[Report 1896] / Medical Officer of Health, Scarborough Borough.

Contributors

Scarborough (England). Borough Council.

Publication/Creation

1896

Persistent URL

https://wellcomecollection.org/works/cxm3v87n

License and attribution

You have permission to make copies of this work under a Creative Commons, Attribution license.

This licence permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See the Legal Code for further information.

Image source should be attributed as specified in the full catalogue record. If no source is given the image should be attributed to Wellcome Collection.





BOROUGH OF SCARBOROUGH.

REPORT

ON THE

SANITARY CONDITION

OF

SCARBOROUGH

DURING THE YEAR 1896,

BY

HERBERT LITTLEJOHN,

M.B., D.P.H., F.R.C.S., Ed.,

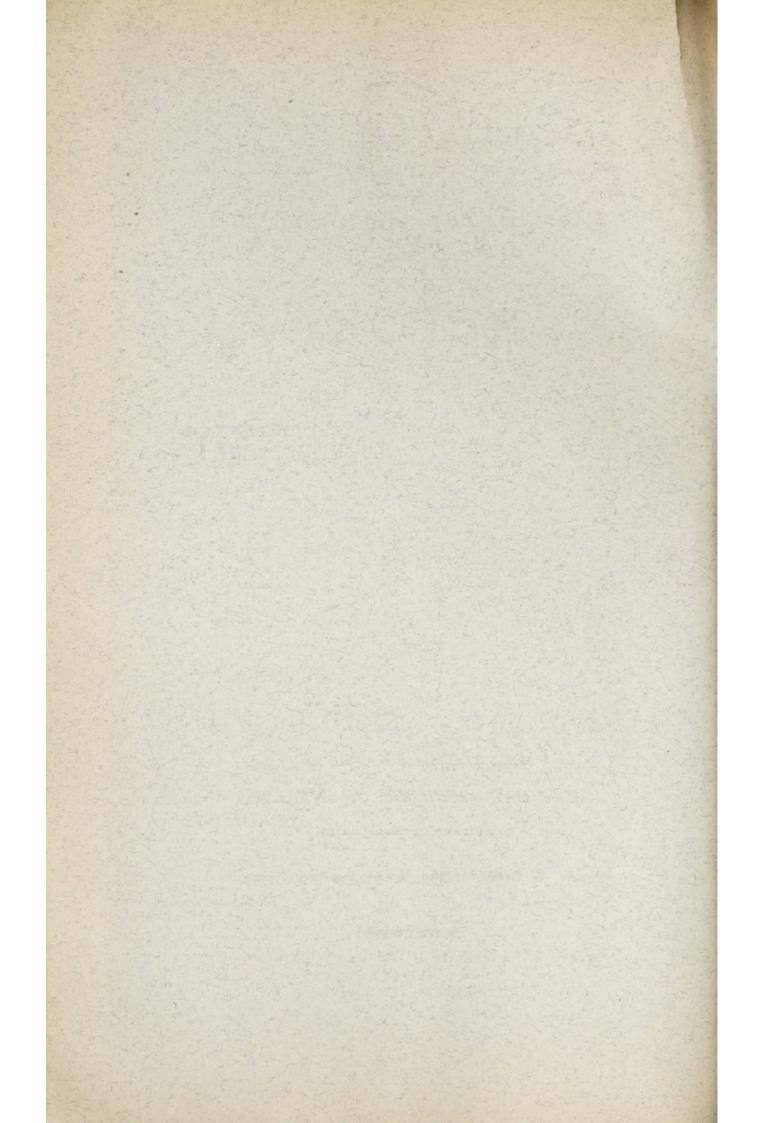
MEDICAL OFFICER OF HEALTH.

Printed by Order of the Urban Sanitary Authority.

Scarborough:

G. R. MARSHALL & SON, PRINTERS, 14, S. NICHOLAS STREET.

THIS BEING THE SPECIAL FILE COPY FOR LIBRARY B. M. A., IT IS PARTICULARLY REQUESTED THAT IT MAY BE RETURNED AT AS EARLY A DATE AS POSSIBLE.





BOROUGH OF SCARBOROUGH.

REPORT

ON THE

SANITARY CONDITION

OF

SCARBOROUGH

DURING THE YEAR 1896,

BY

HERBERT LITTLEJOHN,

M.B., D.P.H., F.R.C.S., Ed.,

MEDICAL OFFICER OF HEALTH.

Printed by Order of the Urban Sanitary Authority.

Scarborough:

G. R. MARSHALL & SON, PRINTERS, 14. S. NICHOLAS STREET. 1897. am, Centionicity of

Health Office,
Scarborough,
February 4th, 1897.

To the Town Council of the Borough of Scarborough.

GENTLEMEN,

I have the honour to present my Second Annual Report upon the Health and Sanitary Condition of the Borough, as well as Reports on the working of the Food and Drugs Act and on the Meteorological conditions observed during the year.

I desire at the same time to thank the members of the Sanitary Committee for the courtesy and consideration I have ever received at their hands.

I am, Gentlemen,

Your obedient Servant,

HERBERT LITTLEJOHN.

Digitized by the Internet Archive in 2018 with funding from Wellcome Library



BOROUGH OF SCARBOROUGH.

REPORT.

POPULATION.—The estimated population for the year 1896 is 35,632, or for all practical purposes 35,700, an increase of 400 over that of last year.

Density of Population.—Taking the area as 2,292 acres, the proportion of persons to the acre in the Borough as a whole is 15.5, while the relative proportion of persons to the acre in the various Sub-divisions of the Borough is shewn in the following Table:—

*TABLE I.

Ward.	Area in Acres.	Population.	Persons per Acre.
North-West	139	7821 4964	57:7
South	901		25·7 4·8
East	97 844	4307 6943 5273	71.5
Central	118	6324	53.2

Marriages.—During the year 330 Marriages took place. The following Table shews the number of Marriages in the last seven years:—

1890	1891	1892	1893	1894	1895	1896
292	268	307	306	312	345	330

^{*} The larger portions of the South and West Wards are composed of arable or other land unbuilt upon.

Births.—During the year 946 Births were registered, an increase of 16 over last year. The Birth-rate was 26.5.

The following Table indicates the proportion of Male to Female Births, the number of illegitimate children born, as well as the distribution of the total Births throughout the various months of the year.

TABLE II.

-0-6	Malan	Famalas	T-4-1]	Megitimate	
1896.	Males.	Females	Total.	Males.	Females.	Total.
January	31	49	80	0	2	2 6
February	26	34 36	60 75	6	0 2	6
April	39 48	31	79	8	2	10
May	31	41		I	4	5
June	44	41	85	6	0	6
July	49	49	98	2	2	4
August	31	46	72 85 98 77 81	0 2	3	4 3 3 5
September	50 31	31 38	69	4	1	5
November	41	41	82	0	1	4
December	44	44	88	5	5	10
Total	465	481	946	38	26	64

DEATHS.—583 Deaths were registered during the year, which, after deducting the deaths of 23 non-resident persons, represents an annual mortality of 15.6 per 1,000 of the population.

This marked diminution in the number of Deaths, compared with last year, is due in great measure to a reduced mortality from such causes as Respiratory diseases, diseases of the Brain, Diarrhœa, and Influenza.

