	33	4	8		
1781	524	275	255	530	6	26	9	14		
1782	549	298	260	558	9	15	14	13		
1783	587	308	288	596	9	33	17	5		
1784	550	283	272	555	5	24	10	14		
1785	435	231	212	443	8	24	16	6		
1786	597	333	276	609	12	35	19	9		
1787	564	290	283	573	9	36	18	9		
1788	578	296	287	583	5	25	10	10		
1789	599	296	308	604	5	42	12	1	1 in 288	1 in 77.
1790	622	317	313	630	8	34	5	7		
1791	621	325	303	628	7	39	2	1		
1792	610	312	306	618	8	29	4	1		
1793	590	300	297	597	7	24	12	1		
1794	583	286	305	591	8	26	6	2		
1795	612	310	310	620	8	32	13	2		
1796	627	326	305	631	4	24	4	1		
1797	619	332	293	625	6	25	9	3		
1798	566	285	292	577	11	31	12	2		
1799	521	282	248	530	9	21	7	1	1 in 938	1 in 118.
1800	417	211	210	421	4	18	1	0		
Total	26202	13642	12871	26513	311	1073	795	391		

Proportion of Boys to Girls born in the Hospital is about 19 to 18.

Children Still-born in ditto, about - - 1 to 25.

Women having had Twins, about - - 1 to 84.

7. SOME miscellaneous observations on the yearly bills of mortality.

THE following statement was deduced in a coarse manner, from an average of about ten years, for the purpose of comparing generally the mortality occasioned by certain diseases, at the beginning, middle, and end of the eighteenth century; care being taken in each period to select such years, in which the whole number of deaths was nearly the same, viz. about 21,000.

	Beginning.	Middle.	End.
Abortive and Still-born -	600	570	750
Colic, Flux, Gripes, &c. -	1,100	135	20
Consumption - - - -	3,000	4,000	5,000
Dropfy - - - - -	850	900	900
Evil - - - - -	70	15	8
Fever - - - - -	3,000	3,000	2,000
Gout - - - - -	26	40	66
Lunatic - - - - -	27	75	70
Palsy, Apoplexy, &c. -	157	280	300
Rickets - - - - -	380	11	1
Small Pox - - - - -	1,600	2,000	2,000

To these might be added the article of convulsions. But it will appear upon enquiry, that the change has in this instance taken place in the name only, and not in the real number

number of deaths. There can be little doubt, but the same diseases of children, which used formerly to be called chryfoms and infants, are now accumulated under the general head of convulsions. For we may observe the decrease of the two former articles to have taken place in a proportion very exactly corresponding with the increase of the latter.

THE apparent increase of the abortives and still-born will likewise in great measure vanish, if we refer them, as we ought, not to the burials, but to the births; the number of christenings, at the three periods above mentioned, bearing very nearly the same proportion to each other, that obtains in these articles. Nevertheless it must be observed, that the register of the Brownlow-street Hospital also exhibits a very sensible increase in the number of children still-born.

It is not easy to give a satisfactory reason for all the changes which may be observed to take place in the history of diseases. Nor is it any disgrace to physicians, if their causes are often so gradual in their operation, or so subtle, as to elude investigation. Of this kind are the origin and decline of the rickets. It is pleasing however to look back upon the progress of this disease, and trace it from year to year, as it has been growing continually less and less fatal.

THE same observations are applicable to the evil also, unless we suppose its apparent decrease ought rather to be attributed to a greater backwardness in acknowledging a complaint now universally believed to be hereditary.

OF fevers I shall have occasion to speak more particularly afterwards *.

THE view which presents itself of consumptions, gout, lunacy, and palsy, must be confessed to be by no means favourable. The first of these probably includes many other chronical distempers, besides the pulmonary consumption. All of them seem to be almost, if not altogether, unknown among barbarous nations, and may perhaps be the natural consequences of arts and civilization. As these again shoot up into luxury and intemperance, their effects may well be expected to become proportionally more conspicuous. Dr. Rush of Philadelphia has reported concerning the uncultivated nations of North America, that fevers, inflammations, and dysenteries make up the sum of their complaints; and in particular, “that after much enquiry he had not been “able to find a single instance of madness, melancholy, “or fatuity, among them (*g*).” In a subsequent part of his work, the same author, speaking of the pulmonary consumption, declares it to be “unknown among the Indians “of North America (*h*).” Likewise Mr. Park, in his Account of the Interior Parts of Africa, says, that notwithstanding longevity is uncommon among the Negroes, their diseases appeared to be but few in number: fevers and fluxes are the most common, and the most fatal.

THE

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(*g*) Medical Enquiries and Observations, by B. Rush, Vol. I. p. 25.

(*h*) Vol. I. p. 159.

THE discerning Sydenham had long before observed, that
 “ acute diseases come from God, but chronical diseases ori-
 “ ginate with ourselves (*i*).” Indeed we cannot doubt, that
 idleness and intemperance, with their long train of vices ; that
 covetousness and anxiety, the necessary attendants upon com-
 merce ; and manufactories, which supply the materials for it ;
 must all in their several ways be injurious to health. And it
 is not improbable, that they may very largely have contri-
 buted to swell out the number of deaths under each of the
 diseases in question.

It does not appear by the bills of mortality, that the num-
 ber of deaths from dropsy was increased by the act passed in
 1690, for the encouragement of the distillation of malt spi-
 rits. Between the years 1718 and 1751, the average number
 is one-tenth greater than at any period before or since. In
 1751 the distillation of spirits was restrained by act of par-
 liament, and the use of them checked by additional duties.
 Petitions were the year after sent up to parliament from va-
 rious parts of the kingdom, setting forth the good effects of
 these regulations upon the morals and health of the people,
 and praying for a continuance of them. And the bills of
 mortality seem to confirm this, by the article of dropsy falling
 from above one thousand annually to nine hundred, and still
 more by the reduction of excessive-drinking from forty to
 five.

OF

(*i*) Morbi acuti Deum habent autorem, chronici ipsos nos.

OF the WEEKLY TABLE of MORTALITY.

IT is not my design to enter into a detail of all the particulars deducible from this table. The following general results however are submitted to the public, as a specimen of the uses to which it may be applied.

1. THE whole number of deaths is greatest in January, February, and March ; and least in June, July, and August.

I BELIEVE this is contrary to the received opinion, which may perhaps have been handed down from those ages, when the authority of Hippocrates, and Galen, superseded the evidence of the clearest facts (*k*).

OUR table corresponds with the following one from Dr. Short's observations, containing the aggregate of the monthly mortality in London for fifteen years, from 1728 to 1743 ; which I insert rather than the eleventh table of the same work, because it affords the additional information of the ages at which the several deaths took place, shewing the different fluctuation at different periods of life.

(*k*) Celsus, who probably copied it from Hippocrates, says, " Igitur saluberrimum ver est ; proxime deinde ab hoc, hiems ; periculosior æstas ; autumnus longe periculosissimus." Lib. II. Cap. 1.

	Under 2 Years.	From 2 to 5.	From 5 to 10.	From 10 to 20.	From 20 to 30.	From 30 to 40.	From 40 to 50.	From 50 to 60.	From 60 to 70.	From 70 to 80.	From 80 to 90.	90 and upwards.	TOTALS.
Jan. -	12,593	2,678	1,306	1,232	3,021	3,576	3,730	3,480	2,625	1,988	1,203	250	37,682
Feb. -	12,550	2,918	1,275	1,139	2,852	3,125	3,409	3,086	2,708	1,997	1,072	226	36,157
March	12,681	3,254	1,267	1,039	2,905	3,423	3,450	3,823	2,281	1,855	1,002	146	37,126
Apr. -	12,731	3,184	1,168	1,021	2,728	3,247	3,088	2,549	2,107	1,496	775	148	34,242
May -	12,268	3,194	1,269	1,004	2,494	3,991	3,046	2,628	2,174	1,427	768	147	33,410
June -	11,363	3,073	1,239	1,048	2,353	2,597	2,803	2,164	1,726	1,129	595	107	30,197
July -	10,063	2,889	1,195	952	2,261	2,748	2,622	2,259	1,558	1,021	528	114	28,210
Aug. -	12,684	2,897	1,170	926	2,241	2,426	2,755	2,543	1,555	1,049	481	102	30,829
Sept. -	13,563	3,101	1,168	1,081	2,401	2,933	2,850	2,558	1,787	1,212	617	104	33,375
Oct. -	13,832	3,069	1,190	1,080	2,344	3,215	3,125	2,372	2,030	1,439	786	108	34,590
Nov. -	12,010	2,867	1,169	1,097	2,685	3,378	3,255	2,924	2,313	1,511	850	122	34,181
Dec. -	12,319	3,055	1,297	1,136	2,617	3,416	3,609	3,090	2,504	1,876	846	187	35,952
Total -	148,657	36,179	14,713	12,755	30,902	37,075	37,742	33,476	25,168	18,000	9,523	1,761	405,951

IF we make allowance for the shortness of the month of February, that will appear in fact to be the most fatal of the twelve (1).

