ON THE MORTALITY OF THE GOVERNMENT CONVICT PRISONS OF ENGLAND.

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THE accompanying tables are designed for the purpose of giving a general idea of the mortality-rate of male and female prisoners under sentence of penal servitude. The facts thereon recorded are gathered from materials which, in past years, have been collected yearly for future publication. Details, therefore, have been avoided; but it is hoped that the evidence conveyed in the following forms will prove that the

"unworked mine" referred to in the BRITISH MEDICAL JOURNAL, on the 24th December, has not been entirely neglected.

The late Sir Joshua Jebb broke up "the hulks" towards the end of the year 1856. Since then, all prisoners under sentence of penal servitude have been confined in prisons. In the Public Works Prisons the men work in the open air, but take their meals and sleep in separate cells.

The first table gives the yearly mortality of the prisons since the abolition of "the hulks," together with the number of deaths from each of the diseases mentioned. The number of insane cases yearly per 1,000 prisoners is also given. It ought to be stated that, of necessity, typhus and typhoid fevers are included in the column for "fever." Acute and chronic bronchitis and cancer are returned in the same way. The yearly reports from which I obtain my information, make no dis-

Table I.

Year.	Class of prisoners.	Daily average number of prisoners.	Number of Deaths.							Deaths per 1000 Prisoners.*				Percentage of deaths from phthisis on the total number of deaths.	* Insane removed to lunatic asylums, per 1000 prisoners.
			Total number: all causes.	Suicides.	Phthisis.	Fever: Typhus and typhoid.	Bronchitis, acute and chronic.	Cancer.	Other diseases.	All causes.	From phthisis.	From fever.	From acute and chronic bronchitis.		
1857	Males.	6219.1	63	2	28	Nil.	3	2	28	10.1	4.5	Nil.	0.48	44.4	3.0
	Females.	923.3	14	—	8	"	1	—	5	15.1	8.6	"	1.08	57.1	6.5
1858	Males.	6343.4	104	—	51	"	1	—	52	16.3	8	"	0.15	49.0	2.2
	Females.	1043.4	18	—	11	"	1	—	6	17.2	10.5	"	0.9	61.1	3.8
1859	Males.	6069.3	69	1	26	2	4	1	35	11.3	4.2	0.32	0.65	37.6	5.6
	Females.	1188.6	11	—	6	Nil.	—	—	5	9.2	5	Nil.	Nil.	54.5	5.8
1860	Males.	6050.2	77	1	29	"	10	—	37	12.7	4.7	"	1.65	37.6	6.1
	Females.	1269.3	19	1	4	1	2	1	10	14.9	3.1	0.75	1.5	21.0	1.5
1861	Males.	5783.7	65	—	19	Nil.	7	2	37	11.2	3.2	Nil.	1.2	29.2	2.9
	Females.	1204.6	11	—	7	"	—	—	4	9.1	5.8	"	Nil.	63.6	1.6
1862	Males.	5775.2	53	—	19	"	2	2	30	9.1	3.2	"	0.3	35.8	3.5
	Females.	1211.2	8	—	3	"	—	—	5	6.6	2.4	"	Nil.	37.5	2.4
1863	Males.	5999.2	90	1	46	"	3	1	39	15	7.6	"	0.5	51.1	9.1
	Females.	1303.1	21	—	9	"	—	2	10	16.1	6.9	"	Nil.	42.8	1.5
1864	Males.	6153.5	89	4	33	1	5	5	41	14.4	5.3	0.16	0.80	37	8
	Females.	1274.2	27	—	15	1	—	—	11	21.1	11.7	0.78	Nil.	55.5	3.9
1865	Males.	5983	110	5	50	6	4	—	45	18.3	8.3	1	0.6	45.4	2.2
	Females.	1248.3	15	—	8	—	1	1	5	12	6.2	Nil.	0.8	53.3	3.2
1866	Males.	5941.3	103	2	41	Nil.	6	2	52	17.3	6.9	"	1.0	39.8	3.5
	Females.	1017	18	—	8	"	1	—	9	17.6	7.8	"	0.9	44.4	4.9
1867	Males.	6095.2	90	2	28	2	1	3	54	14.7	4.5	0.32	0.16	31.1	5.2
	Females.	1007.7	12	—	5	Nil.	1	—	6	11.9	4.9	Nil.	0.9	41.1	1.9
1868	Males.	6592	79	3	28	1	3	1	43	11.9	4.2	0.15	0.4	35.4	3.3
	Females.	1104	12	—	2	Nil.	—	3	7	10.8	1.8	Nil.	Nil.	16.6	7.2
1869	Males.	7219.23	99	—	47	"	4	1	47	14.1	6.7	"	0.5	47.4	2.1
	Females.	1184.7	15	—	6	"	1	—	8	12.6	5	"	0.8	40	2.5
Mean of the thirteen years	Males.	6133.86	83.92	1.61	34.23	0.92	4.07	1.53	13.64	13.64	5.52	0.15	0.69	40.1	4.36
	Females.	1152.26	15.46	0.07	7.07	0.15	0.61	0.53	13.4	13.4	6.13	0.12	0.53	45.3	3.6

* These calculations are made on the daily average number of prisoners.

inction of the varieties of these diseases, and I am therefore unable to do so.