As will be seen by reference to Table V. a deathrate as low as that of the year under review has only once been recorded since 1875, when in 1888 it was also 15.6. In my opinion, apart from the great improvement upon the figures for 1895, a death-rate of anything under 16 per 1,000, in Scarborough, is to be considered as most satisfactory. For, in reviewing the facts that lead to such a death-rate, it must be remembered that not only the wealthy invalid is attracted to a Health Resort such as Scarborough, but also those of humbler means, who, while necessity compels them to work for a living, prudence and a desire for life urges them to migrate to a climate more suitable to their ailments.

It must be, therefore, that we have in Scarborough a considerable population composed of persons whose lives may be fairly described as "below par," and who, dying off year by year (their places being supplied by others), keep up, to an abnormal level, our mortality from Heart disease, Phthisis, and Bronchitis.

TABLE III.

	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896
				1006		963					1			892				828		946
Illegitimate.	73	86	77	73	74	80	65	66	65	83	72	78	70	73	77	78	94	68	63	64
Deaths Illegitimate.	555	611	614	619	538	611	633	607	587 16	643	600	562 21	678	620 30	725	586 29	707	588		651 17

Table III. shews the number of Births, Deaths, and Illegitimate Births and Deaths since 1877.

INFANTILE MORTALITY.—125 children under the age of one year succumbed from various causes, of which the more important were Bronchitis, Convulsions, and Premature Birth.

The Infantile Death-rate, viz.—the deaths under one year per 1,000 Births—was 132'1 or 62'5 less than in 1895.

TABLE V.

23	Birth-r	ate per	ral se.		leath-rate 1000.	rate ooo, ough	General o	leath-rate
Year.	Scarbro'.	England and Wales.	Natural Increase.	Scarbro'.	England and Wales.	Zymo disease per 10 Scarbor	General of per s	England and Wales.
1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896	28·16 30·09 30·59 32·23 33·50 23·87 30·33 35·22 29·19 29·40 29·77 26·53 26·97 26·24 24·39 24·53 26·08 25·5 26·5 24·08 26·34 26·5	35.4 36.3 36.0 35.6 34.7 34.2 33.9 33.8 33.5 33.6 32.9 32.8 31.9 31.2 31.1 30.2 31.4 30.5 30.8 29.6	218 348 294 303 361 387 401 352 306 357 366 258 332 358 193 272 162 293 210 250 213 386	2·4 1·3 1·9 2·2 1·2 2·1 0·8 1·6 1·3 1·8 0·7 1·4 0·8 0·6 2·4 0·9 1·2 0·9 2·2 0·9 2·2 0·9 2·2 0·9	3:4 3:1 2:7 3:4 1:9 3:3 2:7 2:3 2:8 2:2 2:4 1:8 2:2 2:1 1:9 1:9 2:47 1:76 2:14 2:18	3.5 3.5 3.05 5.1 7.3 6.2 5.1 3.6	19 51 16 28 18 95 20 24 20 17 20 06 16 34 18 22 18 84 17 31 16 67 18 40 16 64 15 66 18 26 16 44 20 17 16 5 19 9 16 4 20 3 15 6	22.7 20.9 20.3 21.6 20.7 20.5 18.9 19.6 19.5 19.5 19.3 18.8 17.8 17.9 19.1 22.5 19.0 19.2 16.6 18.7

This marked reduction in the number of deaths in young children is to a great extent due to the comparative absence of Diarrhæa, which in 1895 was responsible for 43 out of the total 181 deaths at this age period.

Of the total deaths 17 were of illegitimate children, of which 13 or 76 per cent. were under the age of one year, and, as 64 illegitimate children were born, the Illegitimate Infantile Death-rate was 203'1 per 1,000.

ZYMOTIC DISEASES.

Of the notifiable Zymotic diseases, 140 cases, comprising 42 of Enteric Fever, 86 of Scarlet Fever, 8 of Diphtheria, and 4 of Puerperal Fever were notified during the year, with a

mortality of 11; while Measles, Whooping Cough, and Diarrhœa, to which compulsory notification does not apply, were responsible for 5, 11, and 12 deaths respectively.

TABLE IV.
SHEWING THE MORE IMPORTANT DISEASES DISTRIBUTED THROUGHOUT
THE VARIOUS WARDS.

DISEASE.	N.W.	N.	c.	E.	w.	s.	Total
Bronchitis	13	5	8	10	8	2	46
Pneumonia	100000		6	3	6		30
Phthisis	13	6	12	5 5 6	3 2	I	40
Other Tubercular Diseases		2	9	5	2	3	25
Cancer	10	3	2	6	I	8	35
Syphilis	2			I			3
Rheumatism	3		I	I			5
Debility from Birth	3 7 8	. I	3	8	2		21
Old Age	. 8	9	4	2	7	1	31
Enteric Fever	177	. 1			1	**	4
Scarlet Fever		. 1				I	2
Puerperal Fever			1		I		2
Diphtheria	. I	I			I		3
Measles	I		4				5
Whooping Cough	2	2	5	2	.;		11
Diarrhœa	I	I	1	. 3	6		12
All other causes	59	48	48	54	47	29	285
Total Deaths	134	86	104	100	90	46	560

The total Zymotic mortality was thus 39, representing a Zymotic death-rate of 1.09 per 1,000 of the population, or less than half of that recorded in the previous year.

That this is a fairly satisfactory reduction in the Zymotic rate cannot be denied. At the same time, however, looking to the fact that in the years 1894, 1892, 1890, 1888, and 1885 the Zymotic rate was under 1 per 1,000, it is evidently not all that can be desired or indeed may be expected in the next few years on the completion of the more important Sanitary schemes, which, in my opinion, are necessary.

TABLE VI.—DEATHS REGISTERED DURING THE YEAR ENDING 31ST DECEMBER, 1896.

	Di	ECEMBE		96.	7		
	r er	بن	5 and under 15.	d 25.	25 and under 65.	65 and upwards	-4
CAUSE OF DEATH.	Under I year.	r and nder 5	an	and er 25	ar	ar	ota
	5.	I and	2 pu	15 and under 25	25	65 orpy	Total of each.
		1	1 2	1 2			
C-1:	J. 161	KE INDI	W JE	SOIG.	911	3 50	
Convulsions	13	7				::	20
Apoplexy	1				9	26	36
Epilepsy		7 -11.13	17.			••	
Inflammation and Disease							
of the Brain	3	3	4	DAY.	6	7	23
Effects of Drink		11.12		0		1	I
Bronchitis	15	II	I		7	12	46
Phthisis		*:	3	8	25	4	40
Other Tubercular Diseases	5	8	4	3	3	2	25
Pneumonia	4	10	I	3	. 6	6	30
Asthma	.:	.:					
Laryngitis Disease of the Heart	1	I			22	22	2
Do. Stomach	3		3		.32.	33 -	70
Do. Liver		::	::		2		5 5
Do. Bowels	5				4	3 3 8	12
Do. Kidneys	2	2			12	8	24
Do. Bladder						1	I
Do. Womb							
Cancer					15	20	35
Rheumatism	2				. I	2	5
Mesenteric Disease, Atro-	18	-					
phy, &c	160	3				31	21
Old Age Premature Birth	24					31	31
Child Birth	-4		::				I
Injuries	I		2		5	1	9
Syphilis	I				2		3
Other Diseases	6	5	3	2	17	17	50
Uncertified							
Erysipelas	I						1
Ague					**		
Small-Pox	1				i		2
Diphtheria		2	ï		1	::	3
Membranous Croup							3
Typhus Fever							
Enteric or Typhoid Fever				4			4
Continued Fever		3 5		14.			
Relapsing Fever					.,		
Puerperal Fever					2		2
Cholera	.:		*:		.:		•:
Measles	1 7	2	1	H. P.	I		5
Diarrhœa and Dysentery	7	3	title In	oi só	• • •		11
- mond and Dysentery		000					
A STATE OF THE PARTY OF THE PAR			win D				2
Carried States and Sta	1					1100	
Total Deaths	125	59	24	21	153	178	560
20111 201113.1111.	2 101	25 72	1 355	or sep	DEFE	J. Files	VENT
			-	-			

What these measures are will be indicated under the headings to which they more particularly apply.