It may be suspected perhaps at first sight, that much of this ought to be attributed to the greater number of people resident in London during the winter, than in the summer months. But what then shall we say to the following account collected by Dr. Short from the registers of five and twenty different country towns in England, including the burials of a great many years? For the result there also is very nearly the same, making allowance for those irregularities, to which small communities must of necessity be liable :

January - - -	16,932	July - - - -	13,034
February - - -	16,126	August - - -	12,795
March - - - -	17,641	September - -	12,999
April - - - -	17,670	October - - -	13,629
May - - - - -	16,618	November - - -	14,074
June - - - - -	13,680	December - - -	15,658

THE monthly mortality at York agrees still more perfectly with what has been observed of London. The annexed Table,

(1) The bills being sent in every week makes the monthly mortality necessarily liable to some uncertainty. For, the same month which one year contains five weeks, may in the next contain only four. These inaccuracies, which might be considerable in a comparison of only two or three years, will diminish in proportion to the number of years which are estimated together.

Table, published by Dr. White, shews the number of burials in that city during seven years :

Jan. - 320	Apr. - 277	July - 220	Oct. - 237
Feb. - 282	May - 265	Aug. - 237	Nov. - 230
Mar. - 316	June - 274	Sept. - 225	Dec. - 292

The truth of these observations is moreover confirmed by the registers kept at Edinburgh, and in Paris, and throughout the kingdom of Sweden (*m*).

ON the other hand, at Marseilles, and at Montpellier, the monthly mortality is stated to vary as follows (*n*) :

	Marseilles.	Montpellier.
January - - -	1,801 - - -	853
February - - -	1,597 - - -	774
March - - -	1,704 - - -	696
April - - -	1,681 - - -	694
May - - -	1,504 - - -	673
June - - -	1,465 - - -	769
July - - -	1,881 - - -	1,038
August - - -	1,849 - - -	1,114
September - - -	1,725 - - -	1,100
October - - -	1,668 - - -	1,093
November - - -	1,765 - - -	1,040
December - - -	1,659 - - -	950

Is

(*m*) Price on Reversionary Payments, Vol. II. p. 271. 5th edit. where observe that the words *former* and *latter* are transposed.

(*n*) Mem. de la Soc. Roy. de Medicine, ann. 1777 & 1781.

Is the difference between this table and the former, occasioned by the different temperature of the places, from whence the accounts are drawn? In very cold climates, it is obvious that the coldest part of the year is the season most to be apprehended. For increase the cold but a little, and it becomes quite inconsistent with human life. But all the accounts we have of places suffering from excessive heat, agree in describing the autumn as the time of their greatest mortality. Now, it is reasonable to suppose with regard to temperature, as in most other things, that some degree of heat intermediate between these extremes must be most congenial to the human frame; and that as any climate approaches nearer to the one, or the other limit, it will naturally partake more of their respective inconveniences. This must not be so understood, as if it were meant to preclude the operation of other causes. Many circumstances peculiar to particular situations, will no doubt often have a much superior influence in determining their salubrity, or unwholesomeness. Still, where these are equal, there is some ground to believe that the effects before mentioned do in fact take place.

2. UNDER two years of age, there die most either in January February and March, or else in September and October.

It should be noticed that baptisms, and I presume births, are usually more numerous in the beginning of the year, than in the subsequent parts of it; as appears from the concurrent testimony of the London Bills (*n**), and of those kept

(*n**) Short's Obs. p. 176.

kept in various parts of the country (*o*), and from the registers of the whole kingdom of Sweden (*p*).

THIS, if we reflect on the great mortality among children in the first two or three months from their birth, will in some measure account for the excess of their burials in the early part of the year. But when the number again increases in September and October, I apprehend that may truly be looked upon as the season more especially prejudicial to young children. It is at this time that bowel complaints are most prevalent in persons of all ages (*p*^{*}); and when it is considered how large a part they constitute of the diseases of infants, it seems by no means improbable that the general cause should be capable of producing this particular effect.

3. OF those aged above sixty years, by much the greatest number die in the coldest months, and the fewest in the middle of summer.

THERE can be little doubt but this ought to be attributed to the degree of cold. For universally old people, above all others, are most sensibly affected by it.

How much they differ from children in this respect, cannot be shewn more evidently than by a comparison of their respective

(*o*) Short's Obs. p. 142.

(*p*) Price on Rever. Payments, Vol. II. p. 271.

(*p*^{*}) See p. 54.

spective numbers during the corresponding months of January 1795 and 1796. For of these two successive winters, the month of January has in one instance been the coldest, and in the other the warmest, of which any regular account has ever been kept in this country. The following Table exhibits at one view the mean height of Fahrenheit's thermometer in London for each week of the two years, together with the whole number of deaths, the deaths of persons above sixty years old, and the deaths of children under two years :

1795.					1796.				
Week ending	Mean Heat.	Whole No of Deaths.	Aged above 60.	Under 2 Years.	Week ending	Mean Heat.	Whole No of Deaths.	Aged above 60.	Under 2 Years.
	Morn. Noon.					Morn. Noon.			
6 Jan.	25°—29°	244	51	66	5 Jan.	40°—46°	300	35	100
13 Jan.	26°—32°	532	139	129	12 Jan.	41°—49°	273	37	87
20 Jan.	24°—30°	637	145	141	19 Jan.	48°—53°	313	29	113
27 Jan.	19°—27°	543	143	128	26 Jan.	47°—52°	257	20	96
3 Feb.	25°—37°	867	239	153	2 Feb.	41°—49°	328	32	110
Total	23°—29°.4	2,823	717	617	Total	43°.5—50°.1	1,471	153	506

From hence it appears, First, that old persons are affected by the cold much sooner than children; for in the very first week of 1795, the proportion they bear to the whole number of

of deaths is very nearly twice as great as in the succeeding year. Secondly, that while the mortality of the aged was five times greater in one year than in the other, the number of infants dying in the first year exceeded those in the second by only one-fifth part. So that the ratio of their respective increase was as five-and-twenty to one (g).

It may be thought satisfactory to add, that the different mortality in the two years from which this comparison is drawn, cannot be accounted for from any accidental fluctuation of the number of people resident in London, nor from any irregularity in the bills themselves. On either of these suppositions, the christenings must have undergone a corresponding rise and fall; but they, during the same five weeks, neither exceeded their usual number in the one case, nor fell short of it in the other. In 1795, they amounted in this time to 1,622; and in 1796, to 1,650.

4. THE number of deaths by palsies and apoplexies is in this country always greatest in winter.

THIS is probably because it is a disease of old age, and is consequently increased, and diminished, by the same causes, which influence the general mortality at that time of life. At Marseilles, not only the whole number of deaths, but those also

(g) Some further account of the effects of cold may be seen in the Philosophical Transactions for the year 1796, p. 279.

also occasioned by apoplexies and palsies, are greatest in the summer (r).

5. CONSUMPTIVE people are of course sufferers by cold; and though they are not so soon affected from this cause as the asthmatic and aged, yet their numbers in the bills are always greatest in the cold months.

6. HOWEVER the number of bowel complaints have been lessened within the last hundred years, we still find them most frequent in September and October.

IN all hot countries these disorders are observed to be more common, and more violent, than they are with us; and here in England they are most prevalent after the hottest summers. This was the case in 1762, and again in 1789, 1790, and 1800. The time of year also when they principally occur in all climates, concurs to indicate some connexion subsisting between them and the state of the atmosphere. But what this is; whether the heat act thus upon the human body by occasioning inflammation, or relaxation, whether by profuse, or by morbid secretions, or by what other means, I confess myself unable to explain; notwithstanding the many pleasant theories about the nature of the bile, with which the books on West Indian diseases in particular are filled.

7. THE remaining diseases, of which an account has been taken in the Table, seem to have no certain increase or decrease.

(r) Mem. de la Soc. Roy. de Med. 1777.

crease. The measles and small pox are exceedingly various, and without any apparent relation to the temperature, moisture, or other sensible qualities of the seasons. The same is in general true of fevers, with this exception, that in long and severe winters they are certainly more numerous, for reasons which have been explained elsewhere (*s*). Many poor families at such times being reduced to the necessity of shutting themselves up, perhaps several together, in a small room, where they can afford to burn little or no fire, and where their best defence against the rigor of the season is to preclude as much as possible all access to the external air.

CONVULSIONS are so much made up of children's deaths, that they follow the same course which has been observed to take place under that article (*t*).

FROM the weekly table of mortality we are enabled to correct some popular errors, which are very generally prevalent. One of these is, that there is something peculiarly wholesome in a sharp frost (*u*); another, that wet weather is noxious to the human body, and in particular that it is productive

(*s*) Medical Transactions, Vol. III. Observations on the Jail Fever, by John Hunter, M. D.

(*t*) "Presque tous les enfants qui meurent avant l'age d'un an, et même de deux, meurent avec des convulsions; l'on dit qu'ils sont morts des convulsions, et l'on a en partie raison," &c. Tissot, Avis au Peuple.

(*u*) Agreeable to this is the proverb, that "A green winter makes a fat churchyard." See Ray's Proverbs.

ductive of putrid diseases (*x*). After what has been stated above, and what may be seen more at large in the Philosophical Transactions for the year 1796, there need not many arguments to disprove the first of these opinions. The year 1797 affords a very favourable opportunity of ascertaining that the other is equally unfounded. That year, from the middle of May, was one of the wettest ever remembered; yet so far was this from rendering it prejudicial, much less pestilential, that whether we attend to the united sum of the deaths, or to the particular articles of which it is composed, we shall find reason to believe it was in every respect a healthy year. The same was observed also during the American war among the soldiers encamped at Coxheath in Kent, and it has occasionally been noticed at other times (*y*). The mistake has in both cases probably originated from the known influence of heat and moisture in promoting putrefaction, and they are not

(*x*) το μεν όλον οι αυχμοι των επομβριων εισιν υγιεινότεροι. Hippocr. Aph. sect. 3. 15. Νεσηματα δε εν τησιν επομβρησιν ως τα πολλά γινεται πυρετοι τε μακροί, και κοιλιας ρυσιες, και σηπεδονες, &c. Ib. 16. Thus Hoffman in his *Medicina Rationalis*, "Aëri in-
"salubritas, et ad ingignendos putridos morbos aptitudo, inducitur ex crebra ac
"diuturna aquarum inundatione." 4to. Vol. IV. p. 262. Many other authorities might be produced to the same purpose.