The second table gives the mortality for the five years previous to the breaking up of the hulks. During that period the daily averages were: Men on board the hulks, 1,292.6; ditto in convict prisons, 4, 648.3.

Table II.

Five years, 1852-6.	Daily average number of prisoners (mean).	Average number of deaths yearly.	Deaths per 1000 yearly, calculated on the daily average number.
	5940.9	109.8	18.48

By comparing the mean mortality of the first and second tables, we find that since the hulks were abolished, there has been an annual decrease in the death-rate of 4.84 per 1,000.

The third table gives the fatal diseases and the mortality per 1,000 of boys under sentence of transportation and penal servitude in Parkhurst

Prison, during the eleven years 1853-63. This establishment was closed for juveniles at the end of 1863. The boys, on reception, were under 15 years of age.

Table III.

Mean daily average number.	Number of deaths.	Deaths per 1000 (mean) yearly.	Number of Deaths from each disease.										Percentage of deaths from phthisis on the total number of deaths.	Insanity.
			Phthisis.	Caries of spine.	Albuminuria.	Dropsy.	Pericarditis.	Scrofula.	Leucocythemia.	Fevers : typhus.	Accident.			
386.54	19	4.46	8	1	2	2	2	1	1	1	1	42.1	1	

In the fourth table, I have endeavoured to show the amount of disease which existed at the time of conviction, or rather, on recep-

tion into the Government prisons, and the number removed to invalid prisons during each year. I can only include in this table the seven years 1862-8.

Table IV.

Year.	Daily average number of male prisoners.	Total number of invalids removed to invalid prisons.	Suffering from phthisis.			From other diseases, etc.		
			Existing on reception at the prison whence removed.	Not existing on reception.	Total number removed.	Existing on reception at the prison whence removed.	Not existing on reception.	Total number removed.
1862	5775.2	454	52	28	80	210	77	365
1863	5999.2	415	49	42	96	233	57	319
1864	6153.5	444	65	24	90	215	118	354
1865	5983	342	20	27	51	138	132	291
1866	5941.3	248	19	15	49	34	78	153
1867	6095.2	443	40	10	50	266	127	393
1868	6592	439	40	13	53	351	35	386
Mean of seven yrs.	6077.05	397.8	40.7	22.7	68.2	206.7	89.1	323

A great deal of time and labour has been spent in endeavouring to distinguish diseases which existed previously to conviction from those which began when under sentence. I am, however, obliged to give only approximate returns on these points. The removals to invalid prisons are to a certain extent regulated by the accommodation of those prisons; and consequently, there are feeble and invalid prisoners in almost all the prisons. During the long sentences of penal servitude, prisoners are also of necessity frequently transferred to the different convict prisons, and the medical officer of each prison has been obliged hitherto to record in his annual returns the condition of the prisoners on the date of reception at the prison of which he is in charge, without any reference to the state of health on first transfer to the Government prisons. Hence has arisen the difficulty of distinguishing diseases which originated during the sentence from those which began prior to the sentence. The totals of invalids removed, given in Table IV, are correct; but the columns "existing on reception, and not existing, etc.," represent those men only whose condition of health was recorded when received from the county and borough gaols.

The tables of the annual returns have recently been so arranged as to record the health of every prisoner on first reception into the convict prisons. I am not, however, sanguine of any practical benefit from this change. I have long been convinced, and I have repeatedly stated the conviction, that an annual medical report is wanted which shall embrace the sanitary condition of the seven thousand convicts in the aggregate; and which ought to distinguish all diseases, fatal or otherwise, arising in the prisons during the year, from diseases which are not consequent on, and which do not originate during, imprisonment. Detached medical reports cannot give a valuable annual record of the diseases of these prisoners; nor can they furnish that aid to the general management of the prisons which sanitary science ought to give.

Before concluding this paper, I am anxious to state a few facts in reference to the deaths in the prisons from phthisis pulmonalis and fevers. The large number of deaths from phthisis given on the tables will be sure to arrest attention. I have purposely given prominence to the columns set apart for the records of this disease. These deaths in prison occur mostly to habitual criminals—men and women who have lived in crime from childhood. During 1869, I obtained permission to examine into the previous history of the men and women who died of consumption in the convict prisons during the seven years 1862-8. There were 295 deaths from this disease during that period—men, 245; women, 50. Seventy-two of these prisoners had no record of previous convictions; the remaining 223 had received 1,211 sentences.