The Table (No. XI.) shewing the deaths from Zymotic disease has been extended, so that a comparison of the present with past years may easily be made.

TABLE VII.

SHEWING NUMBER AND DISTRIBUTION INTO WARDS OF THE CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR.

DISEASE.	N.W.	N.	C.	E.	W.	S.	Total.
Scarlet Fever Enteric Fever Diphtheria Puerperal Fever	17 10 3 1	13 6 1	14 9 2	22 2	5 4 2 2	15 2	86 33 8 4
Total	31	20	26	24	13	17	131

TABLE VIII.

SHEWING THE NUMBER OF CASES OF INFECTIOUS DISEASE NOTIFIED IN EACH MONTH.

DISEASE.	Jan	Feb	Mar	Apl.	May	Jun	July	Aug	Sep.	Oct	Nov	Dec	Total.
Scarlet Fever Enteric Fever Diphtheria Puerperal Fever	7 5 2	9 1 3 1	10 1	4 2 1	1 1 	4	3 5	9 6 1	10	4 4	15 1 1	14 2 2 1	86 33 8 4
Total	14	14	11	7	2	-4	8	16.	11	8	17	19	131

Scarlet Fever.—86 cases of this disease were notified as compared with 59 in the previous year.

As stated in my Report for the 4th quarter of the year, the disease was evidently more or less prevalent throughout the whole country, and it is

not to be wondered at therefore that we should have had a few more cases in Scarborough.

Reference to Table VIII. shews that a greater number of cases occurred during the 4th quarter of

the year,

The disease was of a mild type. Indeed, no better proof of this is required than the fact that of the total cases, no less than 26 were desquamating, and had therefore practically reached the convalescent stage before they were reported.

That this indicates gross and culpable carelessness on the part of many of the parents or patients themselves, is only too apparent, and, taking such facts into consideration, the wonder is that a much

greater number of cases did not occur.

With such frequency were these "desquamating cases" being reported, that I considered it advisable to compile a series of suggestions for parents and others, of an instructive character, with the object of preventing the spread of the disease. This leaflet has been appended to the present Report.

The number of individual houses attacked was 56, and the following Table indicates the distribution of the total cases throughout these houses.

No	in a Ho	use.	No. of Instances.	No. of Cases.
ı iı	n a house		39	39
2	,,		10	20
3	"		4	12
4	,,		1	4
5	,,		1	5
6	,,		1 1	6
100	Total.		56	86

Of the total cases reported, 42 or 48.8 per cent. were removed to Hospital. Of the total cases 2 died, giving a death-rate per cent. of the cases of 2.3 and a rate of '05 per 1,000 of the population.

Puerperal Fever.—Four cases were reported during the year. In no instance, however, was any Sanitary defect found which could account for the condition. Of the above cases 2 proved fatal.

DIPHTHERIA.—Eight cases were reported, and reference to Table VII. will indicate the Wards in which they occurred.

TABLE IX.—Shewing Typhoid Fever and Diphtheria in Under-MENTIONED YEARS DISTRIBUTED IN WARDS.

Ward.	N.	W.	7	1.	(F	E.	M	7.	S		То	tal.
Disease.	Typhoid Fever.	Diphtheria	Typhoid Fever.	Diphtheria.	Typhoid Fever.	Diphtheria,	Typhoid Fever.	Diphtheria.	Typhoid Fever.	Diphtheria.	Typhoid Fever.	Diphtheria.	Typhoid Fever.	Diphtheria.
1830 1891 1892	6 12 12	3 14 4	9 9 4	3	4 16 6	1 I 2 2	16 2	2 4	I 2 2	I I 2	4	2 2 I	40 41 25	27 24 13
1893 1894 1895	10	4 2	10	7 6 2	4 13 19	6 1 2	4 16 17	4 2 1	12 10 14	I 2	9 5 7	3	44 64	15
1896	35	4 3	17 6	1	9	2	3		4	3 2	2	::	109 34	8

The various houses in which the cases occurred were examined, but with the exception of one or two trivial faults, no defects were discovered.

Measles.—Five deaths occurred from this disease, a number 3 in excess of that for last year.

As far as can be ascertained the disease was very prevalent during the latter half of the year, so much so that the attendance at many of the Board and other Schools was seriously affected.

In only one case, however, was it deemed advisable to close a School.

During the year, in one or two of the neighbouring towns and villages. Measles appears to have existed and to a considerable extent, prior to its appearance in Scarborough.

It is more than likely, therefore, that the original seeds of the epidemic were conveyed by the ordinary channels from one or other of these centres.

As mentioned in my last Report, the question of the advisability of adding Measles to the list of notifiable diseases is an important one, but at the same time it is an equally difficult one to decide, there being so much to be said on both sides.

On the one hand it may be argued that the expense would be disproportionate to the benefit derived, that the infective stage actually commencing before definite outward manifestations of the disease appear, notification could in no way prevent the other susceptible members of a household from contracting it, and further that without adequate Isolation accommodation (practically an impossibility), the advantages, if any, would be reduced to a minimum.

On the other hand "partial" notification, by which I mean compulsory, paid notification of the first case and of no others in the same household for, say, a fortnight, would, I believe, be of benefit, and at the same time would be productive of the greatest amount of good with the least possible expenditure.

It would give the Authorities timely warning of the approach of an epidemic, and at least a chance of doing something to combat it.

It would enable the Medical Officer to exercise a supervision over the cases at their homes, and it would make the calling in of a Medical man to such cases more common, thus lessening the mortality of the disease itself and of its sequelæ.

For, while a neglected case may not at the time prove fatal, the sequelæ or after effects are more than sufficient to undermine the constitution and cause premature death.

An alternative to employing notification in its legal sense, is for some arrangement to be made with the School Board, whereby its knowledge of the disease be placed at the disposal of the Local Authority.

The School Board's information, however, relates only to Board School children, and is based mainly upon enquiries made by its Attendance Officers.

Such information, therefore, while of undoubted value, is not complete.

The whole question is, looked at from every point of view, a difficult one, but, if it be once accepted that any benefit is likely to be derived from the notification of Measles, then, in my opinion, its adoption by Scarborough, to which a clean bill of health is all important, becomes an obligation.