(*y*) Dr. Cuming of Dorchester, in a letter addressed to Dr. Fothergill upon the subject of the influenza in 1775, has these words: "The autumn here was
"very wet, as the quantity of rain that fell here during the months of August,
"September, October, and November, was exactly fourteen inches and twenty-
"seven hundredth parts. This circumstance, joined to the mild temperature of
"the air, made me expect diseases of a putrid class, but in this I was happily dis-
"appointed." *Med. Obs. and Enq.* Vol. VI.

not the only instances of people being misled by a name. But the cook and the chemist should be informed, that arguments drawn from a kitchen or a laboratory must not be too confidently transferred to the operations of a living body.

THERE is reason to think that another idea has been adopted by many people upon not much better grounds than the former. For it has been imagined, that neither heat, nor cold, are in themselves pernicious, but that it is the rapid transitions from one to the other which are alone to be dreaded (*z*). If this opinion carry with it an appearance of probability, such facts at least as are afforded by the bills of mortality at the end of the year 1796 and beginning of 1797 do in no wise correspond with it. The great and sudden changes of temperature at that period are too recent to be forgotten. Before the middle of December 1796 it froze hard for several days, and presently after thawed again: Christmas morning will long be memorable for the greatest cold perhaps ever experienced in England, Fahrenheit's thermometer in London standing below zero; but in less than a week the same thermometer was above 50°. The month of January following continued to exhibit frequent and very uncommon variations of heat and cold; yet the mortality all this time did not exceed its usual limits.

THE same opinion has been very commonly applied to the breaking up of a long frost; people in general being more apprehensive of bad consequences from the succeeding thaw,

(*z*) αἱ μεταβολαὶ τῶν ὥρων μάλιστα τιτῆσι νοσημάτων. Hippocr. Aph. 3, 1.

thaw, than from the cold itself. But this admits of a similar answer to the former. For the frost in the beginning of the year 1795 ended with the month of February, though the weather continued indeed to be colder than usual throughout the March following. We need only turn our eyes to the weekly table, to see how accurately this corresponds with the decrease of the mortality.

THE annexed extract from the bills of mortality for the year 1740, shews that the same effects took place likewise during the hard frost which is known to have set in the 24th of December 1739 (old style) and to have continued till the 16th of February 1740. In this case also, as in the former, the succeeding spring was cold and backward.

Week ending	Whole No of Deaths.	Aged above 60.
1 Jan. - - - -	543 - - - -	95
8 Jan. - - - -	714 - - - -	120
15 Jan. - - - -	777 - - - -	163
22 Jan. - - - -	691 - - - -	138
29 Jan. - - - -	728 - - - -	136
5 Feb. - - - -	813 - - - -	174
12 Feb. - - - -	780 - - - -	170
19 Feb. - - - -	794 - - - -	160
26 Feb. - - - -	771 - - - -	146
4 Mar. - - - -	767 - - - -	118
11 Mar. - - - -	591 - - - -	104
18 Mar. - - - -	754 - - - -	120
25 Mar. - - - -	620 - - - -	95

BEFORE

BEFORE we take leave of this subject, it should be noticed, that the numbers given in by the parish clerks in the month of December, are less to be depended upon, than in any other part of the year. For, the yearly account being made up to the middle of that month, it frequently happens that parishes, which have neglected to make any returns for many weeks together, give in at that time the sum of the baptisms and burials since their last report (*a*). And as if the discharge of this debt entitled them to contract new ones, similar omissions are more common in the two or three weeks immediately following, than at any other period.

SOME judgment may be formed of these inaccuracies, by comparison with the weekly christenings. For whenever the burials suffer any sudden increase, or diminution, if the baptisms at the same time undergo a corresponding change, there will be reason to attribute both rather to the irregularity of the parish clerks reports, than to any real alteration in the health of the people.

(*a*) On the 13th of Dec. 1796, the parish of St. George in Middlesex gave in the numbers for the whole year, amounting to 532.

PART II.

OF THE PLAGUE.

A T A B L E,

Shewing how many died Weekly, as well of all Diseases, as of the PLAGUE, in the Years 1593, 1603, 1625, 1636, and 1665.

From the Bills of Mortality.

	1593.		1603.		1625.		1636.		1665.		
	Total.	Plague.	Total.	Plague.	Total.	Plague.	Total.	Plague.		Total.	Plague.
June 2.	410	62	114	30	395	69	339	77	May 30.	399	17
June 9.	441	81	131	43	434	91	345	87	June 6.	405	43
June 16.	339	99	144	59	510	161	381	103	June 13.	558	112
June 23.	401	108	182	72	640	239	304	79	June 20.	611	168
June 30.	850	118	267	158	942	390	352	104	June 27.	684	267
July 7.	1440	927	445	263	1222	593	215	81	July 4.	1006	470
July 14.	1510	893	612	424	1781	1004	372	104	July 11.	1268	727
July 21.	1491	258	1186	917	2850	1819	365	120	July 18.	1761	1089
July 28.	1507	852	1728	1396	3583	2471	423	151	July 25.	2785	1843
Aug. 4.	1503	983	2256	1922	4517	3659	491	206	Aug. 1.	3014	2010
Aug. 11.	1550	797	2077	1745	4855	4115	538	283	Aug. 8.	4030	2817
Aug. 18.	1532	651	3054	2713	5205	4463	638	321	Aug. 15.	5319	3880
Aug. 25.	1508	449	2853	2539	4841	4218	787	429	Aug. 22.	5568	4237
Sept. 1.	1490	507	3385	3035	3897	3344	1011	638	Aug. 29.	7496	6102
Sept. 8.	1210	563	3078	2724	3157	2550	1069	650	Sept. 5.	8452	6988
Sept. 15.	621	451	3129	2818	2148	1672	1306	865	Sept. 12.	7690	6544
Sept. 22.	629	349	2456	2195	1994	1551	1229	775	Sept. 19.	8297	7165
Sept. 29.	450	330	1961	1732	1236	852	1403	928	Sept. 26.	6460	5533
Oct. 6.	408	327	1831	1641	833	538	1405	921	Oct. 3.	5720	4929
Oct. 13.	422	323	1312	1149	815	511	1302	792	Oct. 10.	5068	4327
Oct. 20.	330	308	766	642	651	331	1002	555	Oct. 17.	3219	2665
Oct. 27.	320	302	625	508	375	134	900	458	Oct. 24.	1806	1421
Nov. 3.	310	301	737	594	357	89	1300	838	Oct. 31.	1388	1031
Nov. 10.	309	209	545	442	319	92	1104	715	Nov. 7.	1787	1414
Nov. 17.	301	107	384	251	274	48	950	573	Nov. 14.	1359	1050
Nov. 24.	321	93	198	105	231	27	857	476	Nov. 21.	905	652
Dec. 1.	349	94	223	102	190	15	614	321	Nov. 28.	544	333
Dec. 8.	331	86	163	55	181	15	459	167	Dec. 5.	428	210
Dec. 15.	329	71	200	96	168	6	385	85	Dec. 12.	442	243
Dec. 22.	386	39	168	74	157	1			Dec. 19.	525	281
Whole } Year }	25886	11503	37294	30561	51578	35403	23359	10400	Whole } Year }	97306	68596

THE foregoing Table exhibits a melancholy, yet a very imperfect picture of what the people of this country formerly suffered from the Plague (*a*). It is a subject which must ever be interesting to humanity, to trace out, as far as we are able, by what means it has happened, that a disease which was once so very destructive, should totally have disappeared for now considerably more than an hundred years. For this purpose, it will be necessary to enter at some length into the history of the circumstances attending its progress, and to look back if possible to its true origin.

MANY difficulties occur in the prosecution of this enquiry. Each country is unwilling to acknowledge herself the parent of such an odious offspring. From this part of Europe we are taught to look to Turkey for the source of this evil. Enquire there, and you are referred either to some vague report from the parts about the Caspian sea, or more commonly to Egypt. The Egyptians, on the other hand, will tell you they receive it sometimes from Turkey, but usually from Lybia, or Ethiopia ; in short, from places where there is nobody to contradict such a malicious report. In this manner Villani, who was at some pains to investigate the origin of
a great

(*a*) In the City Remembrancer is collected, from very respectable authorities, the best history of that dreadful time. An elegant account of similar miseries produced from the same cause in the city of Florence in the year 1348, may be seen in the Introduction to the Decamerone of Boccaccio.

a great plague in the fourteenth century, was referred at last to China, and was told that it was there occasioned by the bursting of a great ball of fire attended with an uncommon stench.

