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THE

# ANNUAL REPORT

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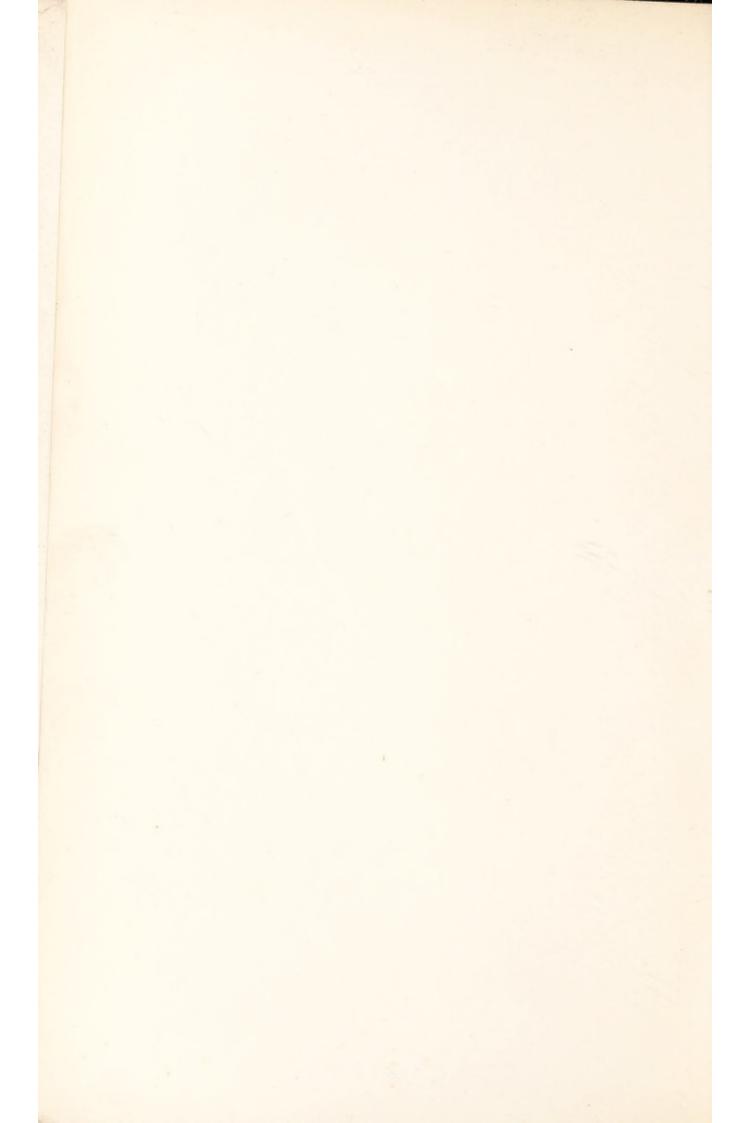
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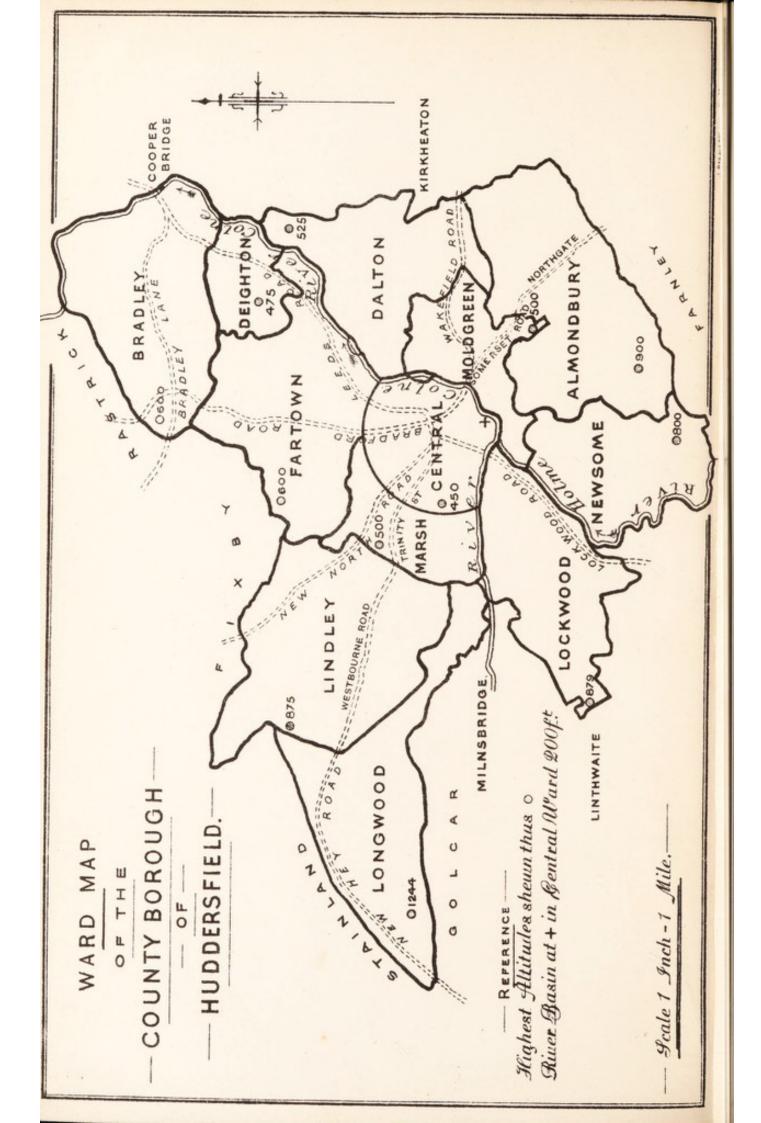


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THE

# ANNUAL REPORT

MADE TO THE

# URBAN SANITARY AUTHORITY

OF THE

# COUNTY BOROUGH OF HUDDERSFIELD,

FOR THE YEAR

1894,

BY

JAMES ROBERT KAYE,

M.B., D.P.H., CAMB., F.C.S.,

Medical Officer of Health to the Borough;

Medical Officer to the Birkby Fever Hospital;

Medical Officer to the Mill Hill Fever Hospital.

PRINTED BY ORDER OF THE HEALTH AND SANITARY COMMITTEES

HUDDERSFIELD:

GEORGE WHITEHEAD AND SONS, PRINTERS, NEW STREET.

# COMMITTEES.

## Sealtb.

JOHN JOSHUA BROOK, Esq., Mayor, and 20 Members Mr. Alderman W. H. Jessop, Chairman.

Mr. Councillor B. BROADBENT, Deputy-Chairman.

## Aldermen:

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G. Brook

J. L. Walker

#### Councillors .

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J. H. Aston

F. A. Barras

E. A. Beaumont

J. Hirst

J. A. Hopkinson

F. H. Johnson

S. Kendall

J. Marshall

F. Marsland

J. Moorhouse

G. Moxon

H. Roebuck

H. Pullon

J. L. Sykes

## Duties and Powers of the Health Committee.

To execute and perform in the name and on behalf of the Council, but subject to the Standing Orders of the Council and to confirmation by the Council, all the powers and duties of the Corporation in relation to the following :-

Main Intercepting Sewers and Sewage Disposal Works.

Agreements with other Authorities as to disposal of Sewage.

Cleansing of Sewers in Central District.

Storm Overflow Sewers in the Central District.

Infectious and Epidemic Diseases.

Hospitals for Infectious Diseases.

Common Lodging Houses.

Cleansing of Infected Houses.

Prevention of Pollution of Rivers and Streams.

Health Statistics and Sickness and Mortality Returns.

Superintendence of the Department of the Medical Officer of Health (in conjunction with the Sanitary Committee).

Property of Corporation at Deighton, adjoining Sewage Disposal Works.

## Sanitary.

JOHN JOSHUA BROOK, Esq., Mayor, and 20 Members.

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T. Mellor C. Moon J. Moorhouse O. Oxley

E. Woodhead

E. B. Woodhead

## Duties and Powers of the Sanitary Committee.

To execute and perform in the name and on behalf of the Council, but subject to the Standing Orders of the Council and to confirmation by the Council, all the powers and duties of the Corporation in relation to the following :-

Scavenging of Streets.

Removal and disposal of Nightsoil and Refuse.

Public Urinals and Conveniences.

Nuisances.

Offensive Trades.

Control of Drains, Privies, Ashpits, and Cesspools-

Buildings and rooms unfit for habitation.

Polluted Wells.

Adulteration of Food and Drugs.

Unwholesome Food.

Cowsheds, Dairies and Milkshops.

Canal Boats.

Factories and Workshops.

Superintendence of the Department of the Medical Officer of Health (in conjunction with the Health Committee).

## COUNTY BOROUGH OF HUDDERSFIELD.

# Medical Officer of Health's Department,

1894.

Medical Officer of Health:

JAMES ROBT. KAYE, M.B., C.M., D.P.H.

District Inspectors of Nuisances:

WM. M. DRAKE.

THOMAS WHITELEY.

BEN HAIGH.

Removal Officer:

MILTON TURNER.

Statistical Clerk:

TOM V. HAIGH.

Scavenging Superintendent:

JAMES JACKSON,

ASSISTED BY THREE FOREMEN.

Hospital Medical Superintendent:

JAMES R. KAYE, M.O.H.

Matron:

MRS. CRUMP.

Meteorological Records by MR. JOE FIRTH.

# STATISTICAL SUMMARY.

Situation-Latitude, 53° 39′ 7″ N.; Longitude, 1° 47′ 30″ W.

Elevation of the area built over—Varies from 200 feet to 600 feet above ordinance data.

Area of the Borough—11,852 acres; of the Central District, 734 acres.

Density of Population—For the Borough, 8:3 persons per acre; for the Central District, 36.

No. of Inhabited Houses-At Census (April) 1891, 20,930.

Population—(1891) 95,422; Estimated at the middle of 1894, 98,511.

Birth Rate-20:25 per 1,000.

Death Rates-Recorded, 15.92 per 1,000.

- ,, Zymotic, seven commoner Infectious Diseases, 1.52.
- ,, Infantile Mortality, 160 per 1,000 births.
- ,, Diseases of the Respiratory Organs, 4.65.

Mean Annual Temperature -47.6 degrees.

Total Rainfall—39.6 inches.

## GENTLEMEN,

Herewith I present my Annual Report for the year 1894, which contains information with regard to the Vital Statistics of the Borough: a comparison of the various Wards, and with the large towns of the country. It also refers to the incidence of disease, and the means for its prevention. In the latter part of the report, an account is given of the work done by the Department. We have kept in view the extension of sanitary work on broad and rational lines, and have not confined ourselves exclusively to the effects of improved drainage. Preventable diseases have not so much their origin in pipes or drains, or even in flaring sanitary evils, as in the home, the workshop, and in the customs and habits of the industrial classes. We have attempted to improve the social customs of some particular localities by frequent inspections and conversations with the people, but ignorance of the most elementary sanitary laws hampers our work at every turn. The extension of technical instruction to popular lectures on Hygiene would be appreciated by the people, and in addition, would be a valuable aid to sanitary administration.

I am pleased to report that, for the third year in succession, the death-rate has been the lowest recorded since the incorporation of the Borough. In 1892, the total death rate was 18:14; in 1893, 17:4, and in 1894, 15:92 per 1,000 of the population. These gratifying results are largely the reward of wise sanitary work, but corporate action is not limitless, and much may be ascribed to favorable atmospheric conditions. To obtain the fullest benefit of these conditions, our sanitation must be maintained and improved, and the individual ratepayer can do something towards this, particularly by utilizing the kitchen fire as a cremator of all

combustible matter, and thus reducing to a large extent the decomposable refuse found in ashpits.

There has been no serious epidemic of any kind. The question of the erection of a new Hospital for Infectious Diseases, which has now been driven from pillar to post during the last ten years, has been advanced a stage. Plans have been selected from the 145 designs sent in for competition, and the early settlement of the question by the erection of a building worthy of the town is, I hope, within measurable distance.

In conclusion, I have again to thank the Chairmen and Members of the Health and Sanitary Committees for their continued kindness and generous support, and the officers and staff for their willing and hearty co-operation.

I desire most gratefully to acknowledge the cordial assistance the Department has received from my professional colleagues throughout the Borough and neighbourhood.

I am, Gentlemen,

Yours faithfully,

JAMES R. KAYE.

Health Office, April, 1895.

# REPORT, 1894.

The attached sketch at the beginning of the Report will facilitate the study of the wards of the Borough. It exhibits the Wards into which the Borough is divided, and in each Ward the highest point of elevation is indicated by a round spot with the altitude in figures printed alongside. For the comparison of the altitudes, the bed of the River Colne might be taken, which at its entrance into the Borough from Linthwaite may be stated to be about 250 feet above sea level, whilst 1½ miles down stream in the Central District it is 200 feet, and 3½ miles further down at Cooper Bridge 172 feet. The highest point in the Borough will be found in the Longwood district, and the lowest at the Borough boundary, Cooper Bridge, so that it will be seen the contour of the Borough lends itself to arterial drainage. In the sketch is also exhibited the main highways intersecting the various Wards.

The area of the County Borough of Huddersfield is reckoned at 11,852 acres, which is made up thus:—

Township.	Area	(Statute A	cres.)	Population 1894.
Huddersfield		4055		 47264
Almondbury		2636		 15220
Dalton		1341		 8811
Lockwood		994		 12504
Lindley		1492		 8965
Longwood		1332		 5747

From these figures an idea can be obtained of the number of persons to each acre. The actual density of the population is important. According to these figures the mean density of the population in the Borough is 8.3 persons per acre, but this does not express correctly the actual condition of density, because the population is unevenly distributed as exhibited in the above Table,

so that in the six townships which form the Borough the density varies from 4.3 in Longwood, 5.8 in Almondbury, 6 in Lindley, and 6.6 in Dalton, to 11.6 in the Huddersfield township, and 12.6 in Lockwood, and if the Central Wards of the Huddersfield township are taken by themselves then their density per acre increases to 36.

The population of the County Borough of Huddersfield has been estimated by the Registrar General to be 98,511 to the middle of the year 1894, that is to say an increase of 959 persons on the population of the previous year. In 1891 the estimated population at the middle of the year was 95,656 so that the increase calculated officially since then has been 2,855 persons, while the natural increase amounted only to 1,563, leaving 1,292 to be accounted for by the excess of immigration over emigration. It is upon the official estimate of 98,511 that the birth-rates and death-rates at all ages are calculated.

## Health of Districts.

In the following tabular statement a comparison has been drawn of the mortalities from all causes; the seven commoner infective diseases; disorders of the respiratory organs; and fatality in those under one year of age in the various Wards of the Borough, and these death-rates have also been compared with corresponding death-rates of the previous decade divided into two five-year periods.

I propose to deal very briefly with these figures referring to each Ward, except in the case of Longwood into which I have entered somewhat in detail.

The total death-rate in all the Wards has participated in the general improvement, being most marked in the Central, Fartown, and Lindley. With regard to the seven infectious diseases a lessened death-rate is recorded, and this is also general throughout the districts. In considering the fatality from diseases of the Respiratory Organs it must not be forgotten that the year 1894 was specially favourable to a low death-rate, and hence the general

comparison as shewn in the table is very satisfactory, but if we glance along the figures of the two five-year periods only, they are not so gratifying.

In the Central, Fartown, Deighton, and Dalton districts the rates of 1888-1893 exceed these of 1884-1888, but taking the death-rate for the whole borough, the rate has been practically the same during both periods.

Less satisfactory are the results as regards infantile mortality during these two periods. An increase is noted in Marsh, Deighton, Dalton, and Almondbury, yet the rate shows an improvement of three per 1000 births on the former quinquennium.

The general impression to be obtained from the table is that considering the all-round improvement in the general death-rate, and zymotic death-rate, the stationary condition, or slight improvement in the mortality from diseases of the respiratory organs, and from infantile diseases is not satisfactory, and with the view of attempting something to reduce these rates, a special investigation has been made into each death, and the information obtained entered in our records.

It is apparent from a study of the table that no district presents an excessive mortality over the average of the Borough.

п				4.53	212	3.92 176	5.37 165
Dalton	8811		1.85			1.39	1.87
		16.63				17.69 1.39 6.92	17.10 1.87 5.37
dley					187	133	84
d Bra	9			2.97		4.98	3.10
on an	2366		1.27			1.37	1.10
Deighton and Bradley		14.84				15.86 1.37 4.98	15.04 1.10 3.10
					135	178	168
wn	00			3.16		5.71	9.20
Fartown	9833		1.12			1.22	1.37
		11.53				17.29 1.22 5.71	17:30 1:37 5:50
					165	161	152
sh	0			5.29		2.07 5.10	1.43 5.45
Marsh	8330		1.40			2.07	1.43
		16.30				16-75	16.64
					142	161	
ral	15			5.29		6.25	5.86
Central	26445		1.18			1.34	1.73
		14.27				16.68	19.57
1894	Population.	All causes per 1000 living	Seven Infectious Diseases per 1000	Consumption and Disease of Lungs per 1000	Mortality under one year of age per 1000 births	Same death rates in averages of five years—1889-1893 16.68 1.34 6.52 161	1884-1888 19.57 1.73 5.86 181

Almondbury	Lockwood	Lindley	Longwood	Whole Borough
	12504	8965	5747	98511
16.05		12:31	13.27	15.92
	1.85	0.26	1.22	1.52
5.53	29.2	3.83	2.21	3.78
168	170	-	150	160
17.74 1.45 5.75 172 18:08 1	1.85 5.78 153	15.26 1.21 4.62 1	143 16:38 1:59 5:36 177	19.23 1.71 6.25 163
1884-1888 18 69 1.86 6.00 155 19 51 2	2.00 6.00 184	15.78 2.11 5.59 184	84	20.13 1.95 6.24 166

The district of Longwood was annexed to the Borough in November, 1890. Topographically it has been likened to the snout of a pig, while the other portion of the head is represented by the remaining portion of the Borough, and this is apparent in the sketch map at the beginning of the report. The area of this district is 1334 acres peopled by a population estimated at 5745 persons in the middle of the year 1894, residing in 1233 houses. At the time of annexation Longwood was stated to be composed of a population of 5900, but in the year following when the census was taken it was found that the population had been over-estimated by nearly 500. Here is another instance of the every day regret that we have not accurate data to work with in the long interval between the official censuses. This error was probably the result of several causes, first a rapid and continuous fall in the birth-rate. In 1885 the birth-rate was 30 per 1000 while in 1890 it had fallen to 23.56 and in 1891 to 21 per 1000, that is to say a decline of 27 per cent. in the number of births during the interval of the 6 years. The second cause leading to the over-estimated population was the high death-rate in 1886 and 1887 which diminished the excess of births over deaths to 37 in the former and 25 in the latter year. The third cause might be ascribed to the excess of emigration over immigration. The district is rural in character, although the trade is principally manufacturing; a number of the inhabitants being occupied as mill workers in other districts.

The Township of Longwood may be stated to include three distinct hamlets, Longwood proper, Outlane, and Nettleton Hill. It is to the first of these I propose to confine my remarks in this report. This portion of the Borough comprises about 800 houses which stand on the escarpment on the northern side of the valley in a direction from North-west to South-east. Longwood proper is therefore fully exposed to the West and South-west winds, and these are the prevailing winds in this neighbourhood. To the North the township is sheltered to some extent by the rocks, known as Longwood Edge, which rise to a height of over 800 feet above sea level, while the average elevation of the village proper will be about 600 feet.

In the bottom of the valley runs the brook, or rather "the open sewer" for the districts upstream and outside the Borough, because only a small portion of the brook runs in the Longwood district.

The geology of the district varies. The sub-soil is generally of a light sandy nature, and not of much depth. In many places the under-lying stratum of sandstone appears on the surface and a large number of the houses stand upon the rocks. In the lower part of the district about Milnsbridge the sub-soil is clay, and even in the higher portion of Outlane which it is not intended to refer to in this report the sub-soil there is clay, causing the ground to be very damp, so much so that in a house to house inspection of 43 cellars no less than 20 were found to contain water after rain or the melting of snow, but in Longwood proper the physical conditions are favourable for natural drainage, and for artificial drainage if properly constructed, but where little thought has been given to drainage, either for sub-soil water or sewage, then there comes some qualifications to its suitability. The lowest houses receive around their foundations the polluted surface washings from higher premises rendering the cellars damp, and a large number of them either contain or have contained water wells.

The following figures in tabular form show several of the more important rates by which the health condition of the district may be judged. The figures at my disposal extend back to the year 1885, five years prior to the annexation of the district, and the rates have been calculated on a re-adjusted population to overcome the excess already noted.

This Table shows the population, the deaths and death-rates from all causes, from Zymotic disease and Pulmonary disease, it also shows the number of births with the birth-rate for each year, the number of deaths under 1, and the ratio in proportion to 1000 births.

Year.	Population.	Deaths.	Death Rate.	Zymotic Death Rate.	Pulmonary Death Rate.	Deaths under one.	Infantile Mortality per 1000 births.	Births.	Birth Rate
1894	5747	76	13 28	1.22	2.27	17	162	105	18:33
1893	5724	99	17:35	2.63	5.96	20	163	123	20.56
1892	5664	67	11.87	0.32	3.72	19	139	136	24.09
1891	5445	112	19.91	1.78	6.40	27	229	118	20.97
1890	5329	77	14.50	.56		16	115	139	21.17
1889	5255	77	14.70	.76	ble	20	127	157	29.98
1888	5181	91	17.62	.92	ii.	21	136	154	17.62
1887	5107	133	26.33	3.82	ě	27	171	158	30.05
1886	5038	110	21.91	1.94	ures	23	156	147	29.28
1885	4960	82	16.59	1.02	No figures available.	34	210	162	32.77
1881	4668				°Z				

Speaking generally it will be noticed that there has been an allround improvement in the mortality since 1885. In the last column it is interesting to note the remarkable fall in the birth-rate. If we include the whole of the year 1890 in the statutes of the Borough, we find the mean death-rate of the five-year period 1890-94 to have been 15.38 per 1000, while for the five years period before annexation the mean death-rate had been 19.43 per 1000 inhabitants.