Typhoid or Enteric Fever.—42 cases were notified, of which number, however, 9 were distinctly traceable to infection caught elsewhere, thus reducing the number of those contracted in Scarborough to 33.

In addition to the 42, six other cases were notified as Enteric, but observation of these, either in Hospital or at their homes, enabled another and less serious construction to be put upon their symptoms.

With regard to the distribution, Table IX. indicates the relation of this disease to the various Wards, in the present, as well as in past years.

As Table VIII. indicates, that in no particular month or quarter of the year was there any great preponderance of cases.

Of the 32 houses attacked, in only 8 instances were such defects discovered, in the dwellings or the

immediate neighbourhood, as might have caused the disease.

The absence, however, of that protective layer of concrete in the foundations of the great majority of all houses in the Borough, cannot be disregarded as a likely factor in the production of the disease.

Of the total 42 cases, 4 proved fatal, giving a case mortality of 9.5 per cent. and one of 0.1 per 1,000 of the population.

Nineteen cases were removed to the Isolation Hospital, and of these 3 ended fatally.

Whooping Cough.—Eleven deaths were registered as being due to this disease, or rather more than double the number during last year.

Whooping Cough is in quite as unsatisfactory a position as Measles, so far as preventive measures are concerned. Though a most infectious and fatal disease, the precautions possible to be taken by a Sanitary Authority are practically nil, and parents either cannot or will not realise the seriousness of the complaint.

The presence or absence, however, of Measles and Whooping Cough, while powerfully influencing the mortality of a town, are not to be taken as gauges of its Sanitary condition. For, recurring as they do at varying intervals, their incidence is probably determined more by the accumulation of a sufficient number of susceptible children, than by any of those conditions which play such important parts in the history of the other Zymotics.

DIARRHEA.—Only 12 deaths from this disease were recorded during the year as compared with 52 in 1895.

The following Table indicates the Ward distribution of the Diarrhœal deaths during the last five years.

Year.	N.W.	N.	c.	E.	w.	s.
1892 1893 1894 1895 1896	2 14 3 14 1	5 1 12 1	4 4 1 4 1	1 10 7 3	1 15 1 16 6	3 2
Total	34	19	14	21	39	5

While Diarrhœa must be taken as an indication of insanitation, other, and in my opinion, hardly less important factors, also enter into its causation.

These latter may be summed up in the term "unfavourable social conditions."

The insanitary conditions which probably exert most influence on the incidence of the disease are those which tend to pollute the air and soil, such as infrequent removal of house refuse, privies (especially if defective), imperfect paving of yards, etc., and the absence of a concrete layer in the foundations of houses.

Of the social conditions unfavourable the more important are, want of personal cleanliness, artificial feeding, "nursing out," and, indirectly, illegitimacy.

Of the total deaths all were investigated, with regard to the probable cause, and with one exception, complete information was obtained, which I have arranged in Table IXA.

RESPIRATORY DISEASES.

Phthisis.—There is again a satisfactory decrease in the mortality from this disease, 40 deaths having occurred, as compared with 50 in 1895.

Bronchitis, Pneumonia, Etc.—These, in the aggregate, also shew a lessened mortality, Pneumonia alone being 2 in excess of last year.

18 TABLE IXA.

No. of case.	Date of Death.	Age.	Food.	Illegitim'te	No. of Rooms.	No. of Inmates.	Privy or w.c.	Remarks.
t	June	3 weeks.	Artificial	Yes	6	3	Privy.	Put out to nurse when I week old
2	July	9 mths.	Artificial		4	6	w.c.	WHEN I WEEK OIG
3	,,	3 mths.	Artificial		4 7	6	Privy with box,	
							3 feet from kitchen door; contents carried through house.	
4	Aug.		Natural		5 4	7 5	Privy-box.	
5	"	15 mths.	Artificial		4	5	Privyon tstfloor receptacle on	Has lost 3 children
,				1879			ground floor.	under I year.
6	,,	4 mths.	Artificial		5	6	w.c.	TT. 1 - 1.11
7	"	4 mths.	Artificial		0	4	w.c. and privy, no box.	Has lost 5 chil- dren in 8 years.
8	Sept.	9 mths.	Artificial		8	6	W.C.	dictimo years.
9	,,	9 mths.	Natural	1	5 5	6	Privy-box.	
10	"	5 mths.	Artificial	Yes	5	3	Privy-box.	
11	"	7 mths.	Artificial		6	3 4	Privy-box,	
							3 feet from door.	
12	,,		::	.:-			Privy, no box.	Visitor's child.
13	,,	10 days.	Artificial	Yes	5	10	Privy-box.	100

Table IV. gives the Ward distribution, while Table X. has been extended, and shews the Respiratory mortality of this and previous years.

OTHER TUBERCULAR DISEASES.

Under this new heading I have placed various causes of death, which, in previous years, have been included under "Other Causes" in Table IV.

To this addition I beg to draw the attention of my medical brethren in Scarborough, and at the same time to solicit their co-operation in rendering it a list, as complete as possible, of deaths from those diseases (other than Pulmonary Phthisis) in which the chief causal factor is the Tubercle bacillus.

It is obviously unsatisfactory at the present day, to have to classify "Meningitis" in a young child,

amongst the general diseases of the Brain, or to relegate "Disease of the Kneejoint" to the category of "Other Causes," when it may have been possible for the granter of the certificate to have qualified it by the simple addition of the word "Tubercular."

SANATORIUM.

During the year 68 patients were admitted to the Sanatorium, or 4 less than in the previous year.

Of the total cases, three of Enteric Fever and one of Scarlet Fever ended fatally.

The following Table indicates the nature of the disease and the ages of the patients admitted.

ADMISSIONS TO SANATORIUM.

Disease.	Under 5 years.	5 and under 15.	15 and under 25.	25 and under 35.	35 and upwards	Total.
Enteric Fever	2	I	12	3	5	23
Scarlet Fever	2	27	10	I	2	42
Diphtheria			I			1
Measles		I	I			2
Total	4	29	24	4	7	68

The nursing and general administration of the Hospital has been carried on as efficiently as was possible, under great disadvantages, and it is satisfactory to note that there has been no complaint made, so far as I am aware, as to the attention received by any of the patients during their stay.

A large amount of work at present devolves upon the Sanitary Inspector and myself, which, in my opinion, would be more satisfactorily carried out by a permanent Matron. Were such an appointment made it would, I believe, conduce to greater efficiency and at the same time render the Hospital more popular.

The question of the charges made for the maintenance of patients in the Sanatorium is naturally one of importance, not only from its financial aspect, but also from the fact that it has a distinct bearing upon the extent to which that institution is made use of by the public.

On more than one occasion during the past year, the only objection to the removal of a patient has been the fear that the cost of maintenance would be beyond the means of the parents, or, as the case might be, of the patients themselves.

In such cases I have not hesitated to reduce, and

in some instances remit, the charge.

This I did in the belief that it was not only the best policy from the Public Health point of view, but also that, in so doing, I was at least acting

legally.

That the Public Health has benefited may be taken for granted, but that I, as representing the Sanitary Authority, have exceeded the powers of that Authority, appears to be equally certain, and in proof of this I append an extract from an opinion by that eminent authority on Sanitary Law, Mr. Macmorran, Q.C.