LEAVING these idle stories, if we direct our attention to the places where in fact it has prevailed, we shall find its head quarters always to have been the nastiest parts of dirty, crowded, ill constructed, large cities. Thus Grand Cairo, and Constantinople, are never long free from it; and thus likewise when it has attacked other places, where it is less common, its first appearance has been among the lowest of the people. There, as on touchwood, the spark is easily kindled, and presently blown into a flame. “ Grand Cairo is crowded by a
 “ vast number of inhabitants, who for the most part live very
 “ poorly and nastily. The streets are very narrow and close,
 “ and twenty or thirty live in one small house. It is situated
 “ in a sandy plain at the foot of a mountain, which by keep-
 “ ing off the winds, which would refresh the air, makes the
 “ heats very stifling. Through the midst of it passes a great
 “ canal, which is filled with water at the overflowing of the
 “ Nile, and after the river is decreased, is gradually dried up.
 “ Into this, people throw all manner of filth, carrion, &c.
 “ so that the stench which rises from this and the mud toge-
 “ ther is insufferably offensive. In this posture of things, the
 “ plague every year constantly preys upon the inhabitants,
 “ and is only stopped when the Nile by overflowing washes
 “ away this load of filth; the cold winds, which set in at
 “ the

“ the same time, lending their assistance by purifying the
 “ air (*a**).” The plague is very generally observed to break
 out at Constantinople in that part of the city which is low
 and marshy (*b*). And there, as every where else, “ nitidæ
 “ ædes haud æque facile inficiuntur, ac fordidæ (*c*).” Black-
 more takes notice that the impurity and filth, which accom-
 panied the gallies and slaves at Marseilles, filled the air with
 offensive smells easily perceivable by those that passed along
 the adjoining shore: and in 1720, the plague broke out there
 in a part of the town thronged by the poorest people (*d*). At
 Aleppo, it always begins in the Keisarias and Judeda: the
 former are small huts with few or no windows, which stand
 crowded together, and are inhabited by the lowest Arabs;
 the latter are the dwellings of the inferior Jews, “ whose
 “ houses are small; or if large, the different apartments are
 “ crowded with different families; many of them are more
 “ than a story below the level of the street, in a condition
 “ half ruinous, dirty in the extreme, damp, and badly aired;
 “ and the wretched inhabitants are clothed with rags (*e*).”
 In Holstein, in 1764, it first appeared at Rensburg among the
 prisoners, “ propter delicta ad operas publicas damnatos (*f*).
 At Moscow, it broke out “ in domo amplissima, quæ infer-
 “ viebat,

(*a**) The City Remembrancer. This account is confirmed by Alpinus, Pococke, Irwin, and a variety of other testimonies.

(*b*) The City Remembrancer.

(*c*) Timone on the Plague at Constantinople, Phil. Trans. abr. Vol. VII.

(*d*) City Remembrancer.

(*e*) Ruffel on the Plague.

(*f*) Waldschmidt de singularibus quibusdam Pestis Holsatiæ. Haller Dis-
 putat. Vol. V.

“ viebat conficiendis pannis pro militibus ; tria hominum
 “ millia utriusq; sexus huic labori operabantur, quorum tertia
 “ pars circiter pauperrima in inferiore parte domus habita-
 “ bat (*g*). In London, the plagues of 1626, and 1636,
 broke out at Whitechapel, a part of the town which abounded
 with poor, and with slaughter-houses : that of 1665 is said to
 have broke out first at St. Giles's ; and there it would pro-
 bably again break out, if ever we should suffer such another
 calamity.

THERE can be no doubt that the plague is infectious ; and
 it would be easy to point out the way in which it may be in-
 troduced by foreign contagion. Indeed the correspondence of
 the dates of our last great plagues, with those of Amsterdam,
 affords a strong presumption, either that one of these cities
 must have received the infection from the other, or that both
 of them received it from some common source. Yet it should
 be remembered, that it is by no means so easily imported, as
 the fears of most people incline them to believe. Nor, be-
 cause a person labouring under the plague may communicate
 the poison to goods, and such goods afterwards to other people,
 does it by any means follow that either of these effects must
 necessarily take place. We have many reasons to persuade us
 to the contrary. For if a single bale of cotton be supposed
 capable of introducing the disease ; who could escape from
 the infection, which had been harboured in the furniture of a
 whole city during the continuance of a plague ? Nevertheless
 we

we read that when the plague was in Italy, the Neapolitans used no artifice to purify either their goods, or houses; yet the disease ceased among them as entirely as in the best regulated towns. So Prosper Alpinus, speaking of the plague in Egypt, says, “ Junio vero mense, qualiscunque et quantacunque fit ibi pestilentia, sole primam cancri partem ingrediente, omnino tollitur, quod multis plane divinum esse non immerito videtur. Sed quod etiam valde mirabile creditur, omnia supellectilia pestifero contagio infecta tunc nullum contagii effectum in eam gentem edunt.” In Syria also, where it's returns are very frequent, yet from September to March it is scarcely ever seen: and Dr. Russel tells us that in the winter time, when infected persons have come to places about Aleppo, some of whom have died in the families where they lodged, the distemper by such means was not propagated. Diemberbroeck likewise observes, that when the plague has been excited out of its proper season, it has not spread. The same thing is confirmed by the foregoing Table, and I believe by the histories of the plague in all large towns of Europe. For its chief force has always been felt in the summer and autumn *. Afterwards, “ le carnage diminue, la
“ maladie

* May not this influence of the seasons on diseases, be the real cause of the strange and contradictory accounts we have received concerning the cure of the Yellow Fever in the West Indies? Accounts which only agree in this, that the most obvious methods of treatment are wrong. It is reasonable to suppose, that physicians there would first make trial of the remedies most approved in similar diseases in other places; yet we find they all failed. And why? Because the epidemic was then at it's height. But afterwards, all their different modes of practice as universally succeeded. For when the disease began to decline, the mortality of it-

“ maladie devient plus traitable, les accidens font moins
 “ preffans, & le plus grand nombre de ceux qui en font
 “ atteints, echappe au danger (*g**).”

BUT a proper state of the air is not the only circumstance necessary to promote the operation of contagion. During the epidemical constitution, it is highly probable, that good diet, and good spirits, and cleanliness, and fresh air, and proper clothing, and exercise, may all contribute to render the body less susceptible of disease. The seeds of which, like those of vegetables, will then only spring up and thrive, when they fall upon a soil convenient for their growth. “ In solam
 “ plebem, ut semper fere accidit, sæviit pestis Moscuensis;
 “ inter nobiles, et ditiores mercatores, neminem fere, præter
 “ paucos valde incautos invasit (*h*).” Likewise at Mar-
 seilles, “ la peste fit ses plus grands ravages dans les quartiers
 “ habités par le menu peuple (*i*).” The same has been
 found to be true universally.

EVERY medical man will readily acknowledge the difficulty of ascertaining the true cause of almost any disease; and with respect to that under consideration, the difficulty is
 on

self became much less; and of those who died, most lingered on for a considerable time beyond their usual period. Which exactly corresponds with what has at all times been reported of the plague, under every variation of medicine, and climate.

(*g**) Fournier, Obs. sur la Peste.

(*h*) Mertens, de Peste Moscuense.

(*i*) Traité de la Peste.

on many accounts much increased. For interest, the most powerful of all motives in a commercial state, interferes in opposing our enquiries. The early risings of the plague are always endeavoured to be concealed, in order to prevent that interruption of trade, which necessarily takes place, where it is publicly avowed. “ La peste n’est reconnue dans une ville, “ que lorsque ses ravages se multiplient. D’abord elle n’en- “ leve que peu de malades ; leur petit nombre n’attire pas l’at- “ tention ; les doutes occupent quelque tems l’esprit : le mal “ est-il averé, des raisons d’interêt le font deguïser. C’est ainsi “ que la maladie fait des progrès secrets, elle se glisse,” &c. (k).

Now, that the plague was ever actually bred in London, it might be odious to assert, and would be impossible to prove. But to any one who reflects upon it’s frequent returns in this capital until the latter end of the seventeenth century, and it’s total absence since, notwithstanding the great increase of our trade by which it was supposed to be imported ; it must I think appear probable, that if it’s origin were derived from foreign contagion, at least it’s propagation ought in great measure to be attributed to some predisposition of the town in those days, which has since been corrected. Any improvements which our quarantine laws may have undergone, are by no means adequate to such an effect (l). But there have not been wanting many more powerful causes.

IN

(k) *Traité de la Peste.*

(l) See this matter discussed in Mr. Howard’s *Observations on Lazarettos*, and in Eton’s *Survey of the Turkish Empire*.

IN 1389, the streets of London were so abused with common lay-stalls, to the great annoyance of the citizens, that a proclamation was made throughout the city by authority of parliament, “ that no person whatever should presume to lay
 “ any dung, guts, garbage, offals, or any other ordure, in any
 “ street, ditch, river, &c. upon penalty of twenty pounds, to
 “ be recovered by an information in chancery.” In 1569, when the plague was in London, orders were issued “ to
 “ warne all inhabitants against their houses, to keep channels
 “ clear from fylth (by onlie turning yt asyde) that the water
 “ may have passage.” And Erasmus, in a letter to Franciscus, Cardinal Wolsey’s physician, ascribes the sweating sickness, which was a species of plague (*m*), and the plague, from which England was hardly ever free, in great measure to the incommodious form, and bad exposition of their houses, to the filthiness of the streets, and to the fluttishness within doors.
 “ Conclavia sola fere strata sunt argilla, tum scirpis palustri-
 “ bus (*n*), qui subinde sic renovantur, ut fundamentum maneat
 “ aliquoties annos viginti sub se fovens sputa, vomitus, mic-
 “ tum

(*m*) The years in which the sweating sickness more particularly prevailed, were 1485, 1506, 1517, 1528, 1551. Dr. Caius must probably have been mistaken when he mentions in his treatise, “ *De Ephemera Britannica*,” one circumstance entirely contrary to what has occurred in any plague of which I have yet seen an account, “ *Nam miseram illam et jejunam plebeculam belli pacisque laboribus duratam, aut omnino non attigit, aut sine gravi noxa vel periculo.*”

(*n*) Hentzner, speaking of the presence chamber at Greenwich palace in the time of Queen Elizabeth, observes that “ the floor, after the English fashion,
 6 “ was

“ tum canum et hominum, projectam cerevisiam, et piscium
 “ reliquias, aliasque sordes non nominandas.” This picture
 of the nastiness of the town will be yet heightened by con-
 sidering the state of the buildings before the great fire of 1666.
 The streets were narrow, and crooked, and many of them un-
 paved; the houses were built of wood, and lofty; they were
 dark, irregular, and ill contrived; with each story hanging
 over the one below, so as almost to meet at top, and thereby
 preclude as much as possible all access to a purer air; they
 were besides furnished with enormous signs, which by hang-
 ing into the middle of the street, contributed not a little to
 prevent all ventilation below. The sewers at the same time
 were in a very neglected state, and the drains all ran above
 ground. Add to which, the metropolis, which now enjoys
 such a plentiful supply of water laid into every house, had
 till many years subsequent to the bringing in of the New
 River in 1613, been but scantily furnished with this first
 of luxuries (o).