## Houses.

Considering how much public health is influenced by the manner in which the people are housed, it will be generally admitted that to advance in the Sanitary improvement in the dwellings is worthy of the best efforts of a Sanitary Authority.

Seven hundred houses have been examined, of these 505 are through-houses while 195 may be described as back-to-back, that is to say nearly 4 per cent. of the total. These back-to-back houses are scattered throughout the district. In Lower Gate there are 74 of these houses to 20 with through-ventilation, in Longwood Road 61 of the former to 28 of the latter, but in Longwood Gate the whole of the houses 142 in number are what are known as through-houses.

Many of the houses are practically built upon the soil with no ventilating area below, and there has been no attempt to remedy this insanitary condition by the introduction of damp course. In the building of the houses measures for the prevention of damp walls have been totally ignored, some of the houses belong to what have been termed the "Salt Pie Class." There are no windows or doors behind, the houses having been built in a hole excavated in the soil, with the back wall built close up to the sides of the excavation. In some houses the coal cellar and keeping cellar, which receive their only light from a doorway leading into the kitchen or dwelling room, are situate between the back wall and the dwelling room. In our investigations we have noted numerous examples which might be interesting and which I intended to enter in this report, but found the matter far too lengthy, so that we may here summarize the chief causes which tend to make these houses unhealthy, and by lowering the general physical condition of the inmates, render them more prone to sickness of one kind or another.

1st, Sanitary defects; 2nd, Dampness and wet sub-soil; 3rd, Insufficiency of air space, deficiency of light and sunshine.

The first refers to drainage and the necessity of a perfect system. It is generally agreed that by far the most important conditions affecting the health of the individual are those connected with his house.

Defects in drainage with the consequent soil pollution and well-water contamination are probably the quickest to produce visible effects upon health. To the second class we might refer defective construction of the foundations, walls, and roofs, and these aided by the third are looked upon as tending to lung and other diseases. Inflammation of the Lungs, Consumption and Rheumatism. With regard to the third order of defects, the injurious influence upon health is self-evident. The three conditions above described are certainly injurious to health, thereby thwarting the aim of all Sanitary reform which is the prevention of preventable sickness and premature death. The more obvious insanitary conditions have been attended to, and wholly or partly remedied, but

difficulties obstruct radical reform, and innumerable examples of insanitary conditions still exist, and I will refer to them in a general way.

# Drainage.

It is agreed amongst competent authorities that proper drainage is the primary and most effective step of all Sanitary progress, and still one frequently hears "these drains have done for our forefathers, and they lived long enough" probably true, but our forefathers did not possess the water carriage system with its many benefits and few drawbacks. For the most part their drains were simply water drains which now prove so perplexing to us. Whenever there is a congregation of houses the disposal of foul water becomes a question of vital importance to the community. The polluted water and putrifying liquids produced in the dwelling should be as speedily as possible run off to a sufficient distance to preserve the healthiness of the premises, and such obnoxious matter should on no account be allowed to stagnate near human habitations. There cannot be any doubt that the unsatisfactory condition of the district as regards drainage has arisen through want of arterial sewers; this has afforded an excuse to owners to delay the proper drainage of their property, and also to rectify what has been left in its primitive condition. The want of drainage has also delayed the abolition of privies and cesspools which destroy the purity of In the removal of facal matter the cleanest method is to resort to the water carriage system. If one of the other systems such as the pail or earth closet is used then the cost of cleansing is very great and necessitates much manual labour, while a system of drains is necessary for the foul waters of the kitchen, but proper drainage fulfils a two-fold duty, first the removal of foul liquids, second the removal of the next great sanitary evil, viz :the storage amongst dwellings of the excreta of the inhabitants. To be brief a large portion of the district may be said to be devoid of efficient sewerage, for the stone sewers that are in existence are probably as harmful as the open drainage so evident in various parts of the district.

The sewage meanders over the floor of these sewers, and in the summer-time the sewage must be in a state of decomposition, and emit injurious gases. The want of main sewerage has baulked us in many of our contemplated improvements, but this obstacle seems in a satisfactory way of being overcome at an early date, as the intercepting sewer is now being laid in the district. The drainage of individual houses has been improved, but much still remains to be accomplished in this way. In our survey 37 per cent. of the houses were found to be badly drained, stone wall drains being common without any provision for cutting off the drain smells from the houses. Of the premises inspected 313 discharge their drainage into stone walled sewers while 339 find an out-let in cess pools or run upon the fields in a rudimentary irrigation fashion. A large proportion of the Longwood sewage ultimately finds its way into Longwood Brook, already referred to as an open sewer.

# Disposal of Excreta.

The midden privies are common, and to increase the danger arising from these nuisances their position is generally at a higher level than the floor of the houses. Further, the floor of the privy is usually sunk in the ground and admirably adopted for the soaking of liquid sewage to the foundations of the houses, and if in the neighbourhood of well-drinking water probably to its contamination. From some of the privies the Scavengers are unable to empty the contents until mixed with shoddy or flue dust. Of the 700 houses visited 252 were accommodated with middens, 74 with dry ash-places, 144 with excreta tubs, and 28 with water closets. Some remarks might be added regarding the ash-places, which are too frequently considered in regard to the question of cost and cleansing rather than sources of disease, such as Enteric Fever, but a number have been remedied by being covered in and the floor raised to the level of the surrounding ground.

# Sub-Soil Drainage.

A large proportion of the houses in the Longwood district are visibly affected by dampness, which reaches a foot or so above ground. The material of the walls absorbs the moisture in the

ground, and too frequently the roof washings from the eaves or the surface water from the roofs of neighbouring houses and from the yards. This dampness which is simply moisture drawn to the warm interior of the house cannot but be injurious to health, and is generally supposed to be the immediate cause of Diphtheria and sometimes Diarrhea. Much of this dampness would be avoided by a damp course, -a remedy rarely employed in the Borough until in recent years. Purity of the air cannot be maintained in a house unless it be thoroughly dry. The air is liable to be rendered unwholesome from excess of moisture, 1st by absorption of water from the rock or soil below; and 2nd from the porous stone or bricks of which the building is constructed, and therefore the foundations of a house and the basement are really the most important parts of it as regards its sanitary These are some of the injurious results of improper drainage, and therefore improvement is necessary, especially as means for purification of the sewage has been provided at the There can be no doubt as to the utility of drainage, contributary and arterial, to the comfort of the people apart from its ultimate economic results.

# Water Supply (Longwood).

Most of the houses in the Longwood district are provided with Corporation water which is principally supplied from the Longwood Reservoir, gathered from arable ground on the southern side of the valley and supplemented by the springs at Wessenden. This water is considered the best of the various supplies to the Borough. The absolute purity of a water supply is of the greatest importance, and is an essential element in the prevention of disease. There is far less chance of the contamination of a public water supply than there is where sub-soil or well-water is in use. It should be kept in memory that ordinary filtering will not purify water which has become impregnated with organic matter or infected material, and it is unsafe to say that because a well yields pure water to-day it may not become contaminated to-morrow, for there are many chance agents of pollution when these wells are situate in yards

and public highways adjoining groups of houses. The following table gives an analysis of the standard to which pure water should attain, and with this the analysis of the ordinary Huddersfield supply and of the Longwood supply in the other columns of the table may be compared. Analysis is also given in the next table of several waters taken from various wells in the district and these show contamination, some of them undoubtedly polluted with sewage, still well-water, and water derived from streamlets is consumed and used in the preparation of food. These waters in bye-gone times would probably be pure and wholesome to drink, but now the pollution of the soil from the house sewage, privies and dunghills near to houses, stables and piggeries have rendered some permanently unfit to drink, while others liable to intermittent contamination are equally dangerous to human life.

In several recent reports to the Medical Department of the Local Government Board, the following general conclusions may be adduced:—(1.) A definite and serious danger of Enteric Fever and allied diseases attaches to the use of well-water in neighbourhoods where the ground is polluted with excrement, drainage, or manure.

(2.) Almost certain prevalence of these diseases if the specific contagion finds its way into the well through the discharges of sick patients being thrown on the ground or into a wet ash place, whereby the liquid penetrates through the ground. (3.) Such polluted well-water can impart its infection to vessels washed in it, and so to the milk they afterwards contain.

Where the population is increasing in density, and where the soil is composed of pervious material or faulty soft rock, then the only safeguard is to close the wells.

	Longwo	Longwood Polluted Well Water	Water	Corporation Water	Pure Water
Appearance in a 2 ft. tube Slightly turbid Clear, colourless Bright and clear Bright and clear	A Slightly turbid	B Clear, colourless	C Bright and clear	Bright and clear	Colourless
Smell, when heated to 106° F	None	None	None	None	None
Chlorine as Chlorides	5.4	5.5	2.2	98.0	1.00
Nitrogen as Nitrates	1.4	1.19	2.1	0.10	0.01
Ammonia, free	.0500	None	None	0.00101	0.0014
" albumenoid	.0180	.0031	.0021	0.00102	0.0035
Hardness	8.1°	°C-9	°8.7	3.5	$_{\circ}0.9$
" after boiling	0.2	02.9	o8. L	3.50	$4.0^{\circ}$
Reaction	Neutral	Faintly alkaline	Neutral	Neutral	:
Total solids, dried at 212° F	59.0	26.4	0.08	5.5	0.9
Sediment	Small amount	None	Small	None	None
Microscopical Examination of Sediment	Oxide of iron	: 33	Hairs dyed blue Various fibres Fungoid growth	:	No organic debris.

A—Is polluted with sewage or drainage from cultivated land. B—Though not seriously polluted, shows evidence that it is unsafe for drinking. C—May be used at present, but is liable to pollution, and therefore unsafe for human consumption. The results are given in grains per gallon.

# Longwood Brook (Pollution.)

Only a short distance of this brook is in the district of Longwood, by far the greater portion being in the neighbouring district of the Urban Authority of Golcar. It is seriously polluted, not only with trade refuse but with domestic sewage, and it is to be hoped the Rivers Board of the West Riding will be able very shortly to improve its condition. Of course there are difficulties, the subject is primarily a sanitary one, and secondarily a commercial or pecuniary one. As with other sanitary evils this involves serious consideration, and although we may not be too exacting, still to permit such a filthy water course in any district is to afflict a nuisance upon the people. It may be difficult to give figures, but still experience would say that such a stream defiled by sewage and trade refuse must have a detrimental effect upon those in its proximity, because evaporation of gases, as we see them bubbling from the surface is constantly going on, thereby polluting the atmosphere in the neighbourhood of the houses on the banks of the stream.

The conclusions deducible from the remarks above made are the following:—

- Sub-soil drainage should be required around all building sites.
- (2). If the building is erected on the side of a hill, the incline of the ground should be cut away so as to allow free ventilation of air around the building, and the lowest level of the floor of a living room should be several feet above the level of the excavated plateau.
- (3). The basement floor should always have a ventilating space under it unless the floor is protected by a layer of concrete on the ground.
- (4). In the walls of the houses a damp course should be inserted a little above the ground level.
- (5). Outside windows should be provided to all living rooms, and to all water closets and places where sinks are fixed.
- (6). The whole of the drainage should as far as possible be kept outside the building and be properly ventilated.

(7). The privy system should be abolished, and the water carriage system introduced, but in some isolated places a properly constructed ash-closet might be permitted. Improvement of the unhealthy parts of the district can be attained by purification of the soil and air around the dwellings, by doing away with unhealthy accumulations and foul privy middens, but the action of the Corporation will be rendered less valuable and become unprofitable without habits of cleanliness, for many are daily throwing away their own health, and not only that, but they barter the life of their fellow-creature as though it belonged to themselves.

# Marriages.

During the year 1894 the number of marriages solemnized in the Borough was 906, against 837 in 1893, 839 in 1892, and 878 in 1891. The average yearly number of marriages during the period 1881 to 1890 has been 847.

## Births.

During the 52 weeks ended December the 29th, 1894, there were registered in the Borough according to the returns furnished by the district registrars 1,988 births, against 2,311 in 1893, a decrease of 323 births in the year under notice.

The subjoined Table shows the quarterly number of births of males and females.

1894.	Males.	Females.	Totals.	Birth-rate
1st Quarter.	265	285	550	22.41
2nd ,,	245	199	444	18.09
3rd ,,	244	240	484	19.72
4th ,,	260	250	510	20.78
Totals	1014	974	1988	20.25

Of the total births in 1894, 1,014 were males and 974 females. These figures correspond to a birth-rate of 20.25 per 1000 of the population, another well marked step in the progressive decline of

the birth-rate since 1878, when it was 35 per 1000 persons. I have in several Reports referred in detail to the abnormal decline in the birth-rate. During the 10 years 1883 to 1892 the mean birth-rate was 26.20 per 1000, which means that if this average had been maintained during 1894, then, 588 births more would have been registered during the year than there really were; again if we had maintained a birth-rate equal to that of the 33 large towns (30.75) then 985 births more would have been added, increasing materially the natural increment of our population, whereas even with their low death-rate the increase of population is small.

The nearest approach to our own birth-rate occurred in Halifax, where 23°1 per 1000 were registered; amongst the other large towns the birth-rate ranged from 25 in Croydon, 25°8 in Brighton, 26°7 in Bradford, 35°1 in Sunderland, and 35°4 in Liverpool.

The effect of the decline in our natural increment will ultimately result in a population favourable to an increased death-rate, because the age constitution of the population will become an advanced one. The following Table displays the age constitution in the two census years 1881, 1891.

Period. Census,	Persons.	All Ages	. 1	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards
		Male 38	,957	1125	4032	9043	7501	16021	1235
1881	81,841	Female 42	,884	1046	4090	9203	8990	17994	1534
		Totals 81	,841	2171	8122	18246	16491	34015	2769
		P	er cent.	2.65	9.92	22.29	20.15	41.56	3.38
		Male 44	1558	955	3596	9804	9446	19379	1378
1891	95,420	Female 50	862	938	3847	10246	11010	22765	2056
		Totals 95	420	1893	7443	20050	20456	42144	3434
		P	er cent.	2.00	7.80	21.01	21.44	44.17	3.60

An investigation into the decline of the birth-rate led me during the past year to make enquiries into the number of still-born children. This enquiry has been surrounded with difficulties owing to various reasons. In some Church Yards no record

is kept of the interment of still-born children, because the English law enacts that those children born alive shall only be registered. On the Continent registration of still-borns is provided for, with the exception of Russia, so that in this country so far advanced in all questions relating to the welfare of the public we should not lag behind in this matter. I am informed also that sometimes the bodies of still-born children are disposed of surreptitiously by the relations during the night time in the Burial Ground. In other cases a fee of one or two shillings is charged which goes to the Sexton, and no record of any kind whatever is kept, while in some instances the fee goes to the minister, and there a register is generally maintained. So far as I have been able to ascertain a yearly average of 119 interments of still-born children took place in five burying grounds, during the decade 1884-1893 in this Borough, that is to say six to eight per cent. of the total births or one to every fourteen living births. These proportions are much in the same ratio as reported by several investigators on this subject. From the figures at my disposal there is little if any ground to believe that there has been any apparent increase in the number of still-born children. To show the necessity of registration in those cases it has been brought to light in a parliamentary return for 1890 that no less than 17,335 supposed to be still-borns were interred in 1,133 burial board cemeteries, and of this number 4,569 were interred without any Medical Certificate as to the cause of still-birth.

With regard to the crime of the production of still-borns it is common information that the practice is frequent amongst women, especially married women. In this Borough during 1894 two cases of criminal abortion have been brought to light, and exemplary punishment inflicted. In how many instances might this practice have been prevented if the registration of still-born children were made compulsory, just as the registration of deaths has been since 1874. Under the present system there is every opportunity for the concealment of illegal means, and for the disposal of children as still-born, who had survived an hour or two, it may have been a day or so. Another point is that the practice is encouraged by lessened expense. A small gratuity covers the cost in the

interment of still-born children, while a funeral would cost several pounds, for this and other reasons the compulsory registration of still-born children should be enforced until a more perfect system has been formulated for the registration and inspection of all cases in which death has occurred without medical attendance.

## Deaths.

The number of Deaths registered during 1894 at all ages and from all causes was 1,563, 819 males and 744 females, corresponding to an annual death-rate of 15.92 per 1000. The Registrar General makes it 15.8, this slight discrepancy is due to the fact that the Registrar General excludes all deaths occurring in Institutions amongst persons not resident in the Borough and includes deaths amongst those admitted from the Borough into Deanhouse Workhouse, while it has been the custom in this department to consider that the deaths amongst strangers in Institutions in the Borough, counterbalance those of residents in other Institutions such as the Workhouse and Asylum.

The smallest number of deaths in one week occurred during the week ended July 14th, when twenty deaths were registered, equal to an annual death-rate of 10.59, while the greatest weekly number of deaths were recorded in the 49th week ended December the 8th, when 50 deaths were registered equal to a death-rate of 26.48 per 1000.

The death rate for 1893 was 17:43 and the average for the last ten years has been 19:68 per 1000 of the population.

Table shewing number of deaths and death-rates according to sex for the five years 1890-1-2-3 & 4.

Year.		Nur	nber of	Death	18.	Death	Ra	tes per 10	00 p	ersons.
	Males		Female	8.	Both Sexes.	Males.		Females.		Both Sexes.
1890	980		824		1804	10.24		8.60		18.84
1891	1146		1043		2189	12.02		10.94		22.96
1892	897		849		1746	9.32		8.82		18.14
1893	893		802		1695	9.18		8.25		17.43
1894	819		744		1563	8.34		7.58		15.92

It will be observed that the number of deaths amongst females is lower than amongst males, but this is not so apparent during the later years of the table, and may be accounted for by the gradual increase of female labour, thereby exposing them to the dangers of employment and vicissitudes of weather.

(The comparison in the following Table of the 33 large Towns represents what might be considered as the mortality if the proportion of persons living in each town as to sex and age groups had been the same as in all of them.)

	Annual	Rate per 1000	Living.	ldren of age ths.	t. of eaths.
Towns.	Births.	Deaths.	Principal Zymotic Diseases,	Deaths of Children under one year of age to 1,000 Births.	Rate per cent. of Uncertified Deaths
33 Towns	30.7	18-1	2.4	152	1.7
London	30.1	17.8	2.7	143	0.8
West Ham	34.0	16.2	3.2	138	4.2
Croydon	25.0	13.2	1.5	121	
Brighton	25.8	16.4	1.2	138	1.4
Portsmouth	27.6	15.2	2.0	131	0.8
Plymouth	28.8	18.3	1.6	169	1.2
Bristol	28.2	17.3	2.0	150	1.3
Cardiff	34.4	16.2	1.9	141	1.2
Swansea	32.3	17.0	1.8	163	1.1
Wolverhampton	34.1	20.7	3.2	166	0.7
Birmingham	31.7	18.6	2.5	163	5.1
Norwich	29.8	18.7	1.5	164	1.7
Leicester	31.5	14.7	1.9	162	3.1
Nottingham	28.6	17.2	2.3	174	1.3
Derby	29.3	15.0	1.6	123	0.7
Birkenhead	30-6	18.1	2.6	143	0.5
Liverpool	35.4	23.8	3 4	179	3.5
Bolton	31.5	18·8 20·4	1.8	162	0.9
Manchester	32·0 34·3	21.0	2·4 3·3	160	1.3
Salford	27.2	18.6	1.8	174 161	2.8
Oldham	32.2	18.7	2.5	170	1.8
Burnley	28.8	17.9	1.6	169	3.6
Preston	32.1	20.8	2.6	217	4.8
Huddersfield	20.2	15.8	1.4	160	3.4
Halifax	23.1	16.5	0.9	135	4.9
Bradford	26.7	17:0	1.8	145	0.9
Leeds	32-2	17.9	2.0	155	1.0
Sheffield	33.4	17.8	2.3	157	3.6
Hull	32.4	17.4	1.8	142	4.2
Sunderland	35.1	20.8	3.1	167	1.0
Jateshead	34.2	17:7	2.4	152	0.9
Newcastle-on-Tyne	31-0	18.3	2.2	157	1.0

From the above table which has been prepared in accordance with the figures of the Registrar General we shall see that our relative position amongst the large Towns is not so favourable as in 1893, still it is very creditable as far as the gross annual death-rate is concerned. It might be argued that we would be nearer a true statement if we used the corrected death-rate, but I consider that the abnormal decline of the birth-rate has impaired the value of the factor, while no consideration has been made on account of trade in arriving at the factor of correction, and therefore it is advisable to adhere to the death-rate which is the same rate as reported weekly by the Registrar General until we have obtained more reliable data from a quinquennial census.

The following table gives the annual death-rate per thousand of the population of the different districts, as taken from the Registrar General's Report:—

England	and Wales	. Populatio	on 30 mi	illions	16.6
,,	Urban Districts	,,	$20\frac{1}{4}$	,,	17.1
,,	Rural ,,	,,	10	"	15.6
Thirty-th	ree large towns	,,	$10\frac{1}{2}$	,,	18 1
Sixty-sev	en next ,,	,,,	$3\frac{1}{3}$	,,,	16.0

# Age Mortality.

The mortality of a town does not occur equally at all ages and experience shows that the death-rate is higher at the extremes of life, that is to say under five and over 55 years of age. In the last three Annual Reports the age mortality has been expressed as percentages of the total deaths, simply because the necessary information with regard to the various age groups was wanting. The result derived from the method of calculation by percentages though not satisfactory assists in verifying the conclusions obtained for estimating the mortality in proportion to the population at the various age periods.