INFECTIOUS DISEASE HOSPITAL. MAINTENANCE OF NON-PAUPER PATIENTS. RECOVERY OF EXPENSES.

I am of opinion that there is an obligation on the local authority to recover the expenses incurred in maintaining a patient in the hospital if the patient is not a pauper, that is to say, if he has means wherewith to pay for his maintenance. The statute declares that the expenses in such a case shall be deemed to be a debt due to the local authority; and I am clearly of opinion that the local authority are under the obligation, in the interests of the general body of the ratepayers, to recover all debts lawfully due to them, and that they have no power to dispense with payment in any case in which they could successfully recover the debt. The local authority are in the position of trustees for the general body of the ratepayers, and they cannot lawfully cast upon the rates expenses which it is contemplated shall be borne by private persons. Accordingly, I am of opinion that the view expressed by the Local Government Board upon the construction of section 132 is unsound.

The expenses of the ambulance do not fall within the description used in section 132 of "expenses incurred in maintaining in a hospital." Moreover, by section 123 the local authority are in terms empowered to pay the expense of conveying persons to a hospital in an ambulance without regard to the means of such persons.

I am inclined to the opinion that the expenses recoverable from a patient are limited to the expenses incurred in respect of the particular patient, that is to say, food, medicine, and the like, actually supplied to him. The words "expenses incurred in maintaining a patient in a hospital" are not, in my opinion, wide enough to include general charges which are incurred without regard to the particular patient, such as establishment charges or the cost of the general medicinal and nursing staff. I am further of opinion that the Corporation are not entitled to charge according to a scale of expenses varying with the means of the patient. The amount which they can recover in each case is the amount of the expenses actually incurred, not the amount which the patient, by reason of his social position, is able to pay.

In view therefore of the above, which, while only an opinion, must be treated with consideration, it appears that it is obligatory upon the Corporation to make a charge for all patients treated in the Infectious Hospital, provided that the patient be not a pauper, and that the amount demanded be not in excess of the expenses incurred in respect of the particular patient.

Without further comment, I would simply express the opinion that if this is to be carried out to the letter in Scarborough, little good will result. For, while the expenses recovered will, even if paid in every case, be insignificant, and go a very little way towards reducing the general cost of maintenance, the mere knowledge that a charge will be enforced must seriously interfere with the usefulness of the Hospital.

NEW INFECTIOUS HOSPITAL.

Acting under the instructions of the Sanitary Committee, I prepared a Report upon the requirements of the Borough in this respect, and at the same time gave what can only be a rough estimate

of the probable cost of a suitable building.

It is to be hoped that the next few months will see plans and estimates prepared for an Isolation Hospital worthy of Scarborough.

SLAUGHTER-HOUSES.

PRIVATE.—Of the thirteen at present in use within the Borough all are, without exception, so placed and so constructed as to be insanitary and

dangerous to health.

Their situation, in some instances under dwelling-houses, in others in the centre of a crowded population, and the inconvenient approach to all; as well as the nuisance arising from the accumulations of manure, offal, etc., are some of the reasons which compel me to again urge upon the Corporation the advisability of taking early steps for, at least, their reduction in number.

Were even one or two closed each year, much good would result.

Public.—The same want of rigid supervision necessary for the proper conduct of a Public Abattoir (as mentioned in my last Report) was evident throughout the year.

Apparently anybody, children included, are at liberty to roam at will through the premises, regardless of the fact that their business, if they have any, is quite remote from the slaughter of cattle.

The two main yards require some form of paving, and the usual notices to this effect will be served.

MEAT INSPECTION.

With the exceptions mentioned in the Inspector's Report, the meat supply of the Borough has been of its usual excellence.

House-to-House Survey.

A Special Report on this subject will be presented dealing fully with the work that has been done under this heading.

INSPECTION OF NEW BUILDINGS.

During the year 143 New Buildings have been inspected, and in twelve of these defects were discovered.

Of the total New Houses inspected 52 possessed Privies only, 63 had both Water-Closets and Privies, while in only 28 were Water-Closets alone provided.

Thus 115 Privies were added during the year.

REFUSE REMOVAL AND DISPOSAL.

FISH REFUSE.—Occupying the position which Scarborough does, of a not inconsiderable fishing centre, it would be extraordinary if some nuisance did not arise from this trade.

That only one serious complaint should have been made, the cause of which was fish refuse, points more to the care with which the officials of the Scavenging Department have carried out their work, than to the means employed for its disposal.

This refuse is derived from two sources, viz., from the several Fish-Curing Houses and from the various Fishmongers' Shops in the Borough, while in addition there is that which collects at the Pier and is dealt with by the Harbour Commissioners, who have it conveyed out to sea.

That portion which is removed by the Corporation officials is treated in practically the same manner as the Privy refuse, and is carted at certain times to the loading shed in Falsgrave, from thence to be conveyed by train to outside the Borough.

This method is not, in my opinion, a satisfactory one, and I would recommend that, as suggested in my Report on the subject, some arrangement be made before next season with the Harbour Commissioners, whereby they undertake its disposal, along with any that may require to be dealt with by them.

PRIVIES AND PRIVY REFUSE.

The removal of this refuse is, as far as complaint is concerned, conducted with little nuisance, but that, notwithstanding the comparative absence of complaint, great nuisance must arise, cannot be doubted.

The emptying of the receptacles, the carrying of their contents through yards and passages, or where no yards exist through the houses themselves, and the consequent stirring up of offensive material cannot fail to be a source not only of nuisance, but also of danger to health.

Year by year, in inland towns, the disposal of refuse has become a matter of increasing difficulty.

Farmers, with artificial fertilizers cheap and handy, flooding the market, fight shy of it, and Rural Sanitary Authorities are equally chary of permitting heaps of it to be dotted over their district.

In other words, where it is possible to dispose of even the liquid portion of the Sewage, and that, only after expensive Chemical and other treatment, the Privy system is now condemned as obsolete and dangerous.

In my opinion, therefore, Scarborough, with every natural advantage, including a sea-board of over three miles, should, instead of adding yearly to her already too numerous Privies, be steadily reducing them in number.

During the past year, where opportunities have occurred, in conjunction with the Sanitary Inspector, I have endeavoured to replace existing defective Privies with Water-Closets, and in some cases with success.

But this can only be a slow and uncertain method, at the best.

I hope, therefore, that before long, powers will be obtained whereby the introduction of WaterCloset accommodation be made compulsory in new houses, and in houses already built the work of the conversion of Privies be seriously undertaken.

GENERAL OFFICE WORK.

This has gone on smoothly and efficiently, and I have pleasure in reporting that every member of the Staff has discharged his duties, in many instances of an arduous nature, in a satisfactory and painstaking manner.

That this is so, is due in great measure to the careful supervision and teaching of Mr. Bastiman, the Chief Sanitary Inspector, for whose cordial and loyal support I, myself, am much indebted.

During past years, by the addition of various new Acts of Parliament, as well as by our improved Sanitary knowledge, the work of the Department has necessarily greatly increased. Indeed, a sufficient proof of this is the fact that there is actually an increase of one thousand inspections over the number for last year.