WE are enabled to form some judgment of the effect of
 this state of things upon the health of the inhabitants, by con-
 sidering

“ was strewed with hay.” The same custom is alluded to by Shakspeare, and
 Ben Johnson; also by Dryden, in his Tale of the Cock and the Fox:

“ Her parlour window stuck with herbs around,

“ Of fav’ry smell; and *rushes* strew’d the ground.”

It is probable that in earlier times this had not been peculiar to England. Boc-
 caccio, describing the villa to which the personages of his Decamerone retired
 from the plague at Florence, in the middle of the fourteenth century, says, “ Il
 “ quale tutto spazzato, e nelle camere i letti fatti, ed ogni cosa de fiori, quali
 “ nella stagione si potevano avere, piena, e di giunchi giunchata,” &c.

(o) This account of London is chiefly taken from Maitland’s History.

sidering the nature of the diseases which were then prevalent. Burnet says, in his History of the Reformation, that in the last year of Queen Mary's reign, "Intermitting fevers were
 " so universal and contagious, that they raged like a plague." Have we any idea of such a thing at present? Morton assures us, that remittent fevers were very destructive for several years before the great plague of 1665. In 1658 Oliver Cromwell died of this fever: and he tells us his own father also died of it, and that himself and his whole family were infected, "*matrem pientissimam, fratres, sorores, servos, ancillas,*
 "*nutrices conductitias, quotquot erant intra eosdem nobiscum*
 "*parietes, ac fere omnes ejusdem, ac vicinorum pagorum incolas, hoc veneno infectos, et decumbentes vidi.*" He proceeds to say, that the cold weather afterwards checked this disease; yet the seeds of it seem to have been by no means destroyed: they still continued to shew themselves under a different form; "*durante enim bruma, intermittentes, quar-*
 "*tanæ, tertianæ, quotidianæ, ab ejusdem veneni mitiore*
 "*gradu oriundas, fere æque epidemias videre erat, ac in autumno*
 "*συνεχέως, seu remittentes; neque mehercule sæviente*
 "*gelu penitus defecerunt istæ febres continentes. Atque*
 "*equidem hancce febrem hoc pacto sub typo συνεχέως, præ-*
 "*sertim simplicis et legitimæ, quotidianæ scilicet, vel tertianæ,*
 "*maxime vulgarem fuisse, et tempore autumnali plus minus epidemiam, usque ad annum 1664 observavi.*" He informs us likewise, that in the two years immediately succeeding the great plague, dysenteries were very frequent; so that in the autumn of 1667 "*civitas fere universa hoc*
 "*morbo*

“ morbo correpta videbatur, atque singulis septimanis 345
 “ plus minus fluxu et torminibus confecti fati cedebant.”

Afterwards we are told the same disease returned every autumn attended by nearly the same mortality. Major Graunt, whose Observations on the Bills of Mortality were published in 1662, says, “ The diseases which, besides the plague, “ make years unhealthful in this city, are, spotted fevers, “ small pox, dysentery, called by some the plague in the “ guts; and the unhealthful season is autumn.” From Sydenham we learn that from 1661 to 1664 agues were epidemical in London, and again from 1677 to 1685. This may be looked upon as the slightest of the effects of putrid moisture: and even to this we are at present almost strangers, unless among those who come from the marshy parts of the country. The same author informs us the dysentery was epidemical four years together; and the bills of mortality of that time shew the sum of the deaths under the titles of bloody flux and griping in the guts, which must both of them be considered as dysentery, never to have been less than 1,000 in a year, and some years to have exceeded 4,000; and for five-and-twenty years successively, from 1667 to 1692, the number every year amounts to above 2,000. At the same time we are told that in the jail of Newgate a contagious fever used to break out annually in hot weather; and that the same was true of most jails in Europe (*p*). Besides the well-known black affize at Oxford in 1577, there happened a second black affize only two years after, from which up-
 wards

(*p*) The City Remembrancer.

wards of 500 persons died. And Dr. Plott suggests as a probable reason for the unhealthiness of Oxford at that time, that the city was very much thronged, and all manner of cattle used to be killed within the walls, and their dung and offals were suffered to lie in the public streets. The true scurvy, which is now unknown in London, is also justly attributed, along with other causes, to a putrid atmosphere. And it is of this that Hodges speaks in his account of the plague of 1665, when he tells us, "*epidemica multo aute*" "*apud nos affectio scorbutica.*" So Hentzner, in his Travels at the time of Queen Elizabeth, observes that the English "*are often molested with the scurvy.*" Willis, who wrote a particular treatise on this subject, describes it in all its characteristic features as being very common: "*ægritudo multis in*" "*locis (Angliæ) endemia, et ubique fere sporadica.*" Charle-ton also declares, "*scorbutus in his regionibus septentrionali-*" "*bus est morbus endemius.*" Many other authorities might be produced to the same effect.

EXAMINE then how far the plague kept pace with these other diseases. In the early part of our history, a great number of years are specified as plague years (*q*). In the fourteenth, fifteenth, and sixteenth centuries, there scarcely passed ten years without a considerable plague. The greatest plague years of the seventeenth century were 1603, 1625, 1636, and 1665; in which the mortality is reported to have been

(*q*) See the City Remembrancer.

been respectively 36,000, 35,000, 10,000, and 68,000 (*q**). But we must not imagine the disease was accidentally imported just at those periods, and that at other times London was perfectly free. The same bills of mortality, and the testimony of all history, positively contradict such an opinion. In 1603, the deaths by the plague amounted, as we have said, to 36,000; in 1604 there died by the same disease 900; in 1605, 400; in 1606, 2,000; in 1607, 2,000; in 1608, 2,000; in 1609, 4,000; in 1610, 1,800; and from 1640 to 1648, the number was every year above 1,000. I would not be understood to insinuate that the mortality was always so great, as in the years here mentioned. There might pass some years without any person dying of the disease. I am disposed to believe however, that the number of these must have been much fewer than most people are aware of. Maitland, in his History of London, declares that for five-and-twenty years before the fire of 1666, the city had never been clear from the plague. And from the year 1603, when the register begins, till 1670, the bills of mortality exhibit only three years entirely free: though it must be confessed the mortality in some others is so small as to leave room to doubt whether the cause of those deaths may not have been misrepresented.

THE

(*q**) There is reason to believe that these numbers, great as they appear, are considerably under the truth. Lord Clarendon says, that “many, who could compute very well, concluded there were in truth double that number who died.” Hist. of his own Life.

THE plague therefore, as well as other putrid diseases, prevailed in a very high degree in times when we know the condition of the town to have been most offensively dirty. And it is pleasing to observe how the health of the inhabitants returned, in proportion as this cause of their complaints was removed. In September 1666, while the plague was yet unsubdued, happened the memorable fire of London. It raged for several days together, till it had consumed every thing from the Tower to Temple Bar. This, which was at first looked upon as a scourge from Heaven, has since proved indeed a most gracious blessing. Great pains were taken, and much encouragement was given by the king, to obtain proper plans for rebuilding the city. The streets were widened; the sign-posts ordered to be "fixed against the balconies, or some other convenient part of the house," instead of hanging across; directions were prescribed for levelling the streets "for the more easy and convenient current and conveyance of the waters;" proper places were appointed for common lay-stalls; cess-pools were ordered to be "made and continued to every grate of the common sewer, to receive the sand or gravel coming to the same, so to prevent the choaking thereof;" orders were issued respecting the "fel- lowship of carmen, who should sweep and cleanse the streets, lanes, and common passages, from dung, soil, filth, and dirt;" all persons were forbid to lay in the streets any dogs, cats, inwards of beasts, cleaves of beasts' feet, bones, horns, dregs or dross of ale or beer, or any noisome thing, upon pain of ten shillings for every offence:" it was ordered

ordered also, “ that no man shall feed any kine, goats, hogs, or
 “ poultry in the open streets ;” “ that no man shall cast into
 “ ditches or sewers, grates or gullets, of the city, any manner
 “ of carrion, stinking flesh, rotten oranges or onions, rubbish,
 “ dung, &c. &c.” that no man “ shall make or continue
 “ any widraughts, feat or seats for houses of easement over,
 “ or drains, into any common sewers, &c.” and other regulations were enforced to the same effect (r) ; by which means many of the former inconveniences and nuisances were remedied. So that in a few years the new town rose up like a phoenix from the fire with increased vigour and beauty. Nor did the benefit end there ; for it produced in the country a spirit of improvement which had till then been unknown, but which has never since ceased to exert itself.