DEATHS.		1st quarter	2nd quarter	3rd quarter	4th quarter	Total	Percent- age to Total Deaths,
	1894	96	68	55	99	318	20
Under 1 year of age	1893	75	77	96 -	77	325	19
	1892	90	100	60	86	336	19
	1894	45	44	38	57	184	II
Between 1—5	1893	51	53	34	57	195	12
	1892	66	73	57	51	247	14
	1894	23	26	15	19	83	5
Between 5-15	1893	18	18	21	23	80	5
	1892	25	18	11	17	71	4
	1894	25	28	23	25	IOI	6
Between 15-25	1893	26	30	16	30	102	6
	1892	25	24	24	23	96	5
	1894	94	65	78	78	315	20
Between 25—50-	1893	97	76	83	89	345	20
	1892	90	86	84	73	333	19
	1894	45	41	44	35	165	IO
Between 50—60-	1893	51	53	49	46	199	12
	1892	57	48	29	49	183	10
(	1894	IIO	90	68	88	356	22
Between 60—80	1893	109	100	88	93	390	23
	1892	148	86	79	102	415	24
(	1894	II	13	5	12	41	2
80 and upwards	1893	17	13	13	16	59	3
(	1892	18	15	16	16	65	4

The following Table gives the total Monthly and Yearly number of Deaths, both Male and Female, with the approximate average Age at death.

	Tota	l N	umber o	f De	eaths.	Approx	imate Avers at Death.	ige Age
	Males		Female	s.	Both Sexes.	Males.	Females.	Both
January	93		103		196	31.70	40.46	36.08
February	61		76		137	32.55	36.13	34:34
March	66		50		116	34.26	27.11	30.83
April	62		44		106	30.35	37.89	34.10
May	75		87		162	29.32	32.30	30.81
June	63		44		107	38.42	41.17 .	39.79
July	48		52		100	30.17	33.66	31.91
August	77		55		132	30.97	35.95	33 46
September	57		37		94	37:51	32.28	34.89
October	90		78		168	28.10	36.36	32.23
November	60		44		104	30.45	32:39	31.42
December	67		74		141	27 08	29.92	28.50
Whole Year	819		744		1563	31:53	34.88	32.20

# Infantile Mortality.

This refers to the deaths under one year of age. These deaths numbered 318 during the 52 weeks of 1894. As heretofore we express this rate in proportion to each 1000 births registered, which gives a rate of 160 against 141 in 1893, and 168 the average of the 10 years ending 1893. In the 33 large Towns the Infantile Mortality was 152 per 1000, so that we have reason to be dissatisfied with this loss of life, especially as our birth-rate is an exceedingly low one, and therefore should help in producing a low

Infantile Mortality, whereas during the last 10 years we have shown little or no improvement in this rate. In the table which displays a statement of the relative position of districts this mortality is also stated.

The following Table displays the various causes of death amongst children under one year of age in the various quarters of the year and according to sex.

1894.	200	st irter		nd irter	100000	rd arter		th	Males	Females	Tota
	M.	F.	M.	F.	M.	F.	M.	F.			
Measles (4), Diphtheria (4)			5		1		1	1	7	1	8
Whooping Cough (31), Croup (1)	1	5	6	7	4	3	3	3	14	18	32
Diarrhœa (4)		1			1	1	1		2	2	4
Erysipelas (4), Syphilis (5)	2	1			1	1	2	2	5	4	9
Tuberculosis (2)			1		1				2		2
Tubercular Meningitis (4), Phthisis (2)		1		1	1		2		4	2	6
Premature Birth (39)	5	5	4	2	3	1	12	7	24	15	39
Congenital Malformations (12)		1	4				3	1	10	2	12
Meningitis (3)		1					1	1	1	2	3
Convulsions (28)	8	4	3	2	4	2	3	2	18	10	28
Bronchitis (50)		10	4	3	3	1	15	4	32	18	50
Pneumonia (24)	5	4	2	1		1	8	3	15	9	24
Dentition (6)			3				1	2	4	2	6
Dyspepsia (1), Gastritis (5)	1			1	3			1	4	2	6
Obstructive disease of Intestine (1)			1						i		1
Atrophy (2), Debility (17), Marasmus (23)	8	6	4	4	7	4	6	3	25	17	42
Inanition (9), Mal Nutrition (1)			2	1	3		2		9	1	10
Not specific or ill-defined (18)		- 5	1	2	100	2	4	1	8	10	18
Other Diseases (18)	3		2	2	2	5	1	3	8	10	18
	52	44	42	26	34	21	65	34	193	125	318
Total	-	96	6	8	1	55	9	9	3	18	

During the whole of the year an investigation has been carried on into every death which occurred in children who had not completed one year of existence. The 318 deaths occurred in 317 different families composed of 813 children. It will be noted that the average number of children per family (2.5) is lower than would have been expected. I do not propose entering into a detailed report upon this subject until we possess the figures for several years, but the following items are interesting.

Total Deaths under one.	Breast Fed.	Bottle Fed.	Breast & Bottle.		Only survived a short time.
318	102	64	69	20	63
Percentage	32	20	21.7	6.2	19.1

Perhaps it would be better to express these figures in another way, because in the above statement it would appear that the mortality was highest amongst the breast fed, or what we might term "naturally fed" children, whereas it was not so. If we add together the mortality amongst those fed by bottle, bottle and breast, and spoon, then the proportion rises to 48 per cent., as against 32 per cent. amongst the breast fed. These figures do not include the 19'1 per cent of children who survived only a short time.

In 44 cases (13.8 per cent.) only did the mother go out to work and 20 deaths (or 6.5 per cent.) occurred amongst illegitimate offspring. One hundred and three, 32 per cent., were insured.

#### The Classification of Death Causes.

All death causes are conveniently arranged under various headings, and the subjoined Table, a summary of Table VI. (Appendix) shows the death-rates per 1,000 living in the Borough, according to the Registrar General's classification of diseases.

	1894	1893	1892
1. Specific Febrile Diseases—			
Zymotic	1.52	1.38	1.53
Malarial	0.11	0.33	0.52
Venereal	0.05	0-07	0.41
Septic	0.13	0.14	0.12
2. Parasitic Diseases			
3. Dietic Diseases	0.02	0.04	0.04
4. Constitutional Diseases	3.44	3.27	3.72
5. Developmental Diseases	1.29	1.30	1.14
6 Local Diseases—			
Nervous System	1.96	2.23	2.26
Circulatory ,,	1.24	1.26	1.44
Respiratory "	3.03	3.76	3.66
Digestive "	0.94	1.20	1.26
Urinary "	0.50	0.43	0.50
Reproductive "	0.12	0.09	0.10
Bones and Joints	0.04	0.07	0.08
Integumentary System		0.02	
7. Violence	0.39	0.37	0.48
8. Ill-defined and not specified causes	1.13	1.42	1.24

This Table shows an all-round improvement upon the figures of 1892.

#### Infectious Disease.

There has been no epidemic of any proportions beyond localized outbreaks in the Borough during the year. Some facts as to the various diseases included in this class are cursorily stated below.

#### Small Pox.

Only five cases of this disease came to our knowledge, and all occurred in male patients. Three were from the Central District and each represented a fresh and distinct attack. The first was a wandering Tailor, the second a Lodging-house keeper who had been in the habit of sleeping in the same room with several of the lodgers; the third a young man who had come from a midland town to visit his friends and developed the disease three or four days after his arrival. The two cases in Dalton district occurred in the same house. The first case occurred in a young man aged 31, a painter by trade, but who had been roaming in other towns. On the 7th July he was at home and complained of pain in his back and the other symptoms characteristic of Small Pox, but no notice was taken of his illness until the 11th when the case was notified and immediately removed to the Small Pox Hospital. In the three first cases referred to all persons who had been in contact with the patients were re-vaccinated, but in the Dalton case the two occupants, besides the patient in the house refused to be re-vaccinated, as they considered it "quite ridiculous" to think that people over 60 years of age could catch the disease, but on the 21st July the uncle aged 62 was found to be suffering from an attack of the disease, and was immediately removed to the Hospital. So much has been said about this disease in former Reports that I need only give the following particulars. The ages of the patients were 43, 32, 31, 62 and 18 respectively. All of them it will be seen are above the age when re-vaccination is considered advisable. The severity of the disease and the detention in the Hospital was very largely settled by the conditions of vaccination.

Although the Small Pox Hospital has been empty for some time it is maintained in such a condition that any case may be admitted at a few moments' notice, and such provision places the department in an invaluable state of defence against this disease.

Still a large share of credit must in this Borough be given to the inhabitants who have so wisely adopted the way of preventing Small Pox. I refer to almost universal vaccination for only about 3 per cent. remain unvaccinated, and having seen the invaluable advantages of such conduct why not exterminate the disease by re-vaccination in puberty. All evidence and my own experience goes to show that efficient vaccination is the one great preventive of Small Pox, and whether any person, or his or her children will escape the disease is entirely within that person's control.

## Typhus.

This very unusual visitor to Huddersfield appeared in a female aged 32 living in a confined court yard. The disease was typical. The Medical attendant demurred to visiting the patient who was kept at home because she was too ill to be removed. I accepted the responsibility and visited her at least once a day until her death on the 9th day of the attack. Every means of precaution were adopted. The only avenue by which this disease could have been introduced was by correspondence from a district in Ireland, where the disease was known to her father and mother when resident there in their youth.

#### Measles.

During the year 13 deaths were ascribed to this disease. Beyond noting the outbreak of measles in connection with a school in the Central district, there is nothing unusual. About the beginning of August the disease became prevalent in the South and East Wards, and disappeared suddenly with the onset of the cold weather. In connection with the school a list of all absentees was obtained, and their houses visited. So distinctly was this invasion traced to one family, that had notification of measles been in practice it is probable many of the cases might have been prevented. The 13 deaths represent a death-rate of 0.13 per 1000, which is exactly half of the previous year.

## Whooping Cough.

This disease was responsible for 55 deaths. Like measles whooping cough occurs in epidemic cycles. The years of its greatest fatality occurred in 1891, 1887, 1884—when the death-rates from whooping cough were 0.62, 0.68, 0.70 respectively. It is a matter of surprise that so much apathy should exist about a disease that demands such an enormous death-toll. Of the 55, only two occurred in children over five years of age. Surely this too contains a lesson; though children over five are less liable to attacks of the disease still the number of cases in children over and under five is not so disproportionate as 2 to 53 which means simply that the younger the patient the greater the fatality and therefore if parents could be made to view this disease as the most fatal of the commoner infectious diseases much sacrifice of life might be prevented especially amongst infants.

Probably there is no infectious disease less amenable to the action of the Sanitary Authority. Of course our action is very limited. We hear in some unofficial way of the disease, when it has spread to some extent. The Inspector then visits the district and distributes some bills requesting householders to keep the family in which there is an infected member away from school; but real isolation is extremely difficult owing to the duration of the disease.

The disease was with us throughout the whole of the year, and invaded every district of the Borough, leaving its trail most marked by 12 deaths in Almondbury, 10 each in the Lockwood and Central districts, and 9 in Dalton. There is one consideration in connection with the prevalence of this disease that ought to urge parents to greater care, and that is this, as in battle the killed bear but a small proportion to the wounded, so with whooping cough, it has quite as an unenviable a reputation as influenza for leaving impairment of some organ or other of the body behind, rendering it more liable to after disease.

#### Scarlet Fever.

I have discussed this disease so fully in my quarterly reports that I shall only make a few remarks upon it now.

During the 52 weeks, 462 cases of Scarlet Fever came to our knowledge, the majority of them through notification by Medical men, while a number were discovered in several house to house visitations. In several instances I discovered by a personal examination of each scholar present in the school, children in an infectious condition. A glance at the table exhibiting the notifications will shew that the disease troubled us in every district except Lindley where only three cases were heard. This district has remained remarkably free for the last six years, probably because of the widespread outbreak in 1887-88. Extraordinary precautions are now being undertaken to keep the district in this happy state.

There is a decrease of 117 below the notifications of 1893, and we may have hope that during 1895 we shall experience another decline. Twenty-three deaths were registered, so that the mortality was scarcely 5 per cent. against 5.2 per cent., the average of previous ten years.

The younger the patient the greater the fatality. In 107 cases amongst children under five years 14 deaths occurred, while only 9 were fatal amongst 355 cases in those over five years of age—that is 13 per cent. proved fatal amongst infants, and only a little over 2½ per cent. amongst the latter.

Of 462 cases 402, or 87 per cent., were removed to the Hospital with a mortality there of 4 per cent., against 11.6 per cent. of those isolated at home; this allows a large margin for cases too ill for removal, and still testifies to the nursing in the Hospital, and also to the fact that this fever is aggravated and more fatal when treated amongst unsanitary surroundings.

Too frequently the idea is heard that this disease is "only" Scarlatina. Although it is not very fatal still those mild cases sometimes develop serious symptoms in the third and following weeks of the illness, frequently leaving permanent impairment of hearing, or kidney mischief which manifests itself in adult life.

The following are the age periods at which the cases occurred, viz:—

Under one.	der one.   1—5   5—10 4   103   198		10—15 108	15—25 26	25 and over. 23				
ŋ	The cases were distributed as follows—								
1st Quarter. 112	2nd	Quarter 117	r. 3rd	Quarter. 116	4th Quarter. 127				
		T	otal 462.						

Table showing the number of cases of Scarlet Fever known to have existed in Huddersfield, during the the deaths registered from the same disease; also the average cases and deaths per quarter in the years 1885-1889, and 1890-1894, with cases heard of in the several quarters of these years, and five years 1885—1889, and 1890—1894.

ars 894.	Deaths.	4	4	9	9	20
Average of five years 1890-1894.	Cases.	89	100	107	113	388
94	Deaths.	00	01	4	6	500
1894	Cases.	112	107	116	127	462
1893	Deaths.	4	9	9	6	25
18	Cases.	81	188	130	180	579
1892	Deaths.	60	9	9	00	18
18	Cases.	11	100	102	81	354
1891	Deaths.	4	-	11	00	30
18	Cases.	46	92	113	106	341
1890	Deaths.	-	1	00	63	1
180	Cases.	53	28	73	17	201
ars 889.	Deaths.	9	9	-	t-	26
Average of five years 1885-1889.	Cases.	73	88	113	96	365
1889	Deaths.	00	9	15	63	56
18	Cases.	122	1119	107	57	200
1888	Deaths.	13	6	4	1	27
18	Cases.	128	98	62	20	326
1887	Deaths.	4	10	63	20	31
18	Cases.	45	72	178	231	526
98	Deaths.	6	9	10	90	60
1886	Cases.	16	96	130	22	370
1885	Deaths.	-	01	9	6.1	=
18	Cases.	28	43	89	91	251
ters.	ппр	I	11.	III.	IV.	

The quarter in each case, is calculated as 13 weeks. For death rate, see Table VII. in appendix.

Our experience in dealing with disease during 1894 has been interesting and encouraging. In several instances sudden localized outbreaks have as suddenly been nipped in their origin.

Besides exclusion of children from infected houses from School, disinfection of the houses and clothing, and removal of the patients, our success depended largely upon the house to house visitation, conducted in this way. A list of absentees for more than three days from School during the past six weeks is obtained. The visitation is made as far as possible in one day, and on the same day the Medical Officer of Health inspects the children at School. By this means there is less chance of overlooking any children, and parents have no time to get any suspicious cases out of our way.

The following figures for 1894 shew the desirability of removing first cases of Scarlet Fever as early as possible. The 462 cases notified occurred in 341 houses as follows:—

One case e	ach i	n 260	households	 260	cases.
Two cases	,,	54	,,	108	,,
Three ,,	,,	18	,,	 54	,,
Four ,,	,,	7	,,	 28	,,
Five ,,	,,	1	,,	 5	,,
Six ,,	,,			 	,,
Seven "	"	1	,,	 7	,,
				-	-
		341		462	

The following statement of the various occupations followed by the parents of Scarlet Fever patients affords some idea of many ways the infection of Scarlet Fever may be carried.

Manufacturers and	Merchants			14
Clerks, Accountants	s, and Minis	ters		32
Millhands-weavers	3		 30	
Do. various			 43	73
Engineers, Boiler M	akers, and I	Blacksmiths		24
Coal Merchants and	Colliers			12
Railway Workers				9
Teamers and Horsel	keepers			20

Out-door Worl	kers—l	Masons		 15	
Do.	Do. Pai			 9	
Do.	]	Plumbers		 2	
Do.		Joiners		 7	
Do.		Porters		 9	
Do.		Labourers		 35	77
Postmen and I	Policem	nen			10
Tailors					8
Shopkeepers					16
Publicans and	Lodgir	ng House F	Keepers		5
Housewives (w					21
Charwomen					6
Miscellaneous					18
Occupation not	t state	d			12

In relation to the influence of Schools in the production of Scarlet Fever it may be stated that of the 462 cases of Scarlet Fever, 314, or 70 per cent. occurred in children attending various Schools in the Borough.

## Diphtheria.

This disease claimed a larger number of victims than any year since 1887, which was an epidemic year, and thus broke the continuous run of improvement noticed in the mortality of this disease since that year. During 1894 thirty-six cases were notified, but these do not represent the whole of the cases, as there is much diversity of opinion upon the diagnosis. No doubt cases are included of a very doubtful nature because with this disease, as with Enteric Fever, the flushing and disinfection of the drainage is carried out immediately on receipt of the notification, and sometimes notifications of suspicious cases are sent to secure these valuable measures in the treatment of the patients. The district of Almondbury produced 13 cases, which ended fatally in 7.

#### Enteric Fever.

In the course of the year 1894 there occurred in the Borough only 31 cases of Enteric or Typhoid Fever, against 57 in the immediately preceding year, or an average of 42 cases for the five-year period 1890-94. Calculated on the estimated population at the middle of the year, these attacks were equal to a rate of 0.11 per 1000 in 1894, and 0.14 in 1893, while the average annual rate for the five years mentioned had been 0.14 per 1000 inhabitants.

The seasonal prevalence of this disease can be studied in the following table, which shows that the third quarter produced the largest number of attacks, closely followed by the fourth quarter, and this is in accord with general experience. Too much reliance must not be placed upon the number of attacks in estimating the prevalence of this disease, because the medical men have been encouraged to report early cases in which there has been the slightest suspicions, so that the drains might be flushed and disinfected, and the stools deposited in a specially prepared tub, the contents of which are afterwards cremated. Two districts—Longwood and Almondbury—remained entirely free from this disease. In the other districts the number of attacks were as follows:—Central, 9; Lockwood, 7; Marsh and Fartown, 4 each; Dalton and Lindley, 2 each; and one in Deighton. Two cases developed in the Infirmary.

The cases were therefore scattered over the Borough, and were unconnected with one another.

Owing to the large number of suspicious cases of Scarlet Fever notified, and which required isolation at the Hospital, a number of cases of Enteric Fever had to be left at home. I very much regret this because negligent nursing might at any time produce an outbreak.

periods 1885-1889, and 1890-1894, with cases heard of during the several quarters of the years of these periods, and the deaths registered, also the average cases and deaths per quarter in the Table showing the number of cases of Enteric Fever known to have existed in Huddersfield during the two five years 1885-1889, and 1890-1894.

ears 1894.	Deaths.	00	63	60	10	13
Averages of five years 1890-1894.	Cases.	90	60	16	15	42
1894	Deaths.	0.3	00	1	10	=======================================
18	Cases.	10	10	=	10	31
1893	Desths.	1	:	4	00	13
18	Савев.	10	60	21	23	57
1892	Deaths.	П	1	00	1	9
18	Cases.	9	1	10	10	22
1891	Destps.	П	4	4	9	15
18	Cases.	4	10	19	10	99
90	Deaths.	6	00	70	9	23
1890	Cases.	14	61	20	26	62
ars 889.	Deaths.	0.1	0.1	00	00	10
Averages of five years 1885-1889.	Cases.	13	10	15	15	50
1889	Deaths.	1	4	4	1	10
18	Cases.	10	14	16	10	20
1888	Deaths.	0.1	00	4	63	11
18	Cases.	15	11	11	19	56
87	Deaths.	1	1	00	4	6
1887	Cases.	7	4	18	61	48
1886	Deaths.	60	63	63	YO.	12
18	Cases.	13	6	6	14	457
1885	Deaths.	4	1	00	6.1	10
18	Cases.	19	15	20	12	99
ters.	Quar	ij	II.	III.	IV.	Year.
		_				

In comparing these figures we must not forget the increase of population. For the death rates see Table VII. in Appendix.

#### Diarrhœa.

Diarrhea was fatal in eighteen cases, which is equal to a deathrate of 0.18 per 1000. With the exception of 1891, when the
mortality from Diarrhea was 0.11, the fatality of 1894 was the
lowest yet recorded, and a glance at Table VII. will show the
great decline which has taken place in loss of life by this
disease during recent years. The distribution of the disease as
regards season would indicate that that had little or no influence.
Five deaths occurred in the first quarter—two in the second,
six in the third, and five in the fourth—in all, only 18. Of
these, six occurred in children under five years of age. The
Central contributed 8, Marsh, Fartown, and Almondbury 2
each, Lockwood, Lindley, and Longwood 1 each; while no death
from diarrhea occurred in Deighton.