REPORT OF THE PUBLIC ANALYST

FOR THE YEAR 1896.

During the year 30 samples were taken by the Inspector, as shewn in the following Table, which also indicates the nature of the article submitted for analysis, and the proceedings, if any, which followed.

	No. of	Result	of Analysis.	Daniel Inc.
Nature of Article.	Samples.	Pure.	Adulterated.	Proceedings.
Milk	17	16	1	Fined 10s. including
Butter	2	2		costs.
Coffee	I	1		
Mustard Gin	1 2	3	::	
Rum	I	I		
Whiskey	4	4		
Brandy	1	1		

Various samples of the Borough Water were taken during the year, and the following represents a fair average of the result of the analysis.

Total Solid Residue	Grains per Gal.
Chlorine Nitrogen as Nitrates and Nitrites Oxygen absorbed in 15 minutes at 80° F	'44
" " 4 hours "	
Free Ammonia	'0052
Temporary Hardness	•8

This, in my opinion, is a very pure water.

HERBERT LITTLEJOHN,

M.B., C.M., D.P.H., F.R.C.S., Edin.,

PUBLIC ANALYST.

TABLE XI.—DEATHS FROM ZYMOTIC DISEASES.

To the same		1	379.	31		18	50.			181	81.			188	2.			1881			18	84.			188	15.	1	1	886			188	7.		188	8.		11	889.			1890			189	1.		15	192.			1893.			180	14.		18	195.		1	1896.	
Zумутюк.	- Int Qu	20 Qr	And Qr.	ers Qr.	1st Qr.	2nd Qr.	Int Qr.	Qr.	Int Qr.	Ind Qr.	apt Qr.	Qr.	let Qr.	Drud Qr.	and o	ch 1	14L 21	nd Se	d del	ist Qr.	žed Qr.	fed Qr.	Qr.	let 2 Qr.	ded Qr.	ard o	ich 1	et 2n gr. Q	d Se	d 40	let Qr.	and a	ird 4th gr. Qr	fat Qr.	ted 3	ded de Qr. Q	th le	t Ind	3rd Qr.	4th Qv.	Ist 2s Qr. Q	sd See jr. Qr	ech Qr.	tes Qr.	2nd Qr.	and 40 Qr. Q	th In	d Ind	fied Qr.	ech Qr.	let de or. Q	d Sed Qr.	4th Qr.	tet Qr.	2nd Qr.	Brd 4 Qr. C	th la	201 Qr.	Int Qr.	eth 1 Qr. Q	2 2n	el Sed r. Qr.	4th Qr
				Ī				Ī								T	T			T										T																					1												
Typhoid or Enteric Fever	4		4	2	2	1	1	5	2	2	2	2		2		1	. 3	1	1 3	1		1	1	1			1	- 1		1	2		. 1		2	1 :	2 .		1	3		2 .	5	2		- 3	1	1	1	-		2	6	-		4	5 .		5	13	1	3	1
Typhus Fever					-											-							-																	-							1	2			:									1			
Scarlet Fever		1					1					3								2												1	. 2	10.3					1				2																				
Messles																																																															
Whooping Cough					1	2	3						1		2	6	9 1	1	2	3	1		1																																1		3		1	1 6	2	3	
Diphtheria					-		1		Ġ		1	1	1		2	1			. 1				-	1						. 1			. 3			× 1	. 3	6	13	2	3	. 1	4	12		- 1	1				1 1		*				1			1 1			2
Small Pox					-			ġ.															-						j.											3				-						3	4 1											10	
Puerperal Fever					,											3							-			4											. -										1			-										. 2	1		
Diarrheea and Dysentery	2	3	3	3	1	2	20	ā		2	11	1	2	3	21	4	. 4	1	2	1.	2	32	7	1	3	6	1	2 1	12	3 6	3	. 1	11 1	1	1	4 3	1 1	1	16	4	. 1	7	4	1		4 3	2	+	6	-		50	1		1	5 2	1	2	43	7	1	10	1
Total of each Year	F		35		=		15		-	2	ř		-	4	1	1		43		-	-	19	1	-	26		1		49		-	31		-	27		T	-	šš			36			41		1	3	4	1		16			33		1	8	0	1	2	89	-
Population	1	21	9,100			29,	700			30,	950			31,4	50		3	2,15	10	1	32,	750			33,3	50		31	1,934	n		34,53	50		35,0	50		3.5,	700		3	6,356			14,00	00		34,	100		34	,600			34,80	10		35,2	000		35,	,700	
Zymotic Death Rate	1		1-2			-	-1			0	8			1	6			1-3			1	8			0-7	1			1-4			0-8			0.5			2	14			0-9			1.1			0	9			1-2	Ì		0.9			2	2		1	09	
Death Rate from all a		2	0-17			20	-05			16	34			18-	22			18-8	4		17	-31			16-	07		1	8-40	,		16-6	4		15-6	16	1	18	-40		1	6-44			20-1	7		16	1-5			9-9			16-4			20	31		15	1-6	

TABLE X.—DEATHS FROM RESPIRATORY DISEASES.

	_	_	_	_	_	_	_	_	_	_	_	_		_		_	_	_		_		_	_		_									- 1				
NAME OF	18	78.	187	9.	18	80.	18	81.	188	2.	188	13.	188	14.	18	15.	18	86.	188	57.	188	8.	188	89.	185	90.	188	91.	18	12.	18	93.	186	14.	185	15.	18	96.
DIBEASE.	est half of year.	and half of year.	est bulf of year.	red half of year.	on half of year.	and half of year.	nt half of year.	and half of year.	est half of year.	and half of year.	est half of year.	end half of year.	est half of year.	end half of year.	est half of year.	and half of year.	est half of year.	and half of year.	of half of year.	end half of year.	est half of year.	od half of year.	est half of year.	and half of year.	est half of year.	and half of year.	est half of year.	and half of year.	est half of year.	end half of year.	est half of year.	and half of year.	est balf of year.	end half of year.	of year.	ed half	est balf of year.	and ha of yea
BRONCHITIS	31	23	31	30	31	20	31	19	32	37	52	27	20	28	38	28	80	29	59	27	51	20	30	33	26	28	48	34	15	22	15	26	35	12	37	19	22	24
Ритина	28	26	21	15	27	13	18	34	29	35	23	32	24	30	40	41	28	33	23	23	23	21	28	33	27	26	28	19	25	26	31	24	47	26	27	23	20	20
PNEUMONIA	18	9	14	22	18	18	27	6	14	18	11	15	21	19	15	16	28	12	23	12	9	12	9	17	13	22	24	7	27	22	9	13	10	10	17	11	22	8
Автима			3		2	1			1	-	1				1		2	1	1	1							1	1				1	1	1				-
LARYNOITIS			9	1	3	3	4	1	2	2	2	4	7	4	3	2	5	1	2		2	3	6	1	2		2	2		1	1	1	2	3	2	1	1	1
PLEURIST	1			1					1	1		1	1	1	1	1		1		1		1	1	2		1	7	3	2		1	1	5	1		1		
Total of each) Half-year)	78	58	71	69	81	55	80	60	79	93	89	79	73	78	98	88	113	77	88	64	85	57	74	86	68	77	110	66	69	71	57	66	100	53	83	55	65	53
Mean Tempera- ture for each period																																			43°.6	. 3		
	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches-	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inches.	inche
Rainfall for)	13:35	18-86	13-85	14-35	10-92	21-63	10-64	23-96	13-85	17-91	11-31	16-88	9-91	11-45	11-9	13-10	14-06	15-68	8-05	13-36	11-26	17:98	11-49	17:24	11-69	13-20	9-02	18-35	13-3	14.3	5-88	13-26	12-61	16-41	12-91	17-45	6.75	15-7

TABLE OF DEATHS during the Year 1896, in the Scarborough Urban District, classified according to Diseases, Ages, and Localities.