LET us now again turn our eyes towards the state of diseases. Morton relates of the autumnal fever : “ Febris
 “ *συνεχης* genuina ab anno 1665 (in quo pestis, veneno ad gradum summe deleterium provecto, caput suum extulit) fere
 “ per biennium profligata disparuit, nec amplius recedente
 “ sole grassata est ut ante.” And again : “ Venenum febriferum anno 1673 quadantenus mitescere et cicurari videbatur, et mitius huc usque (1692) est.” And the gradual decrease of the dysentery, which we have shewn to have been so very destructive, though already taken notice of in the former part of this essay, is too much to the purpose not to be repeated. For taking together the three diseases of
 bloody

(r) See Maitland's History of London.

bloody flux, colic, and gripes, their decline from the beginning of the eighteenth century has been nearly as follows :

From 1700 to 1710 the average is about 1,070 annually.

1710 to 1720	- - - - -	770
1720 to 1730	- - - - -	700
1730 to 1740	- - - - -	350
1740 to 1750	- - - - -	150
1750 to 1760	- - - - -	110
1760 to 1770	- - - - -	80
1770 to 1780	- - - - -	70
1780 to 1790	- - - - -	40
1790 to 1800	- - - - -	20

THE same bills of mortality, so far as they may be trusted in an article confessedly liable to great inaccuracy, shew the decline of scurvy likewise to have been very rapid. The first twenty bills, that is, from the year 1657 to the year 1677, give an average of sixty deaths every year under this head ; whereas since the beginning of the eighteenth century, the number has scarcely exceeded five, or six. It's decrease among our sailors has been much more remarkable. For I have been informed by one of the physicians to the Haslar hospital near Portsmouth, that their wards, which used to be crowded with scorbutic patients, now do not receive above twenty in the whole year. And in this instance nobody can hesitate to attribute the change to the attention that has of late years been paid to the cleanliness, ventilation, and diet of our navy. It is probably from a similar attention, that the

number of fevers reported in the bills of mortality, have in the course of the last fifty years been reduced from 3,000 to 2,000 annually.

BUT to return to the plague. In 1666, there are reported to have died in London by this disease 1,998 ; in the year following, 35 ; and the year after that, 14 ; since which time the number has never exceeded five ; and the last year it is mentioned at all in the bills is 1679 ; notwithstanding the population, and the trade of London, have been so rapidly increasing from that time to this (*t*).

IT may be worth while to observe, that the plague was formerly by no means confined to the metropolis. In 1625, it also broke out at Oxford ; and moreover seized the seamen and foldiers on board the fleet, and obliged them to relinquish the object they were at that time engaged in,

(*t*) The number of people in London seems never to have suffered any material diminution in consequence of the great mortalities which from time to time took place. It appears by the bills of mortality, that in two years afterwards both the christenings and burials, and we may suppose therefore the inhabitants of London, regained their usual standard. For, “ if there be encouragement for an hundred in London, that is, a way how an hundred may live better than in the country, and if there be void housing there to receive them, the evacuating of a fourth, or a third part of that number, must soon be supplied out of the country ; so as the great plague doth not lessen the inhabitants of the city, but of the country, who in a short time remove themselves hither, so long, until the city, for want of receipt and encouragement, regurgitates and sends them back.” Major Graunt’s Observations.

in, of intercepting the Spanish galleons. In 1665, every town within twenty miles of London was more or less infected, and most of the principal towns in England, besides some parts of Ireland. In 1391, it was most severely felt in Norfolk, and at York; in 1643, it broke out at the siege of Reading; in 1645, it was at Leeds; and in 1646, at Newark, Stafford, and Totness. About the same time it likewise occasioned a great mortality in Ireland. From an expression used by Lord Clarendon, in his History of the Rebellion, one may form some judgment how familiar this disease must formerly have been in Bristol. He is speaking of the reasons which induced the Prince of Wales to appoint certain commissioners to meet him at Bridgewater rather than at Bristol in April 1645, and observes that "Bristol was
 " thought at too great a distance from the West, besides that
 " the plague began to break out there very much for the
 " time of year, &c." Yet we find this did not deter the prince from returning thither the very next week.

At the time the plague was so destructive in England, it seems to have raged with equal violence in other parts of Europe; and probably from the same cause. The histories of those ages are full of the physical and political miseries which prevailed. And in proportion as the nations of Europe have become civilized; and agriculture, with the arts of peace, has been cultivated, this disorder has gradually disappeared.

IN the fifteenth century, at Bourdeaux, “ il regné presque
 “ tous les ans une maladie pestilentielle, qui força plusieurs
 “ fois le parlement, pour se soustraire à la contagion, de tenir
 “ ses séances dans d’autres lieux de son ressort (*u*).” The
 following (*u**) are all of them mentioned as having been
 plague years at Dresden; viz. 1504 -5, 1511 -12, 1521,
 1535 -36, 1547, 1563 -64, 1571 -72, 1585 -86, 1591 -92,
 1607, 1627 -28, 1632 -33 -34 -35 -36 -37. In 1502 the
 disease was at Brussels; 1511 at Verona; 1525 in Germany;
 1531 and 1534 in France; 1539 in Switzerland; 1542 at
 Breslaw; 1550 at Basil; between 1550 and 1553 it spread
 itself successively over almost all the habitable world; 1559
 it was in Holland; 1563 it was in Germany, and again in
 1566; 1564 in Savoy; 1566 and 1568 at Milan; 1568 at
 Paris; 1572 at Basil; 1575 at Milan; 1576 at Venice;
 1580 at Marseilles; 1593 it was in Holland and the Low
 Countries; 1596 and 1597 in Germany; 1603 it was again
 in Holland, also in 1609, and in the latter year in Denmark;
 1618 at Bergen; 1619 in Denmark; 1622 at Amsterdam,
 where it continued for eight years; 1623 it was at Mont-
 pellier; 1625 at Leyden, in Denmark, and in Germany;
 1628 it was at Lyons; 1629 and 1630 at Montpellier; 1631
 at Dijon; in 1630 it was besides in Denmark, and at Chris-
 tiana in Norway, and at Parma, Verona, and other parts of
 Italy;

(*u*) Hist. de la Soc. Roy. de Med. Vol. I. 188.

(*u**) It may be proper to observe, that the dates of the plague which are
 here collected, are none of them inserted without some authority; though it
 seemed unnecessary to multiply the notes by so many distinct references.

Italy; from 1635 to 1637 it was in the Netherlands, and the latter year at Prague; in 1649 more than 200,000 persons are said to have perished by this disease in the southern provinces of Spain; 1649 and 1650 it prevailed at Marfeilles; 1650 it was also in Ireland; 1652 at Cracow; 1653 in Poland, and Prussia; 1654 at Copenhagen; 1655 at Amsterdam; and in the course of the same year, and the three following, it was in many places in the south of Europe; 1660 it was in Scotland; 1663 and 1664 at Amsterdam, and Ham-
 burgh; 1668 in Flanders; 1670 in Italy; 1679 at Vienna; 1680 at Leipzig; 1684 in Norway; 1685 at Leghorn. In 1622 the mortality by the plague at Amsterdam (at that time equal to about one-third of London) was 4,000; in 1623, 6,000; in 1624, 12,000; in 1625, 6,800; in 1626, 4,400; in 1627, 4,000; in 1628, 4,500. Felix Platerus, physician at Basil, in Switzerland, about 1580, gives an account of seven different pestilential fevers which afflicted that city in the space of seventy years. Thomas Bartholin mentions five that raged in Denmark in his time (1660). And Forestus relates that in his time (1570) the plague was frequent at Cologne and Paris; and refers the cause to the multitude of the inhabitants, and the nastiness of the streets. In the life of Erasmus we read “ob pestilentiam multis annis
 “ (Parisiis) perpetuam, singulos annos redeundum erat in
 “ patriam—tandem ubi totum annum sæviret pestis, coactus
 “ est Lovanium commigrare.” By another account Paris is said to have been infected eight times between the years 1480 and 1590: in 1607 two hospitals of reserve, St. Louis
 I and

and St. Anne, were erected on purpose to receive patients in times of the plague, or other great calamities. They were opened on account of the plague in 1619, 1631, 1638, 1662, and 1668, since which that disease has been unknown there. We are informed that about the same time Paris was paved, and the streets were widened, and the city began to be kept cleaner (*w*). To the same purpose it is said, in the *Histoire de la Société Royale de Médecine* (année 1786, p. 215) “ Il
 “ suffit de se rappeler, à ce sujet, ce grand nombre d’épide-
 “ mies dévastatrices et pestilentielles dont parlent nos histo-
 “ riens des derniers siècles, et qui, n’étant dues qu’à la mal-
 “ propreté des habitations mal aérées et des rues mal pavées,
 “ ont disparu quand le gouvernement a considéré que ces
 “ objets ne devoient pas échapper à ses regards, et méritoient
 “ une part à sa sollicitude.” In another place we read that the city of Thoulouse “ *morbis malignis sæpe vexabatur : sed*
 “ *tandem (A. D. 1757) dilatatis urbis plateis et compitis,*
 “ *purgatis quotannis stercorebus, liberoque aëri transitu con-*
 “ *cesso, a contagio libera evasit urbs* (*x*).” Of the condition of these two cities formerly, we may form some judgment by the following quotation from Diemerbroeck : “ *Fætidissi-*
 “ *mam platearum, cloacarum, et sterquiliniorum illuviem,*
 “ *ad multorum morborum, et imprimis malignarum febrium*
 “ *inductionem, ac pestiferi contagii propagationem, pluri-*
 “ *imum facere, docet experientia : sicut de Parisiorum urbe*
 “ *testatur*

(*w*) Rapport des Commissaires chargés par l’Académie de l’examen du projet d’un nouvel Hôtel-Dieu. 1786.