#### Phthisis.

The following statement displays the occupations of the patients who have died from this disease during 1894:—

ieu from this diseas	e durin;	g 1004 :-	-	
Domestic Occupation	ons			50
Cloth Weavers				14
Rug Weavers				4
Labourers				12
Stone Masons				8
Office Clerks				11
Cotton Spinners				7
Woollen Pieceners				7
Woollen Menders				7 5
Engineers				5
Hawkers (Fish, &c.	)			6
Boot and Shoe Mal				4
Commercial Travel				4
Plasterers				3
Cloth Dressers				- 3
Silk Dressers		/		3
Joiners				3
Tailors				2
Teamsters				- 2
Farmers				2
Card Cutters				2
One each of the fo		:-Rag S		
Wheelwright, Ba				
and Bookbinder				6
Scholars				6
Under Five				11
V				

Amongst those 180 deaths, it was found that in 69 families death from the same disease had previously occurred, thus:—

In	27	families,	1	death
,,	22	,,	2	,,
,,	14	***	3	,,
,,	3	33	4	,,
,,	2	,,	5	,,
,,	1	**	6	,,

With regard to the means of accommodation in fatal cases, it was noted that

3	deaths	occurred	in	3	cellars
5	"	,,		1	roomed house
44	**	,,		2	"
54	,,	,,		3	"
29	,,	,,		4	,,
$^{24}$	,,	,,		5	,,
11	"	,,		h	ouses over 5 rooms
10	"	33		th	ne Workhouse

The deaths were distributed as regards season as follows:-

1st quarter.	2nd quarter.	3rd quarter.	4th quarter.	Total.
59	40	41	40	180

As regards sex, 103 were males, 77 females.

#### Influenza.

This disease, commonly known under the several names of Influenza, Epidemic Catarrh, Grippe, &c., caused ten deaths, against 32 in 1893, 50 in 1892, and 106 in 1891. This pleasing improvement has been seriously stopped by the general prevalence of the disease, when writing this report in the month of March, 1895. In 1894 Influenza was limited to the first and second quarters, during which 10 deaths were registered, one of them in a child under five years of age. The unequal incidence of fatal Influenza upon persons of different ages is remarkable. The disease has apparently become endemic in this country, and has appreciably affected the mortality statistics, especially those relating to the fatality of respiratory diseases.

Fifty-one inquests were held by the Coroner, and those relating to violence were as follows:—

	Burns and Sc	alds		 	3
	Drowning			 	4
	Suffocation			 	4
Oth	er Injuries-				
	Violence (not	accider	ntal)	 	9
	Homicide			 	2
	Cut Throat			 	3
	Hanging			 	4
	Drowning			 	6
	Poison			 	3

#### Deaths in Public Institutions.

Seventy-three deaths occurred in the Crosland Moor Workhouse last year, against 86 in 1893, and 87 in 1892. Forty-eight deaths took place in the Infirmary against 50 in 1893, and 42 in 1892.

In the Fever Hospital, Birkby, there were 17 deaths against 22 in 1893, and 19 in 1892. Of the 1,563 deaths during 1894 the amount of 3.4 per cent. of the deaths were not certified either by a Registered Medical Practitioner or by the Coroner. The rate per cent in the 33 large Towns was 1.7 so that our position in this respect is one we cannot approve of.

#### Notification Table.

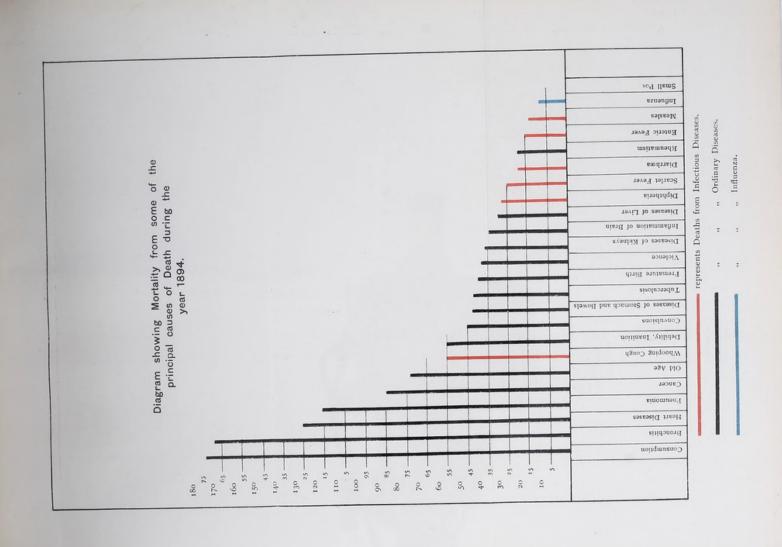
Notification of infectious diseases has been carried out with no difficulty or unpleasantness. The following table gives the number and districts from which they came. According to the Huddersfield Improvement Act, 1870, the householders and medical men in attendance are required to notify cases of dangerous infectious diseases to the Sanitary Authority. These diseases are defined in the Act as "Smallpox, Cholera, Scarlet Fever, (Scarlatina), Typhus, Typhoid Fever, Diphtheria, and Puerperal Fever."

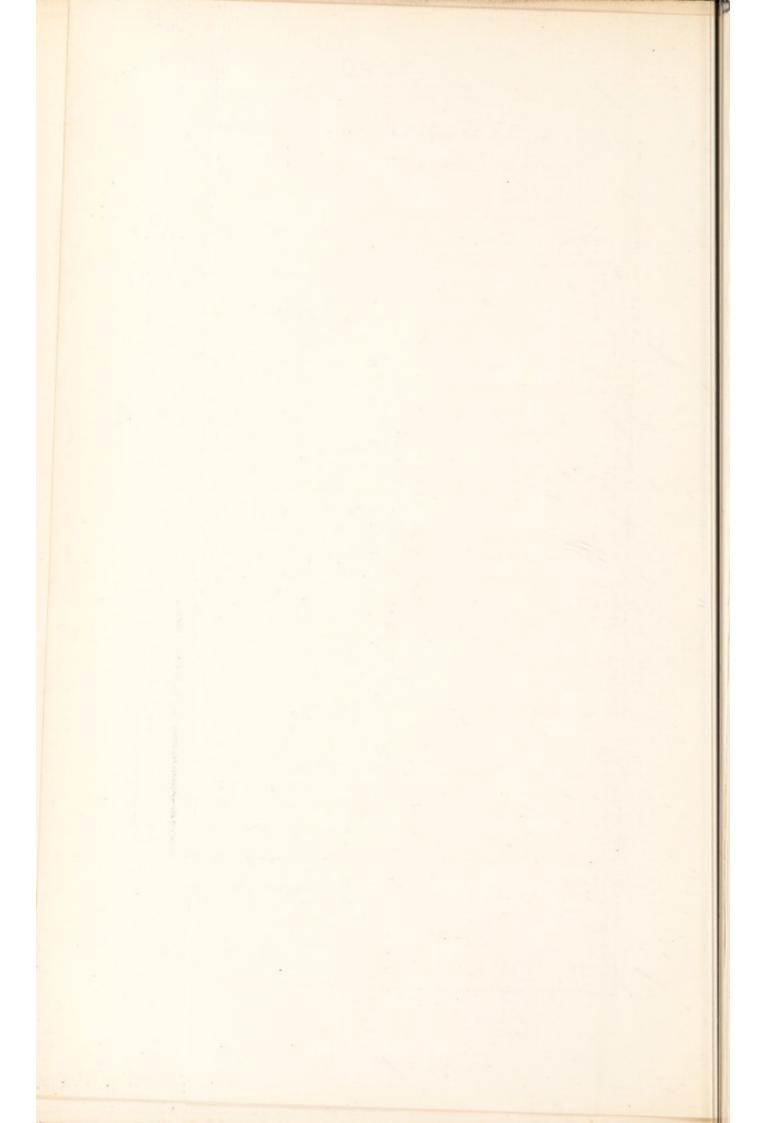
44

## Analysis of Infectious Cases Reported,

52 weeks ended December 29th, 1894.

DISTRICTS.	Small Pox	Measles	Scarlet Fever	Diphtheria	Typhus	Enteric	Other Fever	Erysipelas	Chicken Pox	Puerperal Fever	Doubtful	AGES	TOTALS
Central Wards		2 3	17 68	5 1	 1			 1			1 1	Under 5 Over 5	25 87
Marsh		 1	13 27	2		1 3				2	ï	Under 5 Over 5	16 34
Fartown	:::		16 49	3 2		<u></u>					1	Under 5 Over 5	20 55
Deighton and Bradley	::.		15 35	2 1		 1		2			ï	Under 5 Over 5	17 40
Dalton	2		11 32			2			1		1 2	Under 5 Over 5	13 39
Almondbury			8 59	5 8							1 3	Under 5 Over 5	14 73
Lockwood		10 8	16 49	1 5							4 5	Under 5 Over 5	31 74
Lindley				 1		2		1				Under 5 Over 5	1 9
Longwood		1	10 31									Under 5 Over 5	11 34
Infirmary			1 1			2		ï	:::			Under 5 Over 5	1 4
Crosland Moor Workhouse												Under 5 Over 5	i
Whole Borough	5	13 12	107 355	18 18		1 30	 1	1 7	1		8 19	Under 5 Over 5	149 450





### Hospital.

During the year 413 patients have been removed to the hospitals for treatment and isolation, suffering from infectious diseases. Of these, 402 suffered from Scarlet Fever, 5 from Small Pox, and 6 from Enteric Fever. Of the 510 cases under treatment during the year, 16 ended fatally, all of them, except one fatal case of Enteric Fever, being due to Scarlet Fever. It is necessary to note that several cases, although seriously ill, were removed either with the consent, or by the express wish, of the parents, just to give them a chance. In two cases the medical attendants declared there was little, if any, hope of recovery. The zeal and tenacity displayed in the nursing of those cases were highly laudable. The patients admitted have corroborated the experience of former years that Scarlet Fever seems to possess greater malignancy in the houses of the poorer classes, and especially so amongst those inhabiting a one-roomed house.

I consider the Birkby Fever Hospital has done splendid service, and those acquainted with such work can recognise how great is the danger, individually and collectively, to the community, which it averts or mitigates. The Visiting Sub-Committee has visited, under due precautions, and always expressed satisfaction, while many of the patients have shown their gratitude in letters which have been read to the Committee, and in gifts to the Hospital for the enjoyment of those unfortunate in being prisoners after the donor's discharge.

For the adult patients a billiard-table has been provided, and many hours have been wiled away, and a hope has been expressed that before long a piano will be secured. During 1894, 89 per cent. of the Scarlet Fever patients has been removed to the Birkby Hospital, and it behoves the Authority to provide, as far as possible, the comforts and enjoyments of home life in these institutions.

#### Accommodation for Infectious Cases.

It is now many years since this matter came under consideration. The accommodation cannot be reckoned as the total number of beds, because such reasoning would be misleading. It depends largely on the wards,—e.g.: We possess two wards of ten beds each for Enteric Fever cases. If one adult male and one adult female are admitted, then both wards are occupied, to the exclusion of other diseases, whereas, if we had four wards of five beds each, then the number of admissions of Diphtheria could be increased, and much trouble and inconvenience would be saved to us, when such diseases as measles require to be removed, when occurring in large lodging houses.

The accommodation provided at the temporary Hospital for Small Pox at Mill Hill has relieved us of much anxiety. The patients treated there expressed themselves highly delighted, and simply because they could there amuse themselves out of doors in the enclosed paddock, and yet perfectly, without fear to the neighbourhood. When unoccupied the tent and convalescent wards are kept so that an admission of such a disease, as Cholera—if unfortunately it should appear at any time—can be instantly dealt with.

	Small	Scarlet	Small Scarlet Diphtheria pox Fever	Enteric, or Typhoid Fever	Other, or doubtful cases	Total
Number in hospital on Saturday, 31st of December, 1893	1	108	:	1	:	110
Number since admitted	2	402	:	9	:	413
Number discharged	9	449	:	5	:	460
Number Died	:	15	:	1	:	16
Number remaining in hospital	:	46	:	1	:	47

Table showing **new cases** of one or other of the seven commoner zymotic diseases, and of lung diseases, treated as out-door paupers, or as home patients of the Infirmary, during the 52 weeks of 1894 and each of its quarters.

	To Ca	tal ses.			.00	P.	ough.	C	ontinue Fever.			on.	of the	d other gether.
	All diseases.	Seven zymotic diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Typhus.	Typhoid.	Febricala.	Diarrhoea.	Consumption.	Other diseases of the breathing organs.	Consumption and other lung diseases together.
I.	248	8				2	1		2		3	13	75	88
II.	239	4		2			1				1	13	69	82
III.	242	39		24	3		3				9	6	49	55
IV.	255	32		5	4	1	20		1		1	9	85	94
Year 1894	984	88		31	7	3	25		3		14	41	278	319
Per cer all ca	nt. of ses.	8.4		3.18	0.07	0.03	2.5		0-03		1.4	4.15	28.25	32.40

TABLE, SIMILAR TO THE LAST, FOR 1893.

	To Ca	otal ses.			er.	4	ugh.		ntinu Fever			on.	of the	d other gether.
	All diseases.	Seven zymotic diseases.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Typhus.	Typhoid.	Febricula.	Diarrhoa	Consumption.	Other diseases of the breathing organs.	Consumption and other lung diseases together.
I.	300	17	2	2		1	9				3	12	113	125
II.	248	13	1	2	2		3				5	20	64	84
III.	218	34		1			2			1	30	11	30	41
IV.	256	10		3			1				6	15	74	89
Year 1893	1822	74	3	8	2	1	15			1	44	58	281	339
Per ce	nt. of	6.24	0-03	0.08	0.02	0.01	1.47			0.01	4.30	5.68	27.50	33-17

Table showing the rates of Mortality in Huddersfield for the year 1894, and each of its quarters, from all causes, from the seven zymotic diseases, from consumption and other lung diseases, and the ratio of the Deaths in children under one to a thousand births in the same periods, with the corresponding Death-rates in the 33 great towns.

		HUDDER	SFIELD,			33 TOWNS	
Quarter.	All Causes.	Seven Zymotics.	Consump- tion, &c.	Children under one per 1,000 births.	All Causes.	Seven Zymotics.	Children under 1.
I.	18-29	1.18	5.83	175	20-96	2.41	154
II.	15.28	1.59	4.44	153	17.43	2.55	132
III.	13.28	1.47	3.30	114	16.38	2.78	169
IV.	16.83	1.83	5.05	194	17.76	1.97	155
Year 1894	15.92	1.52	4.65	160	18-14	2.43	152

It will be of service to contrast here the quarters of 1894 with those of 1893.

SIMILAR TABLE FOR 1893.

		HUDDER	SFIELD.			33 TOWNS	
Quarter.	All Causes.	Seven Zymotics.	Consump- tion, &c.	Children under one per 1,000 births.	All Causes,	Seven Zymotics.	Children under 1.
I.	18.28	0.90	6:75	125	22.01	2.00	145
II.	17.28	0.99	5.80	131	19.85	2.77	158
III.	16.46	2.59	3.58	171	21.86	5.42	250
IV.	17:73	1.15	5.56	136	22.67	2.56	174
Year 1893	17.43	1.38	5.42	141	21.60	3.18	181

Abstract of Monthly Meteorological Observations for the Year 1894.

			-		-					-			
Total number of Deaths.	196	137	116	106	162	107	100	132	94	168	104	141	1563
Lowest recorded Tempera- ture on the grass.	20°	200	27°	950	000	45°	47.	44°	980	350	35%	270	80
Lowest recorded Tempera- ture in the night,	000	27°	30°	2330	920	44°	48°	46°	39°	340	35°	31°	320
Highest recorded Tempera- ture in the shade.	49°	09	550	.19	64°	.02	74°	<sub>0</sub> 69	.09	570	550	200	.09
Highest recorded Tempera- ture in the sun.	720	820	°06	108°	107°	108°	113°	107°	94.	84°	730	°19	95°
Velocity of the Wind, miles per hour.	70	64	76	16	56	18	19	22	14	23	58	#	27
Prevail- ing Wind.	W.	S.W.	S.W.	S.E.	NE.	S.E.)	S.W.	₩.	W.E.	E.	S.W.	S.W.	S.W.
Total Rainfall (inches)	4-91	96-9	8.78	2.55	2.44	2.36	3.51	2.76	0-83	5-41	1-66	2.75	39-29
Mean Moisture of Air,	75.2	77.2	61-1	63.2	54.0	9-09	8.92	62.4	2.99	74.0	74.5	8-92	6.99
Mean Height Earth Ther- mometer 2ft. 6in.	°88	.8e	40°	42°	48°	51°	280	000	°829	49°	47°	43°	47.
Mean Height Earth Ther- mometer 4ft. 6in.	45°	41°	40°	43°	46°	48°	550	0.00	53°	°19	. 48°	.97	47.
Mean Diurnal Range oF	174	11-3	17.0	17-7	15.6	16.0	19.7	13.5	11-6	9-01	0-6	10-2	13-3
Mean Ther- mometer oF	97.0	39-0	42.0	48.6	47.7	56-1	2.09	57.4	51-1	47.0	43.5	40-8	47-6
Mean Barome- ter, inches.	79-67	29-74	29-74	29-72	29-81	29-86	29-70	29-77	30-05	29-79	29-76	29-77	29-78
1894. MONTH.	January	February	March	April	May	June	July	August	September	October	November	December	Average

The work of the department has been carried on with the usual zeal and earnestness, and is displayed in the tables in the appendix. During the year the Inspectors of Nuisances have been able to devote more time to actual inspection work by being released from the supervision of the work of scavenging. This has been brought about by the necessity of having closer observation of the scavengers than could be given by the inspectors in their dual capacity. Mr. Jackson, statistical clerk in my office, has been appointed Scavenging Superintendent—a vexatious position for anyone. During the past five years, numerous schemes have been discussed as to the most efficient and economical methods of scavenging. This is a subject teeming with difficulties, and one in which "efficiency" cannot result from economy in the sense of merely lessened expenditure.

## Workshops.

During the year much attention has been given to the inspection of workshops. This is a part of our work, which until recently, had not received the attention from the Sanitary Department that it deserves. During the year, 181 workshops have been visited, and the particulars then taken have been entered upon the Mr. Prior (Her Majesty's Inspector of Factories) has given us great assistance and provided us according to the Act with a list of all new workshops of which he has received official notice. The general condition of the workshops may be stated to have been satisfactory. Several cases of overcrowding have been remedied. I have already drawn your attention to a serious defect in connection with the use of gas for heating implements, and for the boiling of liquids used in trade. No means are provided for carrying away the products of combustion, and these products accumulate in the workshops and are undoubtedly highly prejudicial to the health of the workman. The repeated visits to the workshops have no doubt produced beneficial changes in the more frequent cleansing of the workshops, and by causing more attention to be given to ventilation.

The following statement is a list of the various trade premises inspected:—

Trades.				Total.
Tailors				22
Milliners			***	11
Dressmakers				24
Joiners				7
Jewellers				8
Gunmaker				1
Cabinetmakers				3
Whitesmiths				4
Bootmakers				17
Brushmakers				6
Polishers				3
Wheelwrights		**		6
Upholsterers				5
Wood Carvers				2
Tinplate Workers				5
Cloggers				3
Saddlers				3
Hearthrug Makers				3
Shirtmakers				3
Clothiers				2
Gilders				2
Plumbers				5
Tea Merchants				2
Knitters				2
Pianoforte Dealers				5
Dressmakers and M	filliners			6
Ladies' Outfitters				3
				100

One each of the following:—Sculptor, Hotwater Engineer, Clogger, Hat Maker, Corset Maker, Sauce Maker, Window Blind Maker, Manufacturing Chemist, Wire Worker, Rope Worker, Cork Cutter, Cooper, Engraver, Silicate Works, Organ Builder, Shoeing Smith, Cycle Manufacturer, Currier.

#### House Refuse Removal.

This is most important from a health and comfort point of view, and during the past two or three years has been efficiently attended to, if we judge by the number of complaints received. Some of the complaints are no doubt frivolous, still they form a fairly reliable index as to the efficiency of the work. Mr. Jackson has furnished me with some interesting information as to the work accomplished. It is now more than ever necessary to notice these complaints, because, in our anxiety to reduce expenditure, the comfort and health of the ratepayers must not be forgotten.

Now that the Berry Brow and Longwood sewers are nearing completion, some of the schemes such as the question of establishing district depôts for the disposal of tub contents might be again considered by the Sanitary Committee, so, too, might the removal of ashpit refuse by tram waggons.

Scavenging has been hampered by the unsettled day-to-day policy which has characterized the considerations of this matter, and it is to be hoped that the whole of this most important sanitary work will be early and finally decided upon.

#### Destructors.

Although the figures produced by the Scavenging Superintendent shew that the Hillhouse Destructor has not been fully utilized, still it is a matter of importance that there has been no increase in the number of tips. These accumulations are objectionable, although in Huddersfield the organic filth bears a small proportion to the refuse resulting from coal combustion.

## Food Supply.

During the year every precaution has been taken to maintain the food supply at its high quality. The Butchers' shops have been regularly visited, especially on Saturday nights. Now that the commission on Tuberculosis in the recent report points out in connection with the transmission of Tuberculosis from animal to man that "the danger is a real one," our system of meat inspection should become more methodical, and certainly more rigorous, just as it is in Continental countries where all carcases are examined. With the provision of our excellent Abattoir, a large amount of meat sold in the Borough is under supervision; but in the following Table it will be noticed that the sale of carcases brought from other towns is on the increase, and it is difficult to pick out the diseased meat when carefully dressed and the viscera have been disposed of. This difficulty therefore points to a national system of inspection of all animals intended for human consumption. This increase in the sale of carcases will probably go on because of the trouble and expense saved in slaughtering. An inspection of the private slaughter-houses is made annually by the Markets Committee. There are 24 slaughter-houses in the Borough, but only a few have a license to slaughter cattle, most of them are used for the killing of sheep and pigs.

I have brought before the notice of this Committee several important matters—the first relating to the slaughtering of young calves, under six weeks old, a practice which ought to be prohibited. The second refers to the provision of a tripery. The third to the exposure of uncovered carcases in transmission through the streets. I might also here put on record the fact that the sale of Lamb wrapped in "sheep net" was brought before the notice of the Butchers' Association, and at a meeting of this Association, a resolution was passed refusing to support any member prosecuted for the above practice, which consists in selling the loin and legs of Lamb enveloped in sheep fat. This increases the weight by three or four pounds, and is not the article sought for by the purchaser.