	1	MORT	ALITY I	FROM A	LL CAUS	SES, AT	800				Mo	RTALI	TY FR	om St	BJOIN	ED CA	USES,	DISTI	NGUIS	HING	DEAT	HS OF	CHIL	DREN	UNDER	FIVE '	YEAR	s of .	AGE.	
			sunj	OINED .	Ages.				t	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shewn as separate localities.	At all Ages.	Under	and under 5.	5 and under 15.	and under 25.	and under 65.	65 and up- wards.		Smallpox.	Scarletina.	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing	Puerperal.	Cholera.	Erysipolas.	Measles.	Whooping Cough.	Diarrhoea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Influenza.	Injuries.	All Other Diseases.	TOTAL
Borough of Scarborough Workhouse General Hospital Infectious Hospital Sea Bathing Infirmary Hydropathic	24 24 4 1	121 2 2	55 4	3	15 1 2 3 	132 7 11 1 1	162	Under 5 5 upwards		I I	2 1			3						3 2	10 1	12 	· · · · · · · · · · · · · · · · · · ·	36 1 	40 31 3 1 1	1 62 3 4		3	104 189 2 14 6 9 	176 330 2 22 6 18 4 1
Totals	560	125	59 Th	e subje	oined a	153 accoun	178 its have	5 upwards e also to be		into	acco			4			2		of m	2	1			40	36	69			212	
Deaths occurring outside the district among persons belonging thereto Deaths occurring within the district among persons not belonging thereto.	1	2	2		1	12	6	Under 5 5 upwards Under 5 5 upwards						t						1		1		1	1 1	3			1 14	4 19

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS, coming to the knowledge of the Medical Officer of Health, during the year 1896, in the Scarborough Urban District, classified according to Diseases, Ages, and Localities.

	Popula all a	ation at	18.		New	Cases	of Sic	kness i	n each Iedica	Locali Office	ty, com	ing to	the kn	owledg	e of	Nu	mber o	of such Locali	Cases ties for	Remo	wed from	m their Isolati	Home on Ho	es in the	e seve	ral
NAMES OF LOCALITIES adopted for the purpose of these Statistics, Public		Esti-	d Births.	Aged under 5	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4	5	6	7	8	9	10	11
Institutions being shewn as separate localities.	Census,	mated	ere	or		·i	a.	sme			Fevers.				1			ā.	SILIS			Fevers.				*
TOTAL STATE OF THE	1891.	middle of 1896.	Regist	over 5.	Smallpox.	Scarlatina	Diphtheria.	Membranous Croup.	Typhus.	Enteric or Typhoid.	C'ntinued	R'lapsing	Paerperal	Cholera.	Erysipela	Smallpox	Scarlatina	Diphtheria	Membranous Croup.	Typhus.	Entire or Typhoid.	Continued	Relapsing	Puerperal	Cholera.	Erysipela
Borough of Scarborough	33,776	35,632	946	Under 5		9	1			1							2				1					
				5 upwards		76	7			39			4				39	1			18					
Workhouse				Under 5																						
				5 upwards						1																
General Hospital,				Under 5		1																				
				5 upwards						1							1				τ		**			
Totals	33.776	35,632	946	Under 5 5 upwards	::	10 76	1 7	::		1 41		::	4		::	::	2 40	· · ·	::		1 19					

State here whether "Notification of Infectious Disease" is compulsory in the District—Yes. Since when?—Jan. 1st, 1890. Besides the above-mentioned Diseases, insert in the columns with blank headings the names of any that are notifiable in the District, and fill the columns accordingly. State here the name of the Isolation Hospital used by the sick of the District. Mark (H) the Locality in which such Hospital is situated; and if not within the District, state where it is situated—Three separate buildings used. Nos. 1 and 2 for Scarlet and Typhoid Fevers respectively, and No. 3 for Small-pox, in the Parish of Throxenby, one mile out of the Borough.

HINTS ABOUT THE PREVENTION OF SCARLET FEVER.

The Sanitary Committee hope that parents and others will read this Paper carefully, adopt the instructions which it contains, and any others given by their Medical Attendant having the same end in view.

Scarlet Fever is a very infectious and dangerous disease, characterised by sickness, headache, and sore throat, followed by a rash on the second day of illness. Any person, especially a child, having these symptoms, should at once be put under medical care.

A mild case is as infectious as a severe one, and Scarlet Fever is never so mild that it may not in the long run prove dangerous to life, and even fatal.

It is the duty of every parent or person who has charge of a case of Scarlet Fever, to remember that they are responsible for a disease which tends to spread, and to adopt such precautions as will prevent it from doing so. These are all embraced in the words Isolation or Separation, and Disinfection.

ISOLATION.

Isolation means the separation of the sick from the neighbourhood of every person not necessary for proper nursing and treatment. This may be done in two ways.

By sending the patient to the Sanatorium, which is the only perfect way.

By keeping the patient at home and cutting off all communication with the healthy. This is more difficult, and in the majority of instances impossible to do. It involves, if done perfectly, a great many points, the chief of which are:—

- 1. Keep all persons, especially children, out of the sick-room. In certain cases it may be advisable to send children who are healthy out of the house, but this should never be done without the sanction of the Medical Officer of Health.
- 2. When possible, the room selected should be at the top of the house, large, well-ventilated, and have a fire burning. Never choose the kitchen, as it is the centre of the house, and disease there cannot be isolated.
- 3. Remove carpets, curtains, hair-cloth chairs or sofas, and every unnecessary piece of furniture. Iron bedsteads, hair, or still better, straw mattresses and kitchen chairs are to be preferred for the sick-room.
- 4. The room must be occupied only by the patient and the person nursing, and never entered by any one else.

No child from a house in which Scarlet Fever exists should be allowed to attend school.

5.-No person nursing a case of Scarlet Fever may go

shopping or visiting.

The gown or outer garment of the person nursing should be of washing print; winceys or other stuff dresses should not be worn.

Women especially should avoid neighbours' houses where Scarlet Fever exists, particularly during convalescence.

Much mischief is done by parents gossiping in each others' houses, or even making sympathetic visits in such circumstances.

Midwifes should avoid all contact with this Fever, but having been in contact should, under no circumstances, attend a case of confinement without the permission of a medical man.

No person who suffers from Scarlet Fever, or who has recently been in contact with a person so affected, should milk cows or handle vessels used for containing milk for sale, or in any way take part or assist in the production, distribution, or storage of milk for sale.