(*x*) Linnæi *Amœnitates*, Vol. IV.

“ testatur Palmarius, et Quercetanus de urbe Tholosana.”
Likewise of Marfeilles, at the time of the last plague, we are told, “ la ville de Marseille est fort peuplée, & fort resserree ;
“ les maisons y sont fort petites, &c. &c. (y).

INDEED most towns of any antiquity retain some traces of the same kind. “ The most ancient part of Madrid is nearest
“ to the river Manzanares, with narrow and contracted
“ streets, crooked lanes, and blind allies, like those still
“ visible in London, but more especially in Paris, where no
“ extensive conflagration hath consumed the rude monuments
“ of art erected by the remote progenitors who inhabited the
“ infant city (y*).” Some cities of Europe, which from natural or political causes have been backward in adopting the improvements of modern times, yet continue to exhibit a more lively picture of former manners. “ Till within the
“ last two years Cracow was not wholly paved ; and no-
“ thing can be so execrable as the present paving, which
“ scarcely deserves the name. There is not a single lamp
“ in the place. No precautions are used to cleanse the streets ;
“ which of course become infectious in summer, and almost
“ impassable in winter (aa).”

It cannot be supposed that this disease has worn itself out, as seems to have been the case with some others. For it
continues

(y) *Traité de la Peste.*

(y*) *Townsend's Spain.*

(aa) *Wraxall's Memoirs of the Courts of Berlin, Dresden, Warsaw, and Vienna, in the years 1777, 1778, and 1779.*

continues still in Turkey at least as frequent as at any former period; and even in the eighteenth century has been severely felt in Poland, Hungary, and Prussia, between 1702 and 1709; in Germany, Livonia, and Sweden, 1710; in Holland, 1711; at Vienna, 1712, 1713, 1714; at Hamburgh also, 1714; in the South of France, 1720; in Sicily, 1743; in Hungary, 1756; in Denmark, 1764; in Russia, 1771; and perhaps at Cadiz, 1800*.

It is observable, that at it's first breaking out, the disease has never been known to be the plague. It has, moreover, very generally been preceded by a severe putrid fever. This at least we know to have been the case at Nimeguen (z) in 1635, in London (a) 1665, at Marseilles (b) 1720, in Holstein (c) 1764, at Moscow (d) 1771. "Les medecins de
" Livourne consultés sur la nature de la maladie qui desolait
" l'équipage

* I know not how far some epidemical fevers of America deserve to be ranked under this head. Such have been described in Philadelphia 1699, 1741, 1747, 1762; in Virginia 1737, 1741, and 1778; four different times at Charlestown in South Carolina, viz. 1732, 1739, 1745, 1748; in New York 1791; in Philadelphia 1793; in Baltimore 1794; at Norfolk in Virginia 1795; in New York 1795, 1796, and 1798; and the latter year likewise very severely in Philadelphia; and again in Baltimore 1800. The mortality, in proportion to the number of inhabitants, appears in some instances to have equalled what the severest plagues have occasioned in Europe; and there is reason to believe the same want of attention to cleanliness, and pure air, may have been a principal cause of both diseases. See *A short Account of the Plague in Philadelphia*, by M. Carey, 1794. Also *Weld's Travels in America*.

(z) Diemerbroeck.

(a) Sydenham.

(b) *Traité de la Peste*.

(c) Waldschmidt.

(d) Mertens.

“ l’équipage du vaisseau auquel on attribua la naissance de la
 “ peste de Marseille, le regarderent unanimement comme une
 “ simple fièvre maligne (*e*). Of this preceding fever at Mar-
 seilles it is said, “ on observa dans le cours de ces fièvres, des
 “ bubons, des charbons, des parotides : des morts subites
 “ avoient déjà annoncé quelque changement singulier dans les
 “ corps, ou dans les saisons.” Waldschmidt, who had before
 observed, “ solent plerumque pestis contagium præcedere
 “ morbi alii, febres mali moris, et pestilenciales,” tells us,
 these diseases then deserve the name of plague, “ quando
 “ plures communi aura et mutuo commercio fruentes simul
 “ ægrotant, & plerique moriuntur : quod si accedant summa
 “ virium prostratio, bubones, carbunculi, vibices, petechiæ,
 “ tunc demum certi esse possumus de luis præsentia.” Die-
 merbroeck, among the signs which frequently precede the
 plague, enumerates “ morbi epidemii mali moris, dysenterici
 “ valde malignæ et contagiosæ, et imprimis febres putridæ
 “ malignissimæ, et purpuratæ, plurimisque lethales.” He
 moreover mentions particularly the gradual progress of these
 fevers into the true plague; “ prædicta febris pestilens, in-
 “ dies majora incrementa sumens, magis magisque in pejus
 “ mutabatur, donec tandem in apertissimam pestem transfret.”
 In like manner Morton, speaking of the poison that pro-
 duced the remittent fever, which he describes to have been
 prevalent in London for some years previous to 1665, says,
 “ Venenum sese recolligens, et mirum in modum auctum,
 “ hanc *συνεχῆ* in pestem funestissimam et dirissimam inopi-
 “ nato

(*e*) Preface to Mem. de la Soc. Roy. de Medicine.

“ nato mutavit.” And as the plague originally blazes forth from the embers of malignant diseases ; so at it’s termination it seems again to subside into them. “ Febres quæ anno post
 “ graviolem pestem uno aut altero passim grassantur, pesti-
 “ lentes esse solent ; et licet aliquibus veræ pestis notis def-
 “ titutæ, tamen ejusdem naturam ac indolem quam pluri-
 “ mum referunt, nec non consimilem medendi rationem sibi
 “ vindicant (f).” Sir John Pringle has likewise related, upon the authority of Dr. Mackenzie, who resided thirty years at Constantinople, that the annual pestilential fever of that place, which very much resembles that of our jails and crowded hospitals, is only called the plague when attended with buboes and carbuncles (g). In Syria also in the winter, and early in the spring, the characteristic eruptions are often wanting (h). At Moscow, a putrid fever had been epidemic for three years preceding the plague ; but as soon as the plague broke out, the fever ceased (i) : which is agreeable to the observations made at all times upon this disease.

It is from considerations like these, and from the similarity of the circumstances under which both diseases are found to prevail, that the plague has been thought to be nothing more than a high degree of putrid fever. Sydenham himself, speaking of the “ febris maligna ” which ushered in the plague of 1665, says, “ Cum ipsissima peste specie convenit, “ nec ab ea nisi ob gradum remissiorem discriminatur.” In the

(f) Sydenham.

(g) Army Diseases.

(h) Russel on the Plague.

(i) Mertens.

the same manner Rothman, in his account of the plague at Stockholm in 1710, observes, "*Febris ardentis (i. e. malignæ)*" "*naturam et proprietates rite qui noverit, huic et ipsa pestis,*" "*utpote gradu tantum ab hac differens, ignota non erit.*" And it is worthy of notice, how, according to the bills of mortality, the article of fever in general, but especially the spotted fever, always increased and decreased along with the plague. Of the latter there never died more than four in a week before the plague began; but afterwards the number frequently exceeded an hundred: nor was this by any means peculiar to London. Diemerbroeck relates the same of the plague in the Netherlands; and Gockelius is quoted by Dr. Browne as observing, that some soldiers, returning from Hungary in 1665, spread the infection of the plague about Ulm and Augsbourg, where he then lived, "and besides" "the plague, they brought along with them the Hungarian" "and other malignant fevers, which diffused themselves" "around the neighbourhood, whereof many died." And more particularly Beerwinckel, who was a physician at Hamburg during the plague in the year 1714, "*Sæpissime in cura*" "*pestis observavimus febres petechiales in pestem, atque*" "*hanc in illas tandem degenerasse; & si bubones retrocesse-*" "*rint, febrem petechialem fere ordinarie ortam fuisse.*" Hinc "*colligo, materiam bubonum et harum petechiarum, si non*" "*unam eandemque, parum tamen differentem fuisse.*" There is reason therefore to suspect either that this fever must have been the same with the true plague, or that the plague often passed under the name of malignant fever.