The following figures relating to the meat trade have been kindly supplied to me by Mr. Matthewman.

Abattoir.	Average for five years.	1894
Beasts	3767	3681
Calves	2199	1807
Sheep	13542	14722
Pigs	5954	5531
Carcases brought in	983	912
Private Slaughter Houses.		
Beasts	794	1015
Calves	447	507
Sheep	2623	3145
Pigs	812	955
Total	31121	32275

#### Cowsheds.

Following the systematic inspection of 1893, 308 cowsheds have been visited during 1894. It has been found that the advice given with regard to the collection and storage of milk has generally been acted upon. With regard to the Shippens there has been little or no structural alteration, (beyond the repairing of the floors), which are generally made with flagstones or bricks. Whitewashing and the more frequent removal of manure from the neighbourhood of the Shippen, is now much better attended to. The storage of food, especially the hay, immediately in front of and just over the animals, is not satisfactory, because it is evident the hay being so long retained in the place must become tainted by the emanations from the cows, and in case of infectious diseases, by the infected material. It is common also to find a

horse stabled close by the cow stalls which is objectionable. We have still some difficulty in obtaining sufficient cubic space and efficient ventilation, but taken altogether one cannot fail to see a general improvement.

It is satisfactory to note the improvement accomplished in the Shippens of the larger farms on the estate of Sir John Ramsden, these well-constructed and airy places must tell their beneficial tale on the health of the cows, and on the production and the quality of the milk.

Offensive Trades.

The complaints of the past year have been confined to soap boiling, bone boiling or bone steaming, and to size boiling. In the one case of bone steaming, the matter has been frequently before the Committee, and every opportunity has been afforded for remedying the nuisance, but the offenders still continue to cause much annoyance to the neighbourhood by the sickly smell emitted from their works. With regard to the size boiling in the Fartown district, the owner of the premises has tried to minimize the nuisance by being more careful in the operation, and only conducting it on Mondays instead of at intervals during the week. In connection with premises where offensive trades are conducted, during the year 132 visits have been made.

#### Smoke.

Bad trade and a poor quality of coals have tended to increase the nuisance from smoke. During the year 46 observations were taken, and several of the worst offenders, by the action of the Committee, have either introduced new apparatus with a view of increasing the combustion of the gases and minimizing the emission of black smoke, while in two cases the manufacturers have thought it best to increase their boiler power by the introduction of new boilers.

#### River Pollution.

A complete survey has been made of the principal streams in the Borough, and personally I have followed up the work of the Inspectors. The results of the survey are somewhat surprising as revealing comparatively little pollution from domestic sewage within the Borough. In all, 46 points of pollution were observed, and the greater part of these will be rectified immediately on the completion of the sewer into the Longwood district. Several important pollutions from house drainage have been removed during the past year, and we may truthfully repeat our opinion that the Holme and Colne as they enter the Borough are in a filthier state than when they leave it. During the year no less than 600 dogs and cats were taken from the streams and canals of the Borough, and many of them no doubt have been washed down from districts above us. The cost of the removal of these animals is a cause of expenditure which might be obviated if ratepayers would only understand that to some extent they have the rates in their own hands. The introduction of extracts, as in the case of logwood dyeing, has removed some of the solid matter from the streams, and only in one case had we to find fault with the emission of logwood chips into the river during the year 1894. The Rivers Board is now taking action, and it is to be hoped that very soon we will see an improvement in the Holme and Colne as they enter the boundaries of the Borough.

## Flushing Drains.

This most important operation is too frequently neglected. The drains are out of sight and so forgotten until they make themselves obnoxious, whereas it is as necessary to flush the drains as it is to sweep the chimney, and the inhabitants are wisely beginning to realise this more and more. During the year, the drains of 2,097 premises were flushed and disinfected; of these, 180 were cleansed at the request of the owners and were paid for.

Street Gullies.

Owing to several complaints, unusual attention has been paid to street gullies; many of them are directly open to the sewer, while others are sealed, and too frequently the complaint arises from thoughtless persons throwing stinking matter, such as cabbage water and night chamber refuse, into these gullies. Special visits have been paid to some streets in which these habits have been common, and it has been found that by warning the individual residents in the street, they have desisted and professed that what they did was entirely through ignorance.

#### Bakehouses.

There are 57 bakehouses on the register, and of these 48 have been visited. It is our custom now to make periodical visits to every bakehouse, so that there is not that interference necessary which prevailed a few years ago. The following tabular statement exhibits the work accomplished in this department.

## SUMMARY.

					1st quarter	2nd quarter	3rd quarter	4th quarter	Тота
Total Nun	aber of Inspections of	Premise	g		1176	1174	549	544	344
	of premises for Nuise premises where	ances			765	491	223	229	170
Do.	conducted	···	o traues		45	48	25	14	13
Do.	Dwellinghouses in h								
Do.	Workshops				58	26		97	11
Do.	Schools					***	7	4	
Do.	Slaughter Houses					1			
Do.	Canal Boats				25	19		1	
Do.	Dairies and Milksh					3		2	
Do.	Cowsheds				33	243	23	9	30
Do.	Bakehouses				5	- 11	3	29	
Do.	Markets	***			daily	daily	daily	11	
Do.	Show Vans	***				46	46	2	1
Do.	of premises where		ice is four	nd	245	286	222	146	8
	work in progress				278	193	87	271	8:
	ee if notices are being				70	96	67	53	28
No. of pre	mises visited where	Zymotic	diseases h	ave					
	occurred	***		***	83	108	107	131	45
Do.	inspected	do.	do.		83	108	107	131	4:
Do.	disinfected	do.	do.	***	131	107	116	116	47
Do.	flushed	do.	do.		83	108	107	131	4:
Do.	visited searching fo	r Fever	do.	***	311	357	859	203	173
	ber of visits to infect				449	280	330	541	160
Do.	revisits where case	s are isol	ated at he	ome	128	65	65	127	38
Infectious	diseases reported		***		129	140	148	182	55
Cases rem	oved to Hospital			***	101	96	108	108	41
	articles disinfected b				2885	2624	2693	2774	1097
	houses cleansed, rep f premises flushed b				1	53	51	34	18
	for)				42	50	39	49	18
	nises, yards or courts				568	498	591	260	191
Preliminar	y notices to owners			***	108	152	77	69	40
Owners see					85	170	97	59	41
Number o aboliti	f legal notices issue on of nuisances	ed for a	batement	or	11	33	10	13	(
	nded over to Boroug			art-				100	
	ent by request of Cor	nmittee					5	2	
	do. owr	ier			8	3	1	10	
Letters wr			***		298	373	345	149	116
	reported at Sanitary	Office			19	15	42	32	10
	inspected			***	19	15	42	32	10
	s taken out				2			***	
	ervations taken					28	7	11	1
	abolished				9	8	9	4	8
Section 1	Tub Closets registere				56	85	62	28	28
Do.	applications received				541	393	186	265	138
Do.		do.	Tubs		100040	34	25	32	50179
Do.	Receptacles emptied				102348	119729	160339	119322	50178
Do.	visits under Food and		cts		24	8	14	21	17 -1
	res made or destroye	d	***		pig (20st.)		15 pigs	1 pig	17 pig
ish		**					07.11		67.11
ruit			***				67 lb.		67 lb
	Drugs—samples purch	nased	***		25	9	8	27	6
Do.	adulterated		***		2	1		1	
ALL OF A PERSON AND A PROPERTY.	ples taken for Analys	18			2	3	4	***	
Do.	polluted				1	3	1		

#### COUNTY BOROUGH OF HUDDERSFIELD.

## Canal Boats Acts, 1877 and 1884.

Report of the working of these Acts during the year ended December 31st, 1894.

To the Huddersfield Urban Sanitary Authority.

The work of Canal Boat Inspection during the year 1894, has been seriously interfered with owing to the illness and death of the Canal Boats Inspector, Mr. James Lightfoot.

The number of boats met with during the year was 41, and of these, 46 inspections were made, against 94 of the previous year. These boats came principally from Hull, Goole, Wakefield, and Mirfield, and were found, generally speaking, to be in a satisfactory condition.

The cargoes, as in past years, were of a miscellaneous character, the principal being Logwood, Timber, and general articles of merchandise.

The population found on board these boats numbered 153 persons, viz.:—adult males, 92; adult females, 28; and children, 33.

Ages of Children found on Canal Boats.

Ages	Months		YEARS.													m
	1	4	1	2	3	4	5	6	7	8	9	10	11	12	13	Totals.
Number	2	1	2	2	2	2	2		3	3	3	3	4	2	2	33
Males	2	1	2	1	1		2		1	2	2		3	2	2	21
Females				1	1	2			2	1	1	3	1			12

Annexed are particulars of the information especially desired by the circular dated 29th December, 1893, issued by the Local Government Board and herein replied to seriatim.

- The No. 1 District Inspector of Nuisances was appointed Inspector under the Canal Boats Acts.
- (2) 46 Boats, including 29 broad boats and 17 Flyboats; of these 30 had been registered at Goole, 12 at Mirfield, 1 at Hull, 1 at Wakefield, 1 at York, and 1 unregistered.
- (3 The infringements of the Acts and regulations with respect thereto, were as follows:—
  - (a) Registration. (One).
  - (b) Notification of change of master or owner. (None).
  - (c) Absence of Certificate. (Six). One owner was the offender in four cases. In two cases notices were served on the owner and duplicate duly returned, and in some of the others personal explanation of the Captain was accepted. It is still surprising that boats having passed through other inspection districts should arrive here without Certificate.
  - (d) Marking. (Four). All belonging to the same owner. Subsequent inspections show that the Acts have been complied with.
  - (e) Overcrowding. (None). The 46 Boats inspected were registered for the accommodation of 248 persons, but only 153 were found occupying the cabins.
  - (f) Separation of Sexes. (None). As in the previous year the ages and relationship of the dwellers in the 46 boats did not necessitate separation.
  - (q) Cleanliness and Ventilation. Only four of the cabins might be described as dirty, and orders were given to thoroughly clean them out.
  - (h) Painting. (Two). One form was issued requiring painting to be done, and was duly returned; and in the other case, the boat has been broken up.
  - Provision of Water Cask. (No infringement). Casks or other vessels being generally clean and free from visible pollution.

- (j) Removal of Bilge Water. Generally well attended to.
- (k) Notification of Infectious Disease. (None).
- (1) Admittance. In no case was the Inspector refused.
- (4) No legal proceedings taken.
- (5) Notice forms are sent to the owner requesting the contraventions to be remedied, and the duplicate notice returned within a specified time, signed by some other Canal Boat Inspector. All cases of contraventions are reported to the Sanitary Committee.

The arrangements made through the kindness of the L. & N. W. Ry., whereby their Lock-keeper at the entrance of the Huddersfield Canal, notifies daily all boats passing up the Canal, have been continued throughout the past year.

# Several Congresses were held during the year.

The object of these Congresses may be said to be two-fold; on the one hand to provide for the assemblage of sanitary workers to compare their experiences and to interchange their ideas, and on the other hand to assist in the diffusion of public interest and knowledge in sanitary matters by showing what each community has the power to do, and the duties to be performed.

In the month of July, Sanitary Authorities were invited by the London Council to send delegates to a Conference in London, in connection with the prevention of the spread of diseases by vagrants. Delegates attended from Huddersfield, and the following resolutions amongst others were agreed to after prolonged discussion.

 That there should be power to Local Authorities to require Medical Examination of all persons entering Common Lodging Houses or Casual Wards, and that each inmate of a Common Lodging House or Casual Ward should, on admission have a bath of fresh water.

- 2. That Local Authorities should have power to order the keeper of a Common Lodging House in which there has been Infectious Disease, to refuse fresh admissions for such time as may be required by the Authority.
- That the Local Authority should be empowered to require the temporary closing of any Common Lodging House in which Infectious Disease has occurred.
- 4. That Local Sanitary Authorities should have power to require the detention of any inmate of a Common Lodging House or Casual Ward who may reasonably be suspected of being liable to convey Infectious Disease.
- 5. That means should be provided for the detention and isolation of any vagrants found wandering in a public place if reasonably suspected of being liable to convey Infectious Disease.
- 6. That the Local Authority should have full power to require the disinfection of the person and the clothes of any person in a Common Lodging House or Casual Ward whether infected or exposed to infection.
- 7. That arrangements should be made by which the occurrence of Infectious Disease in Common Lodging Houses or Casual Wards should be made known by the Local Authority of the district to the Local Authorities of other districts.
- That Local Authorities should be empowered to require the vaccination or the revaccination of persons in Common Lodging Houses or Casual Wards who are exposed to the infection of Small Pox.
- At the Congress of the British Institute of Public Health the following resolutions were adopted by the various sections.
- That this Conference instructs the Executive of the British Institute of Public Health to impress upon the Government the necessity of making it compulsory on all Local Authorities to provide adequate and suitable Hospital Accommodation for Infectious Diseases including powers for compulsorily acquiring land.

- 2. That in the opinion of this Congress the Local Government Board is not justified in affording owners and occupiers of land in the vicinity of a site proposed to be purchased by a Public Authority for Infectious Hospital purposes, any protection beyond that given them by the action of the general law.
- That Municipal Authorities should be empowered to establish and maintain Winter Gardens with wholesome Entertainments for the people.
- 4. That the Preventive Medicine Section of the Congress of the British Institute of Public Health now sitting in London would suggest to the Medical Officer of the Local Government Board the advantage that would accrue to the Public Health if his Department would collect and publish the salient points bearing upon the proof of the preventibility of Consumption and Tubercular Diseases generally (i.e. the summary of our present knowledge of causation of these diseases together with practical suggestions as to the details of precautionary measures to be observed by individuals or to be adopted by public bodies, and that such facts and recommendations be disseminated as widely as possible.)
- 5. That in the opinion of this joint conference of the Chemical, Municipal, and Parliamentary Sections of the British Institute of Public Health, amendment of the Sale of Food and Drugs Act is required in the following among other directions:
  - a. The modification of the Warranty Defence in such a way as to ensure the punishment of the real offender.
  - b. The appointment of some adequate and efficient scientific Authority for the fixing of Milk and other standards and the investigation of analytical methods.
  - c. The registration of Itinerant Vendors, and further provision for sampling goods in transit.
  - The requirement of clear and legible Labelling of Mixtures and Impoverished Goods.

- e. The clear inclusion in the term "Food" of such articles as Baking Powders which under the law as at present construed may be so made and sold as to injure the health of the public.
- 6. That the Local Government Board, the Metropolitan Asylums Board and the various County Councils have their attention called to the importance to the public of the early recognition and accurate diagnosis of Diphtheria, and that they be asked to afford medical men facilities for obtaining such bacteriological assistance as may lead to the prompt recognition of the disease.
- That Municipal Authorities should be empowered to establish and maintain crematoria.
- That Testators should be empowered to direct how their bodies are to be disposed of, and executors be compelled to observe such directions.
- 9. That it is desirable in the interests of Public Health that the present permissive action provided in the Public Health Act of 1875:—To construct Public Slaughter Houses, be made compulsory, and that after the building of such houses, notice be given to owners of all private slaughter houses that after the expiration of two or three years, no further slaughtering can be permitted in any, but Public Slaughter Houses.
- 10. That it is desirable that a representation be made to Government, that the costs incurred in Port Sanitary Work in seeking to protect the Country from the invasion of Cholera should be paid in whole, or in part by the State.

# The following were the recommendations of Engineering, &c. Sections:—

 That the present want of uniformity in the Regulations and Bye-laws of Local Authorities in relation to Sanitary Construction and Appliances is detrimental to sanitary progress and injurious to the health of the people, and should therefore, be amended. That it is desirable that the Local Government Board should after consultation, frame a model set of Rules and Regulations.

2. That it is important that every Sanitary Inspector should have a practical knowledge of building construction, for the reason that as his duty is to see the work properly carried out; he cannot fulfil this duty unless he has the trade technical knowledge.

That this decision be communicated to the Local Government Board.

- 3. The want of uniformity is deeply regretted in the decisions given by Judges and Magistrates, and it is believed that the only remedy is the appointment by Government of a Special Tribunal which should deal with all the questions of building construction and sanitary appliances, and all cases which arise out of building.
- 4. That the Congress desire to call the attention of the Board of Trade to the fact that while cattle trucks are bound to have periodical cleansings, yet carriages for human beings are outside its control.

Having regard to recent scientific investigations, the Congress suggests some rules should be framed to bring railway carriages under at least as much sanitary control as sheep and cattle now have.

5. That advantages will be attendant upon the adoption of certain standards of purity of Sewage Effluents framed to meet the various conditions under which these effluents are delivered, and that the Local Government Board be invited to fix such standards.

The importance and practical character of the meeting of the Sanitary Institute held in Liverpool may be judged from the titles of some of the papers given during the Congress.

- 1. The origin of Typhoid Fever.
- 2. The spread of Typhoid Fever by Sewers.
- 3. Infantile Mortality and Female Labour.
- The position of the study of Industrial Diseases.
- 5. Purification of air emitted from Infectious Hospitals.

- 6. Protection of the Health of Female Workers.
- 7. Town Smoke.
- 8. Housing of the Working Classes.
- 9. Disposal of Town and other Refuse by burning.
- Slop Closets and Sewage Disposal.
- 11. Tub and Pail System.

This last paper is so interesting to a pail town like Huddersfield that the following extract is interesting.

"Most of the towns which have adopted this system are not pressing the erection of the tub and pail closets at the present time, but are turning their attention very seriously to the question of water carriage, either by the use of the trough or of the waste water or fresh water closet, and the opinion generally appears to have again turned in favour of water carriage, doubtless the cheapest possible manner of conducting the sewage to any given point; and this is more especially the case in those towns where a sewerage system has just been completed or is now being carried out. The tub and pail system is also considered by all to be a most expensive system, and one which does not give resultant benefits in comparison to the excessive cost in carrying it out in a proper and efficient manner.

The author is of opinion that the tub and pail system has in addition to the reduction of the death-rate, undoubtedly resulted in benefit to the community as against the old midden system, but that the question of cost is so serious, that no large town is now likely to undertake the adoption of the system.

Taking it as a whole he considers it has not been the success that was expected, although it may be still effectively adopted as an intermediate system in towns which are rapidly increasing, and which are not yet in a position to carry out a complete water carriage system.

In conclusion the author is of opinion the advantages and disadvantages of the system are as follows, namely:—

#### ADVANTAGES.

- 1. That it has been, and is likely to be, beneficial as an intermediate system between the midden and water carriage, enabling Corporations as it does to give more time to the questions of sewerage, and to make experiments as to the best mode of dealing with the excreta under the varied circumstances of each town.
- 2. That it is an immense stride in advance of the midden system. The excreta is removed more easily, more frequently, and with less nuisance, and there is no risk of its percolating into the surrounding ground, and polluting both soil and air.
- That it may be of use in towns where an adequate water supply cannot be obtained readily or without excessive expenditure.
- 4. That it is well adopted to the wants of sparsely populated districts, and especially villages, whose water supply is taken from wells, and where the excreta would be utilized on the spot as a manure.

#### DISADVANTAGES.

1. That the great questions of cost, both in the carriage of the pails and dealing with the excreta, is such that in large towns the system cannot be carried on with advantage.

- That there are great difficulties in the way of its being carried out in a proper manner and without creating a nuisance.
- That being a conservancy system it is not the best mode of dealing with the excreta independent of the question of cost.
- 4. That in the event of its introduction, nothing is ultimately saved in the construction of a system of sewerage and very little annual cost in the carrying on of outfall works.

And generally, that the system is now dying out and will again give place to a water carriage system, which is certainly the cheapest and best mode of carriage at present possible."

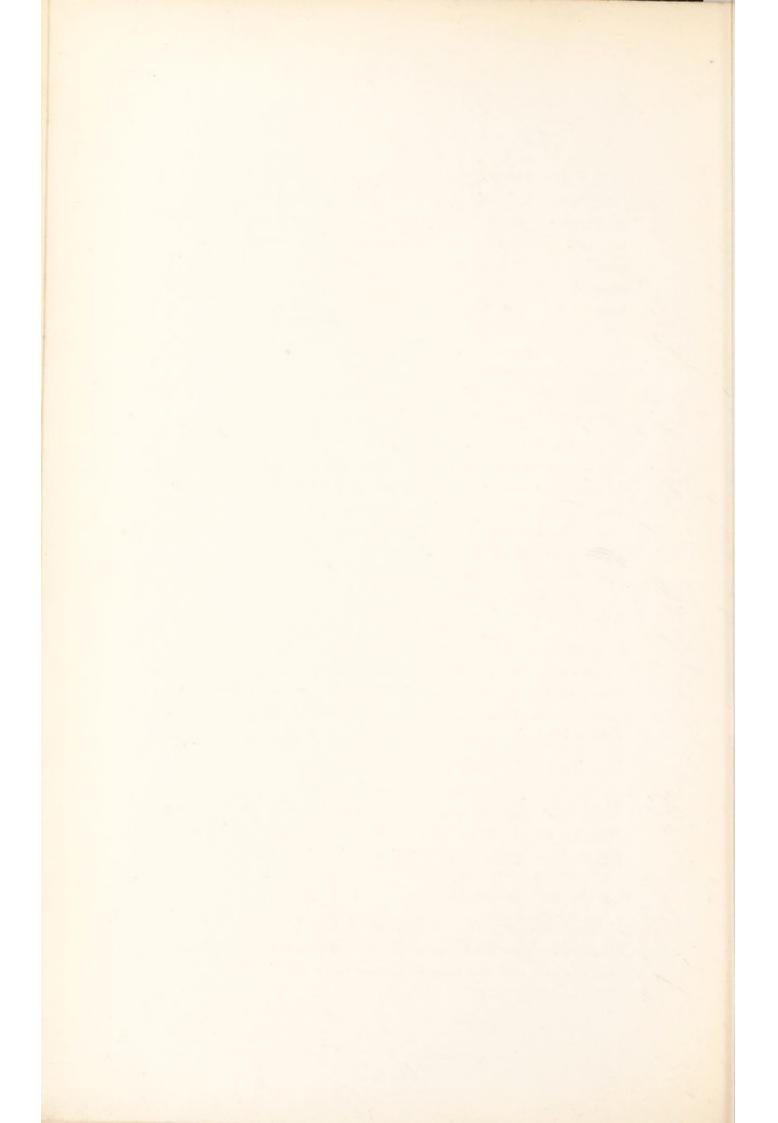


TABLE I.