- 6. While a case of Scarlet Fever exists in a family no books should be obtained from any Public or Circulating Library, and on a case occurring, such books should be brought to the Sanitary Department for disinfection prior to their being returned to the Library.
- 7. Persons exposing themselves or those in their charge in any Public Place or Vehicle, whilst suffering from the disease, are liable upon conviction to a penalty not exceeding Five Pounds.

Any person letting any Room or part of a House in which any person has been suffering from the disease, without having such Room or part of a House, and all articles therein liable to retain infection, properly disinfected, is liable to a penalty not exceeding Twenty Pounds.

DISINFECTION.

The body, and everything about and discharged from the body of a person infected with Scarlet Fever, is itself infected, and therefore capable of imparting the disease to other persons.

1. CLEANLINESS is an essential step towards successful Disinfection, and should, therefore, be thorough, not confined to the surface or middle of the room, but penetrate to every corner.

All dust swept up or rubbed down should be placed in the heart of the fire. It is illegal to place it in the ashpit or privy.

- 2. VENTILATION AND LIGHT are powerful disinfectants. As much Air and Light should be freely allowed to enter the sick-room as the safety and comfort of the patient will permit.
- 3.—DISINFECTION DURING SICKNESS.—Scarlet Fever patients always cast their skin, and so long as a particle of old skin remains

visible, the patient is infectious. The dead skin comes off partly in flakes, but partly also as dust, which flies everywhere and clings to everything.

To prevent this, so soon as the redness disappears, rub the whole surface of the body over with Olive Oil, Vaseline, or other agreeable oil or fat. This should be done every night.

Whenever the patient is able to stand it, give warm baths, taking special care to rid the hair of all particles.

This oiling and bathing is the most important disinfecting process which can be adopted, but the following directions must also be attended to:—

- 1. Use separate bits of rag for wiping the discharge from mouth, nose, or ears, and burn each bit as it is used.
- 2. The Corporation provide free of charge a supply of Disinfectants, and it is desired that the person in charge of a case of fever should always see that such supply is at hand.
- 3. All vessels receiving discharges from the patient should contain a little of the disinfectant.
- 4. All bed or body clothes removed from the patient during illness should be put into a tub containing water and some of the disinfectant, and there allowed to steep for 12 hours. They should be then boiled and washed in the usual way.

DISINFECTION AFTER RECOVERY.—It is impossible to give instructions which unskilled persons can follow with regard to disinfecting rooms, etc., etc.

In all cases, therefore, on the completion of an illness notice should be sent to the Sanitary Department, 42, Queen Street, when immediate attention will be given free of charge.

In the Case of Death, the body should, as soon as possible, be placed in a coffin and interred with the least possible delay. No dead body of any person who has died from an infectious disease must be retained unburied elsewhere than in a Mortuary, for more than 48 hours, without the sanction, in writing, of the Medical Officer of Health. The penalty for offending against this enactment is one not exceeding Ten Pounds, and a daily penalty not exceeding Forty Shillings.

Health Department, 42, Queen Street, Scarborough, Jan., 1897.

SANITARY INSPECTOR'S REPORT.

To the Medical Officer of Health.

I herewith present my thirteenth Annual Report for the year ending 31st December, 1896, shewing the action taken, and details of work carried out in the Health Department during the past year in the abatement and suppression of nuisances.

During the year under notice one thousand four hundred and forty-three notices were served to abate nuisances and improve the sanitary condition of dwelling-houses on the latest scientific principles of sanitation. In nineteen instances it was found necessary to adopt magisterial proceedings against persons for non-compliance with notices served upon them under the Public Health Acts relating to nuisances, also for carrying into effect sanitary measures under the Scarborough Improvement Act and the Housing of the Working Classes Act, 1890, and for recovering penalties under Sections 116-119, also for infringements of the Food and Drugs' Act and the Bye-laws of the Borough (for particulars see Tables).

Housing of the Working Classes Act, 1890.

During the year under review seven insanitary houses have been dealt with under the above Act, six of this number remained on the Books from the preceding year, 1895, and had been dealt with under the Fourth Schedule, Form A. Of this number three have since been put into sanitary order and made fit for human habitation, and two were demolished, also another house was demolished and a new house erected on the site, whilst in another instance a house reported to the Local Authority by the Medical Officer of Health during the year as being unfit for habitation. In this case, however, sanitary arrangements were carried out, the house thoroughly renovated and made fit for human habitation.

Unsound Food.

The inspection of Meat, Fish, Fruit, Provisions, &c., has been systematically carried out during the year by the Medical Officer and myself, and no less than ten carcases and two hind quarters were condemned as unfit for human food. It is interesting to record the nature of the disease from which the animals had suffered.

Twenty-six seizures of unsound food were made during the year, which comprised 220 stone of beef, mutton, and pork, 40 stone of fruit and vegetables, also 7 lb. of shrimps, and 10 lb. of fish. In fourteen instances the articles seized were destroyed by consent of the owners.

No. of Animals.	Kind of Animals.	Disease.
1	Beast.	Dropsy.
3	Two Cows and an Ox.	Dropsy. Tuberculosis.
3	Pigs.	,,
I	Pig.	Dropsy. Inflammation.
2	Sheep.	Inflammation.
2	Portions of a Cow.	Accident.
hind quarters.		

LIST OF NUISANCES DEALT WITH BY FORMAL NOTICES DURING THE YEAR.

Nature of Nuisance.			Abated.	Not Abated.	Total.
Foul and defective water-closets			29		29
Soil-pipes defective			11	I	12
" not ventilated			3	I	4
,, inadequately and improperly	ventil		14	1	15
,, inside houses			2		2
Water-closets with defective cisterns			3		3
Defective yard and house drains			75	10	85
,, cellar drains			4		4
Choked drains			66	I	67
Untrapped drains			9		9
Defective traps			3	::	3
,, eave-spouts and fall-spouts			9	3	12
" slopstone waste-pipes			12	2	14
" gullies			- E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E-E	3	- 4
uninala			35		38
Slopstone and other wastes connected	with	the	4		4
drain					
Fall-spouts connected with the drain			4	*:	4
Defection and de-			39	I	40
			52	I	53
" manure pits			3		3
,, ashpits			3		3
nadequate privy accommodation			0		6
Privies in improper positions so as to be	a nuis	ance	26	5	31
Nuisances from cesspools			2		2
" ,, offensive accumulations			6		6
", ", animals (so kept)			22	I	23
", ", house being damp			2		2
Iouses in a filthy state			6		6
,, unfit for human habitation			3		3
" overcrowded			4		4
Defective roofs and floors			II		II
yard and passage pavements			66	4	70
Sundries			9	2	11
The state of the s					
Total			543	36	579

Four persons were summoned before the Magistrates, all of whom were convicted and punished by fines, also twelve Justices' orders were made in condemning diseased and unsound food alone. Carrying into effect the inspection and supervision of this work alone necessitated no less than five hundred and ninety-three inspections.

The approximate number of Notices on the Register not complied with for the year under notice is 34 as regards general nuisances, and 468 under the house-to-house inspection, out of a total number of 1,443 Notices served. It is a difficult matter to arrive at the exact number of Notices not complied with without a further inspection, which I strongly advocate as soon as the special inspection of the Central Ward is completed.

House-to-House Inspection during the Year 1896,

Shewing the Number of