M. Desgenettes,

M. Desgenettes, the principal physician who attended Bonaparte's army in the late expedition to Egypt, says of the plague, " Qu'il n'a pu, malgré les renseignements nombreux " qu'il a cherchés, en obtenir une histoire satisfaisante; il " s'est aussi apperçu que l'on confond généralement dans le " pays toutes les fièvres pestilentiellles, qui sont tres variées, " et forment un genre, avec la peste proprement dite, " qui est une espece bien circonscrite (j)." The difference between them seems to consist in this; that the one is more infectious, is generally attended with buboes and carbuncles, is quicker in it's progress, and is more frequently fatal. But it must be observed, that this distinction is applicable only to the general course of each disease, not to particular cases; for there stand recorded instances of other fevers which have seemed even in these respects to fall little short of the true plague. Diemerbroeck confesses there is no pathognomonic sign of the plague; for that buboes and plague sores, which have by some been considered as such, are sometimes met with in other diseases, and are at other times wanting in this. Accordingly his description of the " signa " & symptomata pestem comitantia," is agreeable to what we are yet well acquainted with in the jail fever. Beerwinckel describes the appearance of the plague at Hamburgh in 1714 in the same manner; yet that this disease was the true plague, is very evident from the description he afterwards gives of the buboes, and carbuncles, and other tokens. Rothman, in his history of the plague at Stockholm in 1710, again

(j) Mem. sur l'Egypte.

again confirms the same account, and concludes “*dari autem*
 “*revera pestem sine bubone, carbunculo, macula, &c. non*
 “*est quod quis dubitet.*” In Joseph Browne’s Treatise of the
 plague are likewise enumerated “the special signs of persons
 “infected with the plague according to Ludovicus Gardinius
 “and Eberhardus Gockelius ;” which contain nothing more
 than is common to all putrid fevers : there is even no men-
 tion made of buboes or carbuncles, till you come to the suc-
 ceeding chapter upon “the signs after death.” Of the great
 plague in London it was said, “the practitioners in physic
 “stand amazed to meet with so many various symptoms
 “which they find among their patients ; one week the ge-
 “neral distempers are blotches and boils ; the next week as
 “clean skinned as may be ; but death spares neither : one
 “week full of spots and tokens, and perhaps the succeeding
 “bill none at all (*k*).”

IN the directions published by the College of Physicians
 respecting the plague of 1665, the following description is
 given of the different eruptions, which used to distinguish the
 disease at that time :

“ Directions for the Searchers.

“ 1. THEY are to take notice whether there be any
 “swellings, risings, or botch, under the ear, about the neck
 “on either side, or under the armpits of either side, or the
 “groins ;

(*k*) Extract of a Letter from John Tillison, Sept. 14, 1665, to Dr. Sancroft ;
 preserved in the British Museum, Vol. 3785.

“ groins ; and of it’s hardness, and whether broken, or un-
 “ broken.

“ 2. WHETHER there be any blains, which may arise in
 “ any part of the body in the form of a blister, much bigger
 “ than the small pox, of a straw colour, or livid colour,
 “ which latter is the worse : either of them hath a reddish
 “ circuit something swollen round about it, which circuit
 “ remains after the blister is broken, encompassing the
 “ fore.

“ 3. WHETHER there be any carbuncle, which is some-
 “ thing like the blain, but more fiery and corrosive, easily
 “ eating deep into the flesh, and sometimes having a black
 “ crust upon it, but always encompassed about with a fiery
 “ red, or livid, flat and hard tumour, about a finger breadth
 “ more or less : this and the blain may appear in any part of
 “ the body.

“ 4. WHETHER there be any tokens, which are spots
 “ arising upon the skin, chiefly about the breast and back,
 “ but sometimes also in other parts : their colour is some-
 “ thing various, sometimes more reddish, sometimes inclining
 “ a little toward a faint blue ; and sometimes brownish
 “ mixed with blue ; the red ones have often a purple circle
 “ about them, the brownish a reddish.”

ON the other hand, Morton, who must have been well
 acquainted with both diseases, says of the common autumnal
 fevers, “ nonnunquam in primo insultu malignæ extiterunt,
 “ parotidibus, bubonibus, anthracibus, cæterisque maligni-

“ tatis indiciis notatæ.” He afterwards distinguishes these from the plague, by their not being so readily propagated by contagion. Dr. Mead observed of those who with difficulty escaped from some of the worst sorts of the small pox, “ hi
 “ omnes, quod memorabile est, sub finem morbi grave aliquid
 “ passi sunt; nam aut furunculis frequentibus in corpore
 “ obortis, aut tumoribus in glandulis sub auribus et axillis
 “ qui ægre suppurarent, excruciabantur;” and Dr. Freind, speaking of a bad fever which spread on board the fleet in the year 1705, says, “ in perpaucis parotides, aut abscessus circa iniquen orti morbum solverunt (*kk*).” Sir John Pringle likewise takes notice, that when the course of the jail fever is long, it sometimes terminates in suppurations of the parotid. “ I remember,” says he, “ one instance of a
 “ swelling of this kind on both sides, without any previous
 “ indisposition, when the person not suspecting the cause, and
 “ applying discutient cataplasms, was, upon the tumour’s subsiding, seized with the hospital fever, which was then frequent.” Dr. Lind also observes, “ We have, though but
 “ rarely, seen in very violent infections a swelling of the parotid glands, which for the most part was unattended with
 “ a fever; notwithstanding that, such as were in this
 “ manner seized, commonly died.” He adds, “ I had reason
 “ to see at Winchester many of the French prisoners, who
 “ were infected with a fever of a very malignant kind, attended with buboes in the groin and armpits, and other
 “ pestilential symptoms.” Dr. Donald Monro likewise met
 with

with many examples of parotids towards the decline of the malignant fever, and in three patients saw critical swellings of the groin (1). But a more striking example than any of these is related by Sir John Pringle, which indeed shews that the jail fever under circumstances favourable to its progress, may vie with the plague itself in contagion and malignity. “ The sick from the army hospitals being ordered “ to remove from Germany to Flanders, they were embarked in bilanders, to be carried to Ghent. During the “ voyage the fever having acquired new force by the confinement of the air, by the mortifications, and other putrid “ effluvia, it became so virulent, that above half the number “ died in the boats, and many of the remainder soon after “ their arrival. Its resemblance to the plague was further “ evinced by this memorable incident: a parcel of old tents “ being sent on board the same bilanders with the men, “ were used by them for bedding: these tents, in order to “ be refitted, were put into the hands of a tradesman at “ Ghent, who having employed twenty-three Flemish journeymen about the work, lost seventeen of them by the distemper, though they had no other communication with “ the infected.”

In many respects then there must be allowed to subsist a strong resemblance between these diseases. The authors of the *Traité de la Peste* declare, “ Nous pouvons même avancer “ hardiment, qu’on y reconnaitra facilement le caractère des “ fièvres

(1) Monro's Military Hospital.

“ fievres malignes les plus ordinaires ; du moins leur rapi-
 “ dité & quelques accidens feront les feules chofes qui diffin-
 “ gueront ces fievres de la peste.” Their affinity may per-
 haps be compared to that which a common ague bears to the
 remittent fever. And if an accumulation of the caufes of
 putrid fevers cannot produce a plague ; at leaft it feems ca-
 pable of producing a predifpofition to it, where the leaven of
 the plague, however introduced, prefently exalts the reign-
 ing fever into it’s own nature ; fuperadding it’s proper cha-
 racteriftic fymptoms to fuch as are common to both difeafes.
 Conformably to this notion, Diemerbroeck takes notice, “ Si
 “ quifquam alio quodam morbo corriperetur, intra viginti
 “ quatuor horas peftis illi morbo adjungebatur, ita ut toto
 “ anno vix ullus morbus peſte incommitatus viſus fuerit.” We
 have affurances that fome complaints have in this manner
 been engrafted as it were upon the ſtock of previous difeafes.
 “ In autumn 1757, ſeveral foldiers were brought into the
 “ hoſpital at Portſmouth with a diſorder compounded of the
 “ autumnal and jail fever : for when thoſe men, upon being
 “ ſeized with the common fever of the ſeaſon, were con-
 “ fined to the holds of the crowded tranſports, their diſtemper
 “ aſſumed that form (*m*).” So upon admitting into an hoſ-
 pital one perſon with a flux, ſeveral other patients in the
 ſame ward have had this ſymptom added to their other
 complaints (*n*). And Dr. Blane has obſerved generally, that,
 ſuppoſing a ſhip’s company be prediſpoſed to acute diſtem-
 pers, and one man or more ill of a dyſentery be brought on
 board,

(*m*) Pringle’s Army Diſeaſes.

(*n*) Lind on Fever and Infection.

board, this will become the prevailing disease (*o*). Sydenham's works abound with instances of the same kind : as, where he is speaking of an epidemical cough, " Veruntamen
 " qualiscunque fuerit febris stationaria, quæ illum annum
 " funestat, atque per id temporis dominatur, nova hæc febris
 " statim in ejus nomen ac familiam adoptatur, ejusdem
 " ubique genio obsequens, licet symptomata quædam adhuc
 " retineat, a tussi, quam habuit parentem, pendentia."

WE have shewn then, that the streets of London were formerly very close, and dirty, and the houses within very slovenly : we have shewn also in a former part of this essay (*p*), that the inhabitants lived crowded together, probably not less than twice as many in the same space they occupy at present. By pointing out the diseases which prevailed in those times, we have shewn what influence this state of things appears to have had upon the health of the people ; and how the effect, and the cause, have declined together : we have shewn from the testimony of eye-witnesses how nearly the plague is allied to these other diseases ; how common it was at the same time with them ; and how it has also disappeared with them : we have shewn moreover, that the presence of infectious matter is not alone sufficient to make the disease epidemical ; but that some concurrent state of the air, and of the human body, is likewise necessary. I flatter myself therefore we shall be justified in drawing this conclusion : that our long exemption from the plague, is not
 so

(*o*) Diseases of Seamen.

(*p*) Page 66.

so much to be attributed to any accidental absence of its exciting causes, as to our own change of manners, our love of cleanliness, and ventilation, which have produced amongst us, I do not say an incapability, but a great unaptness, any longer to receive it.

FINIS.

Causes of increased health

Reasons why cures & others

1668 Paris ^{street} ^{widened}
Mansueta
Thibouville

unde p.
moli: pum. cur. & bee? act

late anno res ultus m.
p. p. curatibus