Return of Births and Deaths Registered during the thirteen weeks ended March 31st, 1894.

1000	ymotics	During the 13 weeks ended 31st March, 1894	0-91* 0-93 0-82‡ 1-82 0-53 1-60‡ 0:70	:	1.18
Rate of Mortality per 1000	Seven Zymotics	During the corres- ponding period year previous.	0.46 1.88 0.83 1.70 0.46 1.62	:	0.00
of Mort	Causes.	During the 13 weeks ended 31st March, 1894	15-94 118-16 118-16 118-16 118-16 118-16 118-16 118-16 118-16	:	18-29
Rate	All Ca	During the corres- ponding period year previous.	18-63 18-85 12-41 12-41 16-21 16-21 16-87	;	18-27
	*8	All other Disease	60 119 77 77 77 71 111 121 121 131 131 131 131 131 131 13	228	9-29
		Сапсет.	480 - 101017001 : 11	20	0.81
	13	Heart Disease	01 - 2 - 2 - 2 - 2 - 1 - 1	29	1.18
ŧ	eino	Bronchitis, Pneum and Pleurisy.	13 13 13 11 13 13	89	0-20 2-20 3-63
		.sisidadq	5175 51 51 54 51 14	54	2.20
	1	Diarrhea.	80-111111111	5	0-30
ES.		Typhoid T	11117111111	-	0-04
VEN DISEASES.		₹ biodqyT	-:::::	\$1	0.08
EVE		Whooping Cough.	::::::::::::::::::::::::::::::::::::	6	0.16 0.37
ZYMOTIC DIS		Diphtheria.	: : - : :	4	0.16
ZYA		Scarlatina.	T   T	00	0.32
		Smallpox. Measles.			
pu	re s	Persons aged 50 year	18 18 10 10 11 13:	991	:
		4 suq nuqet 2 heats	: :- : : :- : :- :	co	:
TLE		3 and under 4 years.	24 !L !LL ! !co !cd !	10	:
INFANTILE		2 and under 3 years.	1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6	:
INOM		1 and under 2 years.	1001 1 1001 40001 1	23	:
		Under 1 year.	82 8 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	96	:
+681 5 2 1 1 1 1 1 1 1	ing,	Deaths Registered du 13 weeks ended 31st Ma	105 39 39 20 51 11 26 66 66 66 66 66 66 10 10 10 10 10 10 10 10 10 10 10 10 10	449	18-29
the 1894	'qo,	Births Registered dur 13 weeks ended 31stMa	163 442 553 553 688 688 688 688 688 688 688 688 688 68	220	22.41
the .	968 1 10	Estimated Population	26,445 8,620 9,833 2,366 8,811 15,220 12,504 8,965 5,747	98,511	:
	'u	Census Populatio		95,422	:
		DISTRICTS.	Huddersfield (Central)   25,909   Marsh   8,330   Fartown   Deighton and Bradley   2,273   Dalton   14,856   Lockwood   12,076   Lindley   12,076   Longwood   12,076   Longwood   12,076   Lindley   8,575   Longwood   5,406   Infirmary (Central)   1,0000   1,00000   1,000000   1,0000000   1,0000000   1,00000000   1,000000000   1,0000000000	Borough	Rate per 1000 of Esti. mated Population

\* Central, with Infirmary, 17-45. Deaths of Children under one year per 1000 births, 175.

‡ Fartown, with Fever Hospital, 14·29.
Death Rate of 33 large English towns, 20·96.
Birth Rate of 33 large English towns, 31·99.

† Lockwood, with Workhouse, 27-93.

Zymotic Death Rate of 33 large English towns, 2-41.

TABLE II.

Return of Births and Deaths Registered during the thirteen weeks ended June 30th, 1894.

rooo. ymotics		During the 13 week ended 30th June, 18	0.61* 1.634 1.634 1.05 2.577 0.89 3.49	1.59
lity per 1000. Seven Zymotics		During the corres- ponding period year previous.	1.07 0.41 0.41 0.45 0.45 0.45 0.45 0.45 0.45	0.99
Rate of Mortality per 1000.		During the 13 week ended 30th June, 18	18-16 18-16 10-18 10-18 10-18 117-33 117-33 117-33 117-33 117-33 117-33 117-33 117-33	15.28
Rate of M All Causes.		During the corres pending periol year previous,	15-12 18-62 17-02 17-03 17-84 17-84 1-84 1-84 1-84 1-84 1-84 1-84 1-84 1	0-12 0 04 0-08 1-43 3-01 0-98 0-81 7-46 17-28
	-sasi	essiG redio IIA	581 18 18 18 18 18 18 18 18 18 18 18 18 1	91-1
		Cancer.	20 1 1 1 2 2 2 3	0.81
-	**	Heart Disease	2044400004401 :0 2	86-0
v		Bronchitis, Pneur and Pleurisy.	61 2 2 1 2 2 4 4 1 1 6 2 7	10.
	-	Phthisis	10 10 1-1-10-1 101 10	.43
		Diarrhea.	- : : : : : - : : : : : : : : : : : : :	.08
,	2	Other.	-:::::::	0.50
ASES	Fevers	Typhoid.	:-:::::::	120
SEVEN ZYMOTIC DISEASES.	-	Whooping Cough.	-0::004-0::: 6	77
SEV TC 1	-	Diphtheria.	4:-0:-::0	-41
LOW.	-	Scarlatina.	111111111111111111111111111111111111111	0.08 0.08 0.41 0.77
72	-	Measles.		080
	_	.xod llam2		0
pue		Persons aged 50 y	8514585454:7 4	
	-	4 suq nuqet 2 Xesus	[01-1] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	
ω×.	-	3 and under 4 years		
INFANTILE MORTALITY	_	s and under 3 years		
IFAN ORT	_			-
NIN		1 and under 2 years	26 :: 31 1 1 1 1 2 2	-:
		Under 1 year.	41	- :
		Deaths registered of the Bode 30th	82 242 242 253 254 254 254 254 254 254 254 254 254 254	18-09 15-28
*68i 'a	airul au L	Births registered of 30th	1116 38 88 88 88 88 88 140 170 171 171 171 171 171 171 171 171 17	18.09
		Estimated Popular	26,445 8,620 9,833 2,366 8,811 15,220 12,200 12,504 8,965 	:
	noiti	Census Popula		:
		DISTRICTS.	1.01	Rate per 1000 of Esti- mated Population

† Lockwood, with Workhouse, 23.75.
Zymotic Death Rate of 33 large English towns, 2.55. \* Central, with Infirmary, 14-42. 

‡ Fartown, with Fever Hospital, 10-20.

Deaths of Children under one year per 1000 births, 153. 

Birth Rate of 33 large English Towns, 17-43.

TABLE III.

Return of Births and Deaths Registered during the thirteen weeks ended September 29th, 1894.

-				
lity per 1000. Seven Zymotics	During the 13 weeks ended 29th Sept., 1894	1.22 1.22 1.22 1.70 1.70 0.93 0.93 1.32 1.32 1.43 1.43 1.43 1.43 1.43 1.43 1.43 1.43	:	1.47
Rate of Mortality per 1000.	During the corres- ponding period year previous,	2.44 2.36 2.36 2.37 2.38 2.39 1.38 4.91 1.38	:	2.29
of Morta	During the 13 weeks ended s9th Sept., 1894	88.88 8.88 8.88 8.88 8.88 8.88 8.88 8.	:	13.28
Rate of M	During the corres- ponding period year previous,	11.78 11.78	:	16.46
	All other Diseases.	4 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	162	09-9
	Сэпсек.	01017000 [ [ ]	17	69-0
	Heart Disease.	4- : : : : : : : : : : : : : : : : : : :	30	1.55
1	Bronchitis, Pneumonia and Pleurisy.	F-F-80 : 60 F-01 F-F 61	39	1.59
	Phthisis.	400 100-100 110	45	1.7
	Diarrhota.	01     01	9	0-24
	Other, 3	1 : : : : : : : : : : :	1:	:
SEVEN ZYMOTIC DISEASES.	.biodq\T	-::::::::::::::::::::::::::::::::::::::	н	0.04
SEVEN IC DISE	Whooping Cough.	[:   t- 00	13	0-23
SEV	Diphtheria	01 1 1- 1 1 1 1 1 1	00	0.32
ZYMO	Scarlatina	11:14:11:00:	4	0.16 0.16
	pleasles.	∞ !!!!!" ! !!!	4	
	Small Pox.		1	
pue	Persons aged 50 years upwards.	26 6 8 8 8 8 11 11 8 8 4 11	11.7	:
	4 and under 5 years.	1111111-	00	:
TILE LITY.	3 and under 4 years	21 1- 1 22 : 1 1	1-	:
INFANTILE	2 and under 3 years.	10 - 1 - 01 4 1 - 1 1 - 1	15	:
MO	r and under 2 years.	4: : : : : - : -	13	:
	Under I year.	57.42.01.08.2 : : :	10	:
941 ga	Deaths Registered duri 13 weeks ended 29th Sep	25 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	326	13.28
1, 1894 18 the	Births Registered durin 13 weeks ended 29th Sep	151 1 5 5 7 5 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5	484	19-72
	Estimated Population a	26,445 9,620 9,833 2,366 8,811 15,220 12,504 12,504 5,747 	98,511	:
-1	Census Population		95,422 9	:
	DISTRICTS.	Huddersfield (Central)   25,909   Marsh   8,330   Fartown   9,584   Deighton and Bradley   2,273   2,273   2,273   2,273   2,273   2,273   2,273   2,000   2	Borough	Rate per 1000 of Esti- mated Population

\* Central, with Infirmary, 13.81.

Deaths of Children under one year per 1000 births, 114.

‡ Fartown, with Fever Hospital, 13·06. Death Rate of 33 large English towns 16·38. Birth Rate of 33 large English towns, 29·85.

† Lockwood, with Workhouse, 14·12.
Zymotic Death Rate of 33 large English towns, 2·78.

TABLE IV.

Return of Births and Deaths Registered during the thirteen weeks ended December 29th, 1894.

	No. of the contract of the con			
Zymotics	During the 13 weeks ended 29th Dec., 1894	1.97 1.88 1.88 1.88 1.88 1.88 1.88 1.88 1.8	:	1.83
Seven Z	During the corres- ponding period year previous.	0.61 0.94 0.94 0.41 1.06 1.38 1.38 1.38	:	1.15
Rate of Mortality per 1000.	During the 13 weeks ended s9th Dec., 1894	16-69 17-23 17-25 16-09 11-17 11-17 11-17	:	16.83
All Ca	During the corres- ponding period year previous.	17.01 11.92 17.09 17.09 17.88 17.88 17.88 17.81 6.38	:	17-73
	All other Diseases.	727+73278c :c	182	7-41
	Савсет.	41001-00014 [-00 ] [	107	
	Нези Disease.	×04	55	1.50 1.02
1	Bronchitis, Pneumoni and Pleurisy.	85 - 8 - 1 5 4 + 2 1 1 1 4	20	3.42
	Phthisis.	000 iu I 470 i i iyo	9	1-63
	Diambea.	0 14 11 14 14 11	90	0-30
ES.	Typhoid.	21 : : : : : : : : : : : : : : : : : : :	10	0.50
SEAS	Whooping Cough			
SEVEN IC DIS	Diphtheria.	2	5 14	0-20 0-57
SEVEN ZYMOTIC DISEASES	Scarlatina.	1 1 111111	6	0-37 0-3
ZV.	Measles.		1-	0-28 0-3
	Small Pox.		: 1	ò
pur	Persons aged 50 years apwards.	84801740017	100	:
	4 and under 5 years.	::-::-:	+	:
ILE ITY.	3 and under 4 years.	+01       00   -   -01	13	
INFANTILE MORTALITY.	2 and under 3 years.	1031-131-4   :  -	16	
INF	1 and under 2 years.	× 00 - 01 - 00 9	24	
	Under 1 year.	800178500 : ::	66	
	Deaths Registered during weeks ended 29th Dec.,	110 312 313 314 316 316 317 317 317 317 317 317 317 317 317 317	413	90.78 16.83
1681 °	Births Registered during 13 weeks ended s9th Dec.	14. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	510	90.78
ot-	Estimated Population as middle of the year, 18	26,445 8,620 9,833 2,366 8,811 15,220 12,504 8,965 7,747	112,86	
	Census Population,		95,422	
	DISTRICTS.	Huddersfield (Central)   25,909     Marsh	Borough	Rate per 1000 of Esti- mated Population

\* Central, with Infirmary, 18-67. Deaths of Children under one year per 1000 births, 194.

† Lockwood, with Workhouse, 21.83. Zymotic Death Rate of 33 large English towns, 1.97. ‡ Fartown, with Fever Hospital, 15·51. Death Rate of 33 large English towns, 17·76. Birth Rate of 33 large English towns, 30·74.

TABLE V.

Return of Births and Deaths Registered during the fifty-two weeks ended December 29th, 1894.

			the state of the s		
1000.	ymotics	During the 52 weeks ended Dec. 29th, 1894.	1.18* 1.40 1.127 1.27 1.52 1.52 1.854 0.56 1.22 1.22	:	1.52
lity per	Seven Zymotics	During the corres- ponding period year previous.	1.14 1.41 0.83 0.85 0.85 0.97 0.097 0.097 1.11 1.06 0.097 0.097 0.097	:	1.38
Rate of Mortality per 1000.	uses.	During the 52 weeks ended Dec. 29th, 1894.	14-27 16-30 111-53 111-53 116-63 15-10 16-05 112-31 13-27	:	15.92
Rate	All Causes.	During the corres- ponding period year previous.	16-46 115-52 115-52 115-55 116-49 116-49 117-85 117-85	:	17-43
		All other Diseases.	201 201 201 201 201 201 201 201 201 201	755	69-2
		Cancer.	8113672664 :0	850	0.83
		Heart Disease	75 c - c 0 1 1 2 2 2 3 3 3 3 4 3 4 3 4 3 4 3 4 3 4 3 4	120	1.22
	w	Bronchitis, Pneumon and Pleurisy.	65 29 10 10 10 10 10 10 10 10 10 10 10 10 10	286	5.91
		Phthisis.	38 14 18 11 18 11 18 18 18 18 18 18 18 18 18	171	1.74
		Diarrhea.	000101 : :01 : :	18	0.18
	SS.	Typhoid.	-       -	01	20-0
	EASE	\$ biodq\T	4-1:1-00:1:1-1	=	0.11
/EN	DISEASES	Whooping Cough.	00001001004 : : :	20	0.56
SEVEN	TIC	Diphtheria.	40001 1-4 1-11:	27	0-23 0-27
	YMO	Scarlatina.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	52	0.23
-	7	Measles.	0	13	0-13
		Small Pox.		1 : 1	- :
1	pue s	Persons aged 50 years abnawqu	135 53 16 16 18 87 87 87 87 87 87 87 87 87 87 87 87 87	262	:
		4 and under 5 years.	[0100 [-01 [01 [ 100 [	13	:
TLE	H.	3 and under 4 years.	E 00 01 10 0 1 4 4 0 4 1	33	:
INFANTILE	RTAI	s and under 3 years.	8 20 23 - 20 1- 1- 20 1 1 1 21 -	48	:
N.	MO	1 and under 2 years.	22 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	84	:
		Under 1 year.	82 23 24 6 6 6 6 7 7 17 17 17 17	318	:
		Deaths Registered durin weeks ended Dec. 29th	376 1140 1113 35 146 229 220 200 110 76 48	1563	15-92
681 68 a	'q16	Births Registered during weeks ended December a	577 164 170 32 198 291 270 167 	1988	20-25
91	.+68	Estimated population	26,445 8,620 9,833 2,366 8,811 15,220 12,504 8,965 5,747		:
	u	Census Populatio		95,422 98,511	:
		DISTRICTS	Huddersfield (Central) 25,909  Marsh Fartown 9,534  Deighton and Bradley 2,273  Dalton 8,413  Almondbury 12,076  Lockwood 12,076  Lindley 8,575  Longwood 5,406  Infirmary (Central) 5,406  Hospital (Fartown)  Workhouse (Lockwood)	Borough	Rate per 1000 of Esti- mated Population

\* Central, with Infirmary, 16·09.

Deaths of Children under one year per 1000 births, 160.

Fartown, with Fever Hospital, 13.27.
 Death Rate of 33 large English towns, 18.13.
 Zymotic Dea Birth Rate of 33 large English towns, 30.75.

<sup>†</sup> Lockwood, with Workhouse, 21-91.

Zymotic Death Rate of 33 large English towns, 2-43

TABLE VI.
Classification of Deaths Registered during the 52 weeks ended December 29th, 1894.

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		Class I.—ZYMOTIC DISEASES.  Order 1—Miasmatic  Small Pox  Measles  Scartlet Fever  Whooping Cough  Simple Continued and Ill-D. F. (Typhus)  Esteric or Typhoid Fever  Order 2—Diarrhoad  Darrhoan Dysentery  Order 3—Maharial Influenza  Order 4—Veneral  Syphilis  Order 4—Veneral  Syphilis  Order 4—Veneral  Bryspelas  Pramia, Septicemia  Pramia, Septicemia  Remansin Septicemia  Remansin Fever  II.—PARASITIC DISEASES  III.—DIETIC DISEASES  III.—DIETIC DISEASES  III.—Dietic Disease  Pramia Septicania Septicania  Remansin Fever, Rheu, Heart  Remansin Fever, Rheu, Heart  A Cancer, Malignant Disease  Tabes Mesenterica  Graner Septicial  Gout  A Cancer, Malignant Disease  Tabes Mesenterica  Graner Septic  Graner Septic  Graner Malformational Diseases  V.—DEVELOPMENTAL DISEASES.  Phithisis  Other Constitutional Diseases  Congenital Malformations  Order 1—Nervous System  I Inflammation of Brain, &c.  Order 1—Nervous System

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Apoplexy, &c.  Hemiplegia Epilepsy Epilepsy Convulsions Laryngismus Stridulus Laryngismus Stridulus Disease of Spinal Cord, &c. Order 2—Organs of Special Sense Order 3—Circulatory System Perlearditis. Acute Endocarditis Other Diseases of Heart Other Diseases of Heart Abourism Embolism Thrombosis Corder 4—Respiratory System	Laryngitis Croup Emphysema, Asthma Prouchitis Preumonia Pleurisy Other Useases of Respiratory System	Dentition Sore Throat, Quinsy Diseases of Stomach Entertits Obstructive Disease of Intestine	Ascites. Cirrhors of Liver. Jamalee, &c. Other Diseases of Digestive System Order 6—Lymphatic System Order 7—Urlnary System Nephritis Disease of Bladder Other Disease Albuminuria. Other S—Reproductive System. Order S—Reproductive System.	Male Organs  Female Organs  For Parturition  Puerpearal Corvivisions Phacetta pravia, Flooding.
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TABLE VI.—Continued.

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Narsh   Partown   Delight'h   Dalton   Almond-lock   Dalton   Da	7 8	д тэчО	H :	D4 . :	1:24:1:1:1	20	
Hud-   Hud-   Marsh   Fartown   Delght'n   Marsh   Hud-   Hud-   Hud-   Marsh   M	Wor	Under 5	::	:::	:-:::::	65	52
Hud-   Hud-   Marsh   Fartown   Delght'n   Marsh   Hud-   Hud-   Hud-   Marsh   M	oital	Over 5	::	:::	:::::::	t+	
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и лиг			Order 9—Bones and Joints Order 10—Integumentary System VII.—DEATHS FROM VIOLENCE	VIII,—DEATHS FROM ILL—DEFINED AND NOT SPECIFIED CAUSES.	Dropsy. Debility, Atrophy, Inc. Mortification Tumour Abscess Hemorrhage Sudden Death Causes not specified o	Totals	TOTALS AT ALL AGES
The state of the s				>			

TABLE VII.
Death Rate per 1,000 per annum for 1894 and fifteen previous years.

oth	Consumption Diseases of 1 Breathing org	4.65	5.45	5.69	7.64	6.58	5-95	5.40	7.26	6.38	6.50	5.65	7.65	18-9	6.50	6.73	7-64
	Violence an	0.39	0.37	0.48	99-0	0.48	0.38	9-0	0.51	0.79	0.74	0.57	0.58	0-65	0.75	0.61	99-0
otic	Seven Zyme Diseases.	1.52	1.38	1.53	2.38	1.23	2.02	1.55	3.39	1.63	1.42	1.77	1.68	2-63	1.26	2.49	2.78
	Diarrhoea.	0.18	0.53	0.19	0.11	0.39	98-0	0-19	0-41	0.48	0.50	0-63	0.44	0.53	0.38	0.91	0.34
	Fever.	0-11	0.14	90-0	0.16	0.25	0-11	0.13	0.10	0.14	0-11	0-14	0-18	0.18	0-13	29-0	0.28
SEASES.	Whooping Cough.	0.56	0.13	0.30	0.62	0.45	0.16	0.41	89-0	0.32	0.29	0.70	0.55	0.64	0.45	0.15	0.41
Id	Diphtheria.	0.27	0.03	0.07	0.02	0.02	0.13	0.15	0-46	0.14	0.02	0-02	0.04	0.07	0.04	0-02	60-0
ZYMOTIC	ScarletFever	0.23	0.26	0.19	0.31	0.07	0.28	0.29	0.35	0.87	0-13	80-0	80-0	0.26	0.51	0.28	1.10
7	Measles.	0.13	0.26	0.71	1.12	0.04	86-0	98-0	1.39	0.19	0-65	81.0	0.39	96-0	60-0	0.40	99.0
	Smallpox.	:	0-05	0.01	:	0.01		0.03	:	:	:	:	:	:	:	0.05	:
pı	In persons at 50 years an upwards.	5.72	99-9	68.9	8.62	7.02	6.33	6.87	6.70	6.30	6-79	6-34	6.52	09-9	6.54	99-9	6-92
	Children ov 1 year and ur 5 years.	1.87	2.00	2.56	3.50	2.19	2.78	2.80	4-42	2.76	5.84	2.00	3.09	3.93	2.82	3.79	4.50
qer.	Children und	3.24	3.34	8-49	16.4	8.83	4.15	3.90	90-9	4-49	4.62	4.84	5.14	5-64	4.67	5.20	4.87
'səl	From all cau	15.92	17-43	18.14	22-96	18.84	18-79	18.21	22-99	19-54	20-02	19.54	21.38	22.39	20.35	22.04	22.95
in lo	Estimated Population the middle the Year.	98,511	97,552	96,599	92,656	94,253	92,825	91,419	90,034	88,670	87,327	86,004	84,450	83,271	82,113	81,780	80,245
		1894	1898	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879

The populations for 1884 to 1894 are those estimated by the Registrar-General, by geometrical progression. The populations for 1883, 1882, and 1881 are estimated by arithmetical progression, the two latter from the first published returns of the census of 1881. The populations of the earlier years are those estimated for those years at the time. The death-rates for 1880 are therefore probably one per cent., and those for 1879 0.5 per cent. too low. See Annual Report for 1882, p. 4, 5, note and p. 10 note, for 1883, p. 29, and for 1888, p. 16.