The deaths from consumption in the convict prisons have been, I believe, less than half the number per 1,000 yearly, during the last thirteen years, than they were twenty years ago. During the time I was in medical charge of Milbank Prison with the late Dr. Baly, the mean mortality in that prison from consumption for the three years 1847-9, was 18.6 per 1,000 men.

With reference to fever: the condition of the prisons as regards deaths from fever is very marked when compared with former years. During the period above named (the three years 1847-9), the deaths of men from fever yearly in Milbank were 9.9 per 1,000; and for the four previous years—1843-6—4.37 per 1,000; or, respectively, 99.0 and 43.70 in every 10,000; whereas during the last thirteen years (Milbank included), the deaths were in the proportion of—men, 1.50; women, 1.20, in every 10,000.

THE REGISTRATION OF SICKNESS.

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THE Royal Sanitary Commission has just pronounced in favour of a national registration of sickness—partial and incomplete, it is true, but at any rate the principle is affirmed; and it will now be for sanitary reformers to show the extent to which such a record can be carried without becoming a burthen to the rates or a serious tax upon the Exchequer.

The importance of a registration of sickness is acknowledged by all who feel any interest in the public health, or in the etiology, prevention, and treatment, of disease; but very much remains to be discussed and settled before the full bearings of such a measure, especially on medical practice, are realised or well understood. It is hoped that the following paper on the historical aspects of the question may be a help to those who wish to give it fuller consideration.

The lineage of an idea is perhaps as difficult to trace as the descent of a physical defect or a family feature. Links in the chain will always be wanting. Still the attempt may be made to note the salient points at which a prevailing thought, sometimes at long intervals, comes to the surface and appears in the literature of the day. For more than a century the desirability of a registration of sickness has been constantly present to men's minds in England, and numerous schemes have been proposed with a view to carrying it into practice. It formed a prominent feature in an "Essay towards the improvement of physick, in twelve proposals, by which the lives of many thousands of rich as well as the poor may be saved yearly. Humbly dedicated to the Parliament of Great Britain by John Bellers. London: 1714." A few years later, in 1732, Dr. Clifton, physician to the Prince of Wales, in his *State of Physic*, urges that "three or four persons of proper qualifications should be employed in the hospitals to set down the cases of the patients there from day to day, candidly and judiciously, without any regard to private opinions or public systems, and at the year's end publish these facts just as they are" (p. 171).

The reports of Willan in 1801, and of Bateman in 1819, on the diseases of London as affected by the changes of weather, were the types and forerunners of a long line of papers in the present century, which perhaps owe their immediate origin to the Association of which, in its more developed form, this JOURNAL is the organ and mouthpiece.

At the inaugural meeting of the Provincial Medical and Surgical Association in 1832, Sir Charles (then Dr.) Hastings, the founder of the Society, mentioned "increased knowledge of the medical topography of England, through statistical, meteorological, geological, and botanical inquiries," as one of the chief objects to be aimed at. "We are left," he says, "with little more than the bills of mortality from which we can extract any information on the state of the public health of a vast proportion of our most populous cities and countries"; and he urges "the investigation of the modifications of endemic and epidemic diseases in different situations and at various periods, so as to trace, so far as the art will permit, their connections with the peculiarities and occupations of the people" (Address of Dr. C. Hastings, *Transactions of the Provincial Medical and Surgical Association*, 1833). The immediate result of these words may be traced in a series of papers on medical topography which have no rivals in our literature: that on the Hundred of Penrith, by John Forbes, M.D.; and that on Bristol, by Andrew Carrick, M.D., and John Addington Symonds, M.D., in the year 1834, may be quoted in illustration. Would that the race had not died out! Passing to the year 1836, the close and inevitable connection between medical relief to the poor and a practicable scheme for the registration of sickness, is, for the first time, alluded to in "Some observations on the present condition of medical relief for sick paupers, with recommendations for an altered and improved system, by Nathaniel Rumsey of Beaconsfield, Robert Ceely of Aylesbury, and H. W. Rumsey of Chesham" (*Transactions of the Provincial Medical and Surgical Association*, vol. v). It is here urged that a report of all cases of disease treated by Poor-law officers shall be compiled and published periodically by a medical board.

The year 1842 was memorable for Mr. Chadwick's Report to the Poor-law Board on the sanitary condition of the labouring populations of England and Wales—a report based upon Poor-law records as well as registers of cases in dispensaries, hospitals, and other public institutions—not, be it remarked, on the mortality or causes of death.

Mr. Baker, in his Report on Leeds in 1843, expresses his sense of the