TABLE VIII.

	Total from all Causes.	16 09 118 27 118 27 118 27 118 27 116 63 116 63 116 119 12 31 13 27	15-92
	Other Causes,	0.20 0.20 0.35 0.45 0.45 0.70 0.70	0-36
	III-defined and not Specified Causes.	11.82 0.020 0.020 0.020 0.020 0.020 1.037 1.04 1.04 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05	1-13
Ages.	Violence.	0.0000000000000000000000000000000000000	0-39
all Ag	Diseases of the Reproductive System.	0.04 0.05 0.05 0.08 0.08 0.08 0.08	0.12
at	Diseases of the Urinary System.	0.52460058414120058	0-50
Living	Digestive System.	10.48 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0-94
	Diseases of the Respiratory System.	25.51.1.1.4.8.4.5.4.1.1.1.2.3.5.4.4.0.0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	3.76
Persons	Diseases of the Circulatory System.	153 1133 1140 1140 1140 1140	1.24
1,000 I	Diseases of the Nervous System.	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1.96
т 1,0	Developmental Diseases.	1.92 1.92 1.92 1.92 1.93 1.93	1-29
ty per	sisidad	1.36 2.27 2.27 2.27 2.27 2.27 2.27 2.27 2.2	1.74
Mortality	Constitutional Diseases (sistifad gnibuloni)	29 29 29 29 29 29 29 29 29 29 29 29 29 2	3.27
Mo	Seven Zymotic Diseases.	1.18 1.19 1.19 1.22 1.12 1.23 1.23 1.23 1.23 1.23	1.52
	Adults over 50 years.	24.58.59.45.84.45 8.55.50.45.84.45 8.55.50.45.84.45 8.55.50.45.84.45	5.72
	ı ço 2 Aesus	1.58 1.50 1.50 1.50 1.50 1.50 1.50 1.50 1.50	1.87
	Children under 1 year.	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3.24
	эзел-фиіН	21.89 21.89 19.09 17.85 17.85 17.85 19.18 19.18 222.79 222.79 18.69 18.63	20-25
	DISTRICTS	Central (with Infirmary)  Central (without Infirmary)  Marsh Fartown (with Fever Hospital)  Fartown (without Fever Hospital)  Delighton and Bradley  Almondbury  Lockwood (with Workhouse)  Lindley  Longwood  Longwood	Total for Borough, 1894

# TABLE IX.

Cases of infectious diseases certified under the 64th clause of the Huddersfield Improvement Act, 1880, or heard of through others so certified and by private enquiries, during the four quarters of the 52 weeks of the year 1894.

A Cases of Small-pox, Scarlet Fever, Typhoid, and Typhus Fever.

\$681 1894	Deaths in Hospital.	1 19:	17
s ende 29th,	Total deaths in Borough.	1 23 1 1	35
52 weeks ended becember 29th, 18	Admitted to Hospital.	402 6 6	413
Dece Dece	Total cases reported or heard of,	10 2 E E L	499
pq 1894.	Deaths in Hospital.	.9 - :	1-
13 weeks ended ember 29th, 18	Total deaths in Borongh.	10.0	14
3 week mber	Admitted to Instituted to	102 ::	108
Dece	Cases heard of.	127 10 	138
3d 1894,	Deaths in Hospital.	:00 ::	00
13 weeks ended ptember 29th, 1	Total deaths in Borough,	:44 :	10
13 week September	Admitted to Hospital.	105	108
Sept.	Cases heard of.	2 1 I I I I I I I I I I I I I I I I I I	129
3d 3d	Deaths in Hospital.	:- : ::	-
th, 1895	Total deaths in Borough.	:01:00	9
13 weeks ended une 30th, 1894	Admitted to Hospital.	:: 55	96
1.6	Cases heard of.	107 5 1	115
ded 1894	Deaths in Hospital.	:9::	9
lst, 18	Total deaths in Borough.	:00 01 :	10
13 weeks ender March 31st, 189	Admitted to Hospital,	: 5 : :	101
M	Cases heard of,	:5.6 :	117
		Small pox	The above 4 diseases.

B Other Diseases.

	1st Qu	uarter	op or	Quarter	3rd Or	arter	4th Qu	uarter	TOT	FOTAL
	Heard of	Hospital								
Continued fever	1	:	:	:		:	:		-	:
Measles & Rötheln	1	::	-		:	:	17	-	25	:
Chicken-pox			1	:		:			-	
Diphtheria	2	:	10	:	11	:	10	:	36	:
Puerperal Fever	:	:	1		:	:	1	:	01	:
:	n	:	1	;	61	:	61	;	œ	
Other and doubtful	63	:	2	****	9	:	14		27	::

## TABLI

	JA	NUA	RY.		F	EBR	UAR	Υ.		MAR	CH.		1	
1st week ended January 6, 1894	2nd week ended January 13, 1894	3rd week ended January 20, 1894	4th week ended January 27, 1894	5th week ended February 3, 1894	6th week ended February 10, 1894	7th week ended February 17, 1894	8th week ended February 24, 1894	9th week ended March 3, 1894	10th week ended March 10, 1894	11th week ended March 17, 1894	12th week ended March 24, 1894	13th week ended March 31, 1894		1894.
50	48	41	41	30	48	41	41	46	48	46	42	28	1	Tota
29 9 4 4 8	46 11 2 2 18	46 8 6 4 15	42 4 5 6 11	33 10 1 4 7	38 9 3 4 8	35 8 4 3 9	34 7 4 1	30 3 4 4 11	24 9 1 3	27 8 1 2 8	31 4 5 5 7	34 6 5 3 8	23456	Deaths at {
1	3	3	1	2	2	4	3	3	1	2	2	2	7 8	] [
1	1	2 1	1		1	1	1	2	1	1	1	2	9 10 11 12 13 14 15	Deaths from seven principal Zymotic Diseases.
13 1 1 1 1	10 8 3 1	12 4 4 1	9 8 2	7 4 4	3 4 5	3 4 2 2	6 1 	5 3 2	3 4 1	-1 -4 5 1 2	8 5 1		16 17 18 19 20	Deaths from
5 30.06 27.6 4.6 43° 39° 78.0 0.18 E. 28 54° 44° 7° 5°	35·7 11·5 43° 38° 76·0	43.8 6.0 41° 38° 77.0	29·51 39·2 8·1 42° 38° 70·0 1·24 S.W. 53 82° 51° 26° 24°	1 29·50 38·9 7·0 42° 39° 76·0 1·49 W. 49 83° 46° 27° 25°	9·8 42° 40° 80·0	3 29·64 37·7 8·2 42° 38° 75·0 1·72 8 . W 59 72° 50° 26° 24°	2 30·02 31·8 16·0 42° 37° 76·0 0·68 8. w. 37 78° 43° 15° 10°	2 29·56 42·2 11·4 41° 39° 79·0 1·62 S. W. 43 97° 53° 30°	3 29.48 41.1 11.7 41° 39° 72.0 2.07 S.W. 40 88° 52° 30° 29°	29·32 40·2 13·5 40° 40° 63·0	2 30 20 44·3 17·0 40° 41° 62·0 0·00 S.W. 10 92° 58' 29° 27°	29·95 46·1 26·0 40° 42° 48·0 0·03 8 E. 12 96°	21 22 23 24 25 26 27 28 29	Mean moisture Total Rainfal Prevailing Velocity of Wind Highest recorded
30 10 1068	28 13 1075	18 15 1156	18 10 1114	22 18 1133	16 8 1136	19 9 1117	23 9 1100	21 13 1105	13 8 1066	17 6 1146	15 6 1046	4	35 36 37	and Home Cases notified as
26.48	25.42	21.72	21.72	15·89 17·48	25.42	21.72	21.72	24:36	25.42	24:36	22.24	14.83	38	) Per 1000 of (
0·53 6·89	1:59 5:30			1:06 3:71			1·59 3·18				1.06 4.24	1·06 3·18	40 41	Death-rate { per 1000 lvg. {
				20·01 32·95										

	-		APR	IL.			1	MAY.				JUN	E.	
52 weeks.		14th week ended April 7, 1894	15th week ended April 14, 1894	16th week ended April 21, 1894	17th week ended April 28, 1894,	18th week ended May 5, 1894	19th week ended May 12, 1894.	20th week ended May 19, 1894	21st week ended May 26, 1894	22nd week ended June 2, 1894	23rd week ended June 9, 1894	24th week ended June 16, 1894	25th week ended June 23, 1894	26th week ended June 30, 1894
Births	1	51	30	39	32	41	35	32	27	20	29	30	40	38
All Ages	23456	27 6 5 3 6	22 3 2 3 9	31 5 5 4 8	26 7 2 1 6	26 11 2 2 5	29 4 3 4 10	32 7 3 4 9	41 7 7 7 3 10	34 6 5 2 7	29 3 1 4 15	27 3 3 3 6	26 2 2 2 3 10	25 4 4 5 2
Seven diseases Smallpox Measles Scarlet Fever Diphtheria Whooping Cough Contd. Typhus Fever Other&c. Diarrhœa	13		2	5 2 1 1 	3 1 1	2 2	1 21	3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5 4	2	1	1	3	1
Lung disease, &c. Consumption Heart disease, &c. Violence, &c. Institutions	18 19	3	6 3 2 1	4 2 3 1 4	5 3 2 2	4 6  2	4 1 2 2 3	6 2 2 	11 2 2 3	8 6 1 3	6 2 2 5	7 3 2 1 2	5 2 2 2 4	2 5 1
Inches)  ° F.  Range ° F.  EarthTher.4ft.6in  , , , 2ft.6in  of Air, %	23 24 25 26 27 28 29 30 31 32 33	44° 62·0 0·54 8. E. 14 108° 67° 35°	29·74 49·7 17·0 43° 45° 81·0 0·78 S. E. 14 109° 68° 37° 35°	0.67	47·2 19·0 45° 46°	47·2 14·0 45° 47° 60·0 0·35	29·64 49·9 15·0 45° 47° 55·0 0·70 W. 31 109° 60° 38° 36°	46° 48° 62.0	29·97 44·2 21·0 46° 48° 46·0 0·07 N. E. 20 102° 67° 28° 27°	29·55 46·2 16·0 47° 49° 47·0 1·00 N.E. 29 106° 66° 37° 35°	29·75 51·0 10·4 47° 49° 75·0 1·93 8.E. 20 104° 62° 39° 36°	0.18	29·83 56·4 19·4 48° 51° 57·0 0·25 S.W. 12 111° 71° 44° 42°	30·14 62·2 21·0 50° 55° 50·0 0·00 8, E 15 114° 79° 47° 46°
Sickn's, Paupers   Patients	35 36 37	6	18 12 1069	14 11 1080	14 11 1099	18 12 1020	16 8 1074	14 7 1067	23 10 1095	15 16 1098	8	25 9 1089	14 15 1083	9 15 1075
Birth-rate Death-rate Seven Zymotics . Breathing Organs	39	1:59	11.65	2.65	13:77	2:12	2:12	1:59	21.72	18:01	15.36	1.06	13.77	13.2
33 English towns	42	14:30		16.42	13.77	13.77	15:36	16.95	21.72	18:01	15:36	14:30	13:77	13.2

## TABLE

	JU	LY.			AUG	UST			SI	EPTE		-		
27th week ended July 7, 1894	28th week ended July 14, 1894	29th week ended July 21, 1894	30th week ended July 28, 1894	81st week ended August 4, 1894	S2nd week ended August 11, 1894	83rd week ended August 18, 1894	34th week ended August 25, 1894	35th week ended September 1, 1894	36th week ended September 8, 1894	87th week ended September 15, 1294	38th week ended September 22, 1894	89th week ended September 29, 1894		1894.
46	28	38	34	38	47	35	41	40	37	44	27	29	1	Tota
26 4 2 4 5	20 1 3 3 6	23 5 3 3 5	31 9 2 5 6	26 4 2 3	29 8 5 8	26 7 6 5 4	23 5 3 7	28 3 1 7 6	19 3 2 1 4	25 5 2 2 9	24 5 6 6	26 5 3 3 4	23456	Deaths at
1	2	1	7 3 1 1	5 1 2 1	3	1 3	2  1 	1 i	2 1	1	1	2	7 8 9 10 11 12 13 14 15 16	Deaths from seven principal Zymotic Diseases
4 6 1 2	2 2 3 2 3	2 6 2 3	3 2 3 3	2 4 1 2 2	2 1 4 5	5 1 1	3 2 1 2	2 4 6 4	2 4 1 1 2	2 3 2 1 3	7 3 3 1 3	3 2 2 2	17 18 19 20 21	Deaths from Deaths in Publi
14	59·5 23·0 53° 58° 53·0	58·1 15·7 53° 58° 60·1 1·30	60·8 20·0 53° 58° 60·0	29·72 61·3 16·0 58° 54° 60·0 0·80 8.E. 29 114° 73° 48° 47°	59·0 14·4 54° 57° 60·0 0·33	56.5 10.4 54° 56° 63.0	29·83 54·8 14·5 56° 54° 63·0 0·27 5.₩ £E 24 108° 68° 42° 40°	12·1 55° 54° 68·0 0·72	51·0 13·1 55° 54° 65·7	50·8 12·7 53° 53° 61·0	30·08 52·1 7·5 53° 80·0 0·36 E. 14 75° 59° 42° 40°	50·5 13·0 53° 52° 60·3 0·21 N. E. 10 93°	23 24 25 26 27 28 29 30 31 32	Mean Borom. Mean Therm. Mean Diurnal Mean height Mean moisture Total Rainfal Prevailing Velocity of Windl Highest recorder Lowest "" ""
19 7 1061	15 12 1042	28 12 1071	23 16 1081	19 12 1080	17 19 1055	22 11 1083	23 10 1099	23 9 1083	12 7 1091	16 7 1106	14 15 1080	11	35 36 37	New Cases o and Home Cases notified a clause 64, H Hudd. Distric
3:77	14·83 10·59	12.18	16.42	13.77	15.36	13.77	12:18	14.83	10.06	13.24	12:71	13.77	39	population
0.53 2.12	1.06	0.53 1.06	1.59	1.06	1.06	2.65	1-59	1.06	1.59	1.06	3.71	1.59	41	Death-rate per 1000 lvg.

<sup>\*</sup> Signifies Huddersfield had the lowest

## X.—Continued.

			OC'	POBL	ER.		N		MBEI		-	CEM	BER	-	88
52 weeks.		40th week ended October 6, 1894	41st week ended October 13, 1894	42nd week ended October 20, 1894	48rd week ended October 27, 1894	44th week ended November 3, 1894	45th week ended November 10,1894	46th week ended November 17, 1894	47th week ended November 24, 1894	48th week ended December 1, 1894	49th week ended December 8, 1894	50th week ended December 15, 1894	51st week ended December 22, 1894	52nd week ended December 29, 1894	TOTALS & AVERAGES
irths	1	55	33	37	35	46	45	35	39	45	44	37	28	31	1988
ll Ages	23456	34 10 4 4 12	29 8 4 7	34 3 5 2 11	36 10 5 3 7	35 5 6 2 8	25 3 2 4 6	22 6 4 2 6	31 9 3 1 3	26 4 3 1 8	50 10 11 7 12	34 13 1 5 8	27 12 5 2 5	30 6 4 2 7	1563 318 184 165 397
even diseases	7 8	2	3	4	3	4	2	3	1	2	9	3	5	4	149
Ieasles	9 10 11 12	1	1	3		2		1	1	2	3 1 1 3	3	1	1	13 23 27 55
ontd. Typhus Typhoid. Other&c.	13 14 15				1	i	ï				1		1		1 11 1
ung diseases, &c.	16 17	6	$-\frac{2}{3}$	2	1 10	 7	6		· 8	4	16	8	5	 5	280
onsumption Ieart disease, &c. iolence, &c.	18 19 20 21	1 3 2 4	3	5 5 4	5 1 1	6 2 1 7	3	1	3	4 3 1 3	4 4 5	3	1 2	3 4 2	17 120 33 138
ange ° F	26	47:6 15:0 52° 51°	54·2 8·4 52° 50°	9.4 51° 49°	43:9 12:0 50° 47°	29.53 45.5 8.4 50° 47°	47:5 8:4 47° 49°	42°3 11°2 48° 49°	30·05 43·2 10·0 48° 45°	30·21 41·0 6·4 48° 45°	29.68 36.5 12.0 47° 43°	44·3 9·0 46° 44°	29·52 41·3 11·1 45° 43°	45° 43°	29·7 47·6 13·3 47 47
nches)		69·0 0·28 8.W. 12 87°	79·0 0·31 S.W. 16 33°	71·0 0·83 N.E. 16 90°	77·0 2 75 N.E. 40 80°	76·0 1·24 S.E. 32 80°	70·0 0·46 3.W. 29 83°	1·02 8. 32 76°	76·0 0·18 S. W. 41 69°	76·0 0·00 S.E. 12 62°	S.W. 10 54°	77·7 0·69 S. W. 35 61°	78·0 1·75 W. 70 62°	0·21 S. W. 60 67°	27 92
" " shade " " night " " grass	33	57° 33° 32°	60° 44° 40°	50° 34° 32°	57° 26° 25°	60° 34° 32°	57° 37° 36°	53° 35° 30°	54° 37° 33°	50° 31° 28°	47° 30° 26°	53° 33° 30°	50° 31° 26°	49° 30° 27°	60 35 33
nfectious under	35	10-549	14	17	13	23	22	21	19	30	25	26	23	12	98 59
Act	36 37	23 1077	1099	17 1007	12 1101	15 1116	11 1107	10 1097	13 1119	21 1070	5 1084	1101	1108 1108		565
irth-rate Peath-rate	-								1000	10					
even Zymotics reathing Organs	40 41	1·06 3·18	1·59 1·59	2·12 1·06	1:59	2·12 3·71	1·06 3·18		0·53 4·24		4·77 10 59		2·65 3·18		
3 English towns	42	15.97	16.69	16.99	18:53	17:34	16.90	17:10	17:30	17:81	20.24	19:75	18:20	18.03	18

death-rate of the 33 large towns.

TABLE A.

TABLE OF DEATHS during the Calendar Year 1894 (365 days ended December 31st), in the Urban Sanitary District of Huddersfield, classified according to Diseases, Ages, and Localities, and showing also the Population of such Localities, and the Births therein during the 52 weeks.

		Central	Fartown Deighton &	Bradley Dalton	Almondbury	Lockwood	Longwood	Infirmary	Hospital	Workhouse	TOTALS			
-	Other Diseases.	1288		282	828	588	39 68	27	:	:00 55	258		:=	10.0
	.solunies.	1-0:	: IT :	00   01	: <del>"</del>	09 :	:::		:	: : **	98 60		::	:00
Age	Heart Disease.	157	oo : t~ :	7 :2	18	27	3 :00	119	:	:: •	118		:-	:-
Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of A	Bronchitis, Pheurisy Pleurisy	2 22 22	12 + 21	18	288	822	φ co o		:	: :2	153		14	:01
o Yea	Phthisis.	- 52 -	1 21 2	00 01 01	-8-	19 II	9 :00	11	:	: :2	165		::	:-
Fiv	'ansy S	111	::::	:::	::	:::	: : :	11		: : :	::	District	11	11
mde	Puerperal Fever.	:-:	::::	:::	::	:::	::-	11	:	:::	: 24	ry Di	11	::
ren 1	Pysemia.	:-:	: :- :	::-	::	G# 11	· : :	11	:	:::	:9	Sanitary	11	1:
Child	Erysipelas.	01 :-	1111	111	::	-	11:	11	:	::-	4	the Sa	11	::
Jo s	Epeumatic Kheumatic	:01	::-:	::-	: 04	- :	- :04	111		:::	10	9	11	11
eath	Cholera Nostras.	:::	::::	:::	::	:::	:::	::	:		::	vision	11	
ng D	Discribos and	** :	24   24	111		111	- ;-	::		: :-	9 22	ā	11	11
uishi	Doubiful.	-	::::	::-	::	:::	111	11			:-	this	11	11
sting	Enteric or Continue, Conti	17 1	-:::	::-	:-	100	:::	11	:-		:=	ity of	11	11
s, dir	Typhus.	:- :	::::	:::	11	:::	:::	11	1	: : :	:-	mortality	::	11
Sause	Whooping Cough.	0 - 10	; e4 ;	[ P	21 :0	- 01	: * :	11			T 01	the m	11	-
ned	Croup " spasmodic,"	- :-	:-	:	11-	11	-:	11	:		t= 01	jo.	- 11	11
pojqn	Diphtheria.	4 :00	1 00 00 04	111	9		: :-	11	:	:::	8 8	judging	11	11
om s	Z Scarlet Fever	- :-	::-:	: :01	117	11	-	1	0.0	11	14	in jud	11	11
ty fr	2 Mensies.	000 1 1	1111	100 ;	- : -		- ; ;	1	:		22 ~~	unt i	111	11
ortali	xodlinms 5	111	1111	111	11	:::	111	1			111	account	11	-::
M	=		upwards Inder 5 upwards Inder 5	upwards Inder 5	upwards	upwards Inder 5	npwards inder 5	nder 5	nder 5	nder 5	nder 5	taken into	nder5	nder 5
-	spauwdu 2/09 S	96	28 1	29	2 2	24 12	30 00	00	:	10 00	0.0	to be	55 :	Die
es, a	09 raban bana 32 o	1	8 8	57	23 23		83	53	01	28	0 400	also t		,
ges.	ol5 and under 25	_	00 00	6	11 11		4	- P	:	:	1 480	ave		3 10
lity from all cau subjoined Ages	a 5 and under 15		0 -	-	14 1		+	01	10	-	101	ers 1	- : :	
r fron	o I and under 5		6 6	18 1	26 1		00	4		65	88	num	- : :	- :
Mortality from all causes, at subjoined Ages.	w Under 1 year.		97 9 9					-	. 10		186	ned r		60 :
Mor		D =	37 5	145 41	233 51		76 17	48	71	100	60	ibjoi	11	11
'8	NOON ZO UI	577 37 164 14	170 11		291 20		105 7	-		14 7	1988 1572 322	The subjoined numbers have also to be	196:10	
bered	7 44 17 144		1 "	I	Č4 Č	16	16	-	:	-	198	T	Dean- de the mong reto Birk- se and	unon
18 noi .892	Population 1894	26445	9833	8811	15220	8963	5747				98511		g (in ) outsic strict a ing ther (in the orkhous	within the divi- district among belonging thereto
Names of Localities	adopted for the purpose of these Statistics; public institution; public institutions being shown as separate or respectively.	Central	Fartown	Dalton	Almondbury Lockwood	Lindley	Longwood	Infirmary	Hospital	Workhouse	Totals		Deaths occurring (in Dean- house Hospital) outside the division or district among persons belonging thereto Deaths occurring (in the Birk- by Hospital, Workhouse and	Infirmary) within the divi- sion or district among persons not belonging thereto

TABLE B.—Part 1.

New Cases of Sickness occurring during the 52 weeks ended December 29th, 1894, amongst Out-door Paupers.

	SANTOT	61 60	241	00	02	17	:		64.05	: 100	41.0	01 7	#	16	472
-5	Lead Poisoning	1	61	:	:	::	:	:	::	::			:	1:	: :
_		_		-	-	-	-	-		-		-	+		-
	Other diseases	0	689	:	_	:00	1	:	18	:6	:00	115	=	: -	130
pı	Immaturity an Old Age.	ď	1 1	:	:	: :	:	:	11	1 :	:	1 1.	-		: 03
	Violence, &c.	31	:1-	:	:	::	:	:	:-	:01	:-	1:	-	: :	12
9	Convulsions an discases of the Nervous Syste	0	27	01	***	: 4	::		- 00	: 4	:1	:	21	::	47
	Diseases of the H Liver, Kidney Stomach, and Bor	9	49		10	:-	***		::1	:9	: 10	-   :	21	: 10	86
	Other diseases Breathing Orga	w	56	1	9	:10	:	:	00 07	:9	e 5	010	9	:00	125
	Consumption	88	: "	:	:	::	:	:	:00	:00	:-	1 :	23	11	16
	Influenza.	27	:=	:	:	::	:	:	::	:-	10	:	:	: :	1 4
'21	Puerperal Feve	8	1::	1:	:	1::	1:	:	1::	11:	1	: :	:	: :	1 :
	Pysemia.	23	:-	:	:	: :	1	:	1::	::	:	: :	:	: :	:-
	Etysipelas.	24	:00	:	:	1::	:	:	::	1::	:	: :	:	: :	: 00
er.	Rheumatic Fev	88	10	:	03	: 03	:	:	: 20	:00	: 10	:	:	::	27
	Сројега.	81	1::	1:	:	1:	1	:	1::	1::	11	:1:	:	1:	::
1	Diatrhosa and Dysentry.	21	: 9	:	:	::	1:	:	::	:-	03	:   :	:	::	01 t-
evers	Other doubtful (Febricula, &c).	30	1:	:	***	; ;	1	:	::	1::	1	1	:	::	: :
ned F	Typhoid.	19	::	1:	:	: :	:	:	::	1::	:	: :	:	: :	::
Continued F	-snydAL	18	: :	1:	:	::	:	:	::	::	:	: :	:	: :	::
	Whooping Coug	17	- :	:	:	: :	:	:	::	::	-0	1 :	:	: :	01 01
	Croup.	16	::	:	:	::	1	:	::	1::	:	: :	:	::	::
	Diphtheria.	15	::	:	:	:-	:	:	::	::	:	: :	:	: :	:-
	Scarlatina	14	- 00	:	:	:-	:	:	:-	::	:	: :	:	: :	1 70
	Measles and Rotheln.	13	- 00	:	:	::	:	:	::	::	01 -	1:	:	: :	ου <del>4</del>
	Smallpox.	120	11	1	:	::	1	:	::	1:		11	:	1	11
	DISTRICTS OF BOROUGH.	1 11	Under 5 5 upwards.	5	5 upwards.	Under 5 5 upwards.	Ď,	Bradley 5 upwards.	Under 5 5 upwards.	ury 5 upwards.	d 5 newards	Under 5		d 5 upwards.	rough Under 5
	DIS		Central	Moreh		Fartown	Deight		Dalton	Almondbury	Lockwood	Lindlev		Longwood	WholeBorough

TABLE B, Part 2.

New Cases of Sickness occurring during the 52 weeks ended December 29th, 1894, amongst Home Patients and In-Patients of the Infirmary.

		-		Patie	_	0	-	4	E	-		Patie	-	1	1	1	1	-	1	W	In	on
DISTRICTS OF BOROUGH.		-	Central	Portions of Under 5		Central	- T	Marsh	Fartown	Deighton and	Bradley	Dalton	Almondbury		Lockwood	ndlow	margh	Longwood	oug wood	Whole Borough Under 5	In-Patients from	outside the Borough 5 Upwards
TS H	-	11 11	.5 upwards.	Under 5	Traden 2	.5 upwards.	Under 5			Under 5	Bradley 5 upwards.	Under 5 5 upwards.	Under 5	Under 5		Under 5	5 upwards.	Under 5	5 upwards.	Under 5	Under 5	5 Upwards
Smallpox.	2	0			_				111	1:	1	11				:	:	:	:	1		:
Measles and Rötheln.	. 60	1	1	1: :		: :		:	1	:		::	:	: :	:	:	:	:	:	17		:
Scarlet Fever	14		: :	-		: :	:	:	::	:	1	: :	:		:		:	:	:	1	:	:
Diphtheria.	10	1		1 : :	_	: :	1	:	1 :	:	:	: :	:		:	:	:	:	:		:	-
Croup.	16	+	: :	1		: :	1	:	::	:	:	11	:		:	:	:	:	:	-		:
Whooping Cough.		+	7	1::	-	: :	:	:	::	:	:	::	:		:	:	:	:	:	17	:	:
Typhus.	90		: :	111	_	: :	:	:	::	:	:	1 1	:		:	:	:	:	:	1	-	-
Typhus.	19	1	: 00	111		: :	:	-	::	:	:	: :	:		:	:	:	:	:		:	:
ther, doubtful		-	: :	::	L	: :	:	:	::	:	:	::	:		:	:	:	:	***	: :	:	:
атьюза & Dysenti		-	100	111	L	: :	:	1	111	:	:	1 1	1		:	:	:	:		01 00	-	:
Chicken Pox.	3	2	: :	1::	-	: :	1:	:	1 : :	:	:	1 1	:		:	:	:	1	:	:	-	:
theumatic Fever.		J	34	:01	1_	: 1-	:	-	:-	:	:	: -	100		00		-		1	: 50		
Erysipelas.	16		:01	:=		: :	:	:	1:		:	::	:		:	:	:	***	***	: 00	:	-
Cancer.	39	-	: :	: :		: :	:	:	::	:	:	: :	:		:		:	:	***	:	:	***
Puerperal Fever.			: :	11:			1	:	::	1:	:	: :	:		:	:	:	:	:	:	:	:
Influenza. Consumption.	0	_	: -	1:-			:	:				-	:	1	:				:	: 61		-:
To sasassib vadio		÷	20 83	-	-	1 1	:	:	: :	:	:	: -	:-	:	00	:	:	-	1	32 12	-	1
reaching Organs. senses of the Heart Liver, Kidney,	or .	1	94 46		_	18 9		00	: 10	:	-	: 63	:0	_	3 6		01		-	43   14 24   80	-	79 41
comach & Bowels. Convulsions and		I		-	-		1	_			21		:-	1.	10		21		_		-	_
diseases of the Vervous System.	,	1	20	01 01	-	12	:	91	:01		1	::	: 9	23	+		+	:	03	9 200	-	12
Violence, &c.	50	-	- 1-	::	T	: 65	:	:	:1-	:	23	:01	:-	01	23	:	4	:	63	800	:	31
Immaturity and Old Age.	7	Ī	: :	1::		:-	:	:	: :	:	:	::	:	:	:	::	:	:		:-	1	:
Other diseases.	,	. 1	258	- 00		150	03	18	:83	00	12	15	:08	7	40	:	21	:	00	367	:	86
Lead Poisoning.	-	1	9	1::	Ĺ	10	1	-	:-	1	:	:-	:		-	:	-	:	1	191	1	0.1
COLVEY.	60	:	319	10 57	100	225	01	29	46	00	17	: 53	: 55		83	:	35	:	15	134 850	1	261

#### STREET LIST.

Arranged under the heading of each Infectious Disease.

Deaths which occurred at Birkby Hospital are allocated to the District from which the cases were notified.

PLACE OF	F DEA	тн.		DIST	RICT.		Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhosa.
Newtown				Central							1			
Hardy's Buildin	gs, Sou	th St	reet	22					1					
King Street			***	"	***	***								
Bradford Road	***			22	***									
Grove Street	***	***		,,	***									
John Street				19	***	***							1	
,,	***			"	***					1				
,,,				"		***					1			П
Dodd's Yard, Sp	oring St	reet	***	"	***						1			Н
Mills Row, Cast	legate			29	***							1		L
York Street				22	***			2						
Mills Row, Cast				,,				1						1
Windsor Court,	Castleg	ate		22				1						L
Back Dock Stre	et			79	***								1	
Denton Lane				19	***						1			ı
Thomas Street				22							1			ı
St. Andrew's R	oad			22							1			ı
Firth Street				22	***						1			ı
High Street				,,							1			ı
Upperhead Row				22									1	
Dale Street				,,				1						L
Charles Street				,,									-	l
Back Spring Str				,,							1			ľ
Prospect Street				"									1	
Merton Street				,,						1			100	ı
Colne Terrace,				"						1				ı
Water Street				,,						1				ı
Lucas' Yard, No				,,										
Portland Street				,,							1			Г
New North Road														
Fitzwilliam Stre				. ,,										
Birkby Fever H				77					5					
and the second second			7.33	"									1	
,,	,,			,,									_	
Church Street, 1	Paddock			Marsh										
. "	,,			11							2			
Johnny Moor Hi	ill, Pado	lock		,,,	***	***			350		1			
Tentergate,	,	,		22					1					
Allen Row,		,	***	22						1				
Upper Brow,		,		"						1				
Mark Street,	,			"	***									E
Clough Lane,		,		22							1			

#### STREET LIST-CONTINUED.

PLACE OF DEATH.		DIST	RICT.		Smallpox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhoa.
Hill Street		Marsh							1			
Gledholt Bank		53									1	
Birkby Fever Hospital		**					1					Н
Edgerton		,,	***					1				
Fanny Row, Sheepridge		Fartown					1					
Marian Street		11	***				100	1				
Woodhouse Hill		2.7						1				
Woodhead's Buildings, Sheepr	idge	**						1				
Folly Road, Cowcliffe		**							1	-		
Long Hill		9.5	***						1			
Leeds Road North	***	22						2				
Hillhouse Road		17	***					1				]
Fartown Green		"						1				1
Lowerhouses		Almondb	ury					2				
Dog Kennel Bank		77				1						
Birkby Fever Hospital		,,					1					-
Close Hill, Newsome	22.	79						1				Г
Taylor Hill		27		***				1				
Wood Terrace, Primrose Hill	1000	22		***				1				
Dodds Royd, Berry Brow	***	"						1				
Somerset Road		22						1	,			
Newsome Road Deadmanstone, Berry Brow	***	"		***					1			
CLU CI		,;							2			
Tunnacliffe Hill		"							1			
Lower Park		"		***					1			
Birch Street		"							1			
Prince Street, Primrose Hill		"					4		î			
Salford		"							2			
Arlom's Square, Newsome		"							1			
Church Terrace, Newsome		,,,							1			
Laithe Croft, Salford		**										1
Mulberry Street, Moldgreen		33										1
Scar		"									1	
Colne Bridge		Deighton	& Brad	lley			1			1		
Birkby Fever Hospital		,,	77				2					
Cherry Nook		* **	,,					2				
Deighton Road		"	"						1			
Moldgreen		Dalton				1						
Ravensknowle		17				1						
Pond Cottage, Moldgreen		"				1						
Birkby Fever Hospital		,,					2 2					
Forest Road		,,,				8	9					

#### STREET LIST-CONTINUED.

PLACE OF	DE!	λTH.		DIST	TRICT.		Smallbox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Simple Fever.	Enteric Fever.	Diarrhea.
Church Street, M	foldgr	een		Dalton							2			
TO 11 34:11				,,							1			
Highroyd, Moldg				"							1			
Victoria Street,	Moldg	reen		,,,							1			
Bankfield Terrac				,,							1			П
Bank End				,,							1			
Ravensknowle R	oad			,,							1			
Lodge Row, Alm				**							1			
Nab Hill				"									1	
Victoria Road				Lockwoo	od			1						
Bath Terrace								i						
Starling End				"				1			1			
Swan Lane				"						1	-			
Y 1 1D 1										1				
Bland Street			9.39	**		75.5				1				
Marsden Road, C			oor	37				1		,				
zunibuon zeona, c	, obia	200 200		"							1			
Park Road West	Cros	land	Moor	,,				1						ı
Birkby Fever He				"				1	4					
Wh - 1 /2: .	···			27	***				3	1				L
Thornton Road			177.0	23		•••			1	1				
Albert Street				29					1		1			
Swan Lane				"		•••					î			
Back Summer St				"							î			
Woodfield Road				"							1			
Oldfield Square,		and 7	Moor	*9							î			
Hawthorn Terra			4001	"							î			
Moorfield Lodge,		22		"	***						1			
Barton Road	,	"		"							1			
Bland Street		***		"									1	
				"									1	
Swan Lane				33	***								1 1	
Lockwood Road Victoria Street				"									1	
Union Workhous	е			"										
Lindley Moor				Lindley							1			
Salendine Nook				"		***		-						
Weather Hill Ro				,,,				1						
New Hey Road		***		23				1						
Oakes		***		72	•••						1			
Kew Hill				Longwoo	nd.	3335					1			
		***									1			
Speak Hell				27					1					
Spark Hall				,,,					1		1			
Longwood				,,	***						1			
Lowergate				"							1			
High Street				22	•••					- 4	1	1		
Mount				"						1			- 1	

#### Removal of Nuisances.

## Yearly Report 1894, December 31st to December 29th.

						1st quarter	2nd quarter	3rd quarter	4th quarter	Total
Drains r	equiring Re-con	struction	(stone	drains)		36	37	50	38	16
Do.	do.		(pipe d	rains)		3	3	10	2	1
Do.		ting with				50	7	6	6	6
	ot efficiently tra					52	47	45	45	18
	equiring Ventila					21	21	27	22	9
	e Sink Drains					62	50	65	54	23
Do.	Yard Drains					35	38	15	35	12
Do.	Cellar Drains					6	15	20	29	7
Do.	Eave and Fall					18	23	19	31	9
Do.	Street Gullies					13	2	1	9	2
			•••		**	3	ĩ	2	4	1
Do.	Roofing		***			0	4	2	6	1
Do.	Urinals	***			***		4	2	100	
Do.			***	***					1	
Do.	Water Closets			•••		9	6	6	17	3
	es, &c., requirin					91	54	76	81	30
	ide Sinkstones to					2	4	13	***	1
Fall Pipe	es requiring Disc	connectin	g			27	24	33	42	12
	ide Eave and Fa			***		42	17	5	5	6
	es from want of					9	4	8	8	2
Do.	Water in					12	8	8	7	3
Do.	Cellar We						1			
Do.	Cess Pool					1	î	2	2	
Do.	Stagnant				100	3	2	6	8	1
Do.	Defective		of Vand	***		4	1	1	13	1
Do.	77	-			***	1	15	6	3	
Do.		nd Diago			***					2
	Poultry a		ns			6	2	2	1	1
Do.	Animals					2	4	2	2	1
	Accumulations					12	13	6	21	5
Do.	Ashpits and Pr	ivies	***	***	**	1	14	2	6	2
Do.			***			11	1	4	1	1
Urine Gi	uards required					3	6	***	***	
Closets r	requiring Lime-	washing				3	4	10		1
Ashpits	and Closets requ	uiring Re	-constr	action		10	9	16	16	5
	Do. requi	ring prop	er doors	and cov	ering	24	25	8	10	6
Old Priv	ies altered to tu	b or wat	er close	t system		25	27	19	7	7
Insufficie	ent Closet Accor	nmodatio	n			10	15	5	2	3
Houses (	Overcrowded					3	2		3	
	Requiring Clean					3	16		14	3
Do. I	Damp					9	100	2		1
Do. I	Requiring Water	Supply						2		•
Cowshed	s requiring Lim	e-washin	g				133	2	1	13
I	Oo. Drai	ning and	Paving				2			10
	of Wells abolish	ed					2		1	
					-					
		T	OTAL			622	658	506	553	233

	1-					_				_		-	T
	Water from Mains.	:	:	:	125	539	1087	602	78	138	:	:	2569
894.	Snow.	182	22	:	:	:	:	:	::	:	:	:	204
YEAR 1894.	Trade Refuse.	09	48	83	68	33	35	36	48	18	52	56	528
LOADS COLLECTED DURING THE	Slaughter House Refuse.	58	22	24	19	17	20	21	26	28	54	24	283
ED DL	Market Refuse.	7.0	49	09	57	61	09	58	63	59	107	09	704
COLLECT	Street Sweepings.	266	315	382	326	339	273	260	249	243	511	305	3469
OADS	Ashes.	3099	2753	2896	2875	3126	2623	2418	2146	1802	4548	1931	30217
	1894.	January	February	March		May		July	August	September	October	December	Total

Particulars of Work Performed by Scavenging Staff at Hillhouse Depot, Streets, &c.

1894	Loads of Receptacles brought in to the	Number of hours worked by Sweeping	Refuse burnt in Hillhouse Destructor.	ournt in Destructor.	Tons of Clinkers removed from Hill- house Destructor	Tons of fine ashes from Hillhouse Destructor made
	Depot.	Machine.	Loads.	Tons.	to tips.	into manure.
January	1989	145	1258	1070	345	114
February	1735	131	1266	1076	304	209
March	1885	160	1376	1169	316	147
pril	1750	153	1321	1122	321	95
May	1975	167	1634	1134	299	238
June		164	1154	981	338	160
July	1920	132	1064	904	287	36
August	2001	157	365	310	99	179
September	1771	166	294	265	:	113
October (	3913	324	562	406	107	35
December	1797	1483	220	184	14	14
Year	22640	1847\$	10514	8621	2397	1340

## HILLHOUSE DEPOT, MANURE SALES 1894.

MONTHS.	Stable Manure.	Shoddy Manure.	Grass Manure.	Market Refuse.	Night- soil.	Slaugh- ter house Refuse.	TOTALS
1894							
January	$81\frac{1}{2}$		115	$40\frac{1}{2}$	114	$34\frac{3}{4}$	3853
February	98	16	$130\frac{3}{4}$	58½	209	27	5391
March	$88\frac{1}{2}$	40	171	40	147	$17\frac{1}{2}$	504
April	81		$113\frac{1}{2}$	47	95	393	3764
May	82	32	$20\frac{3}{4}$	39	238	33	$444\frac{3}{4}$
June	77	32		32	160	81/2	3091
July	611			37	36	32	1664
August	$58\frac{1}{4}$	8	$116\frac{1}{2}$	64	156	$40\frac{1}{2}$	4434
September	$57\frac{3}{4}$	20	$98\frac{3}{4}$	41 ½	98	40	356
October November	108	88	933	162	120	56	6273
December	$65\frac{1}{2}$	16	$97\frac{3}{4}$	39	57	16	2914
Approximate Total	0.000	252	9573	$600\frac{1}{2}$	1430	345	4444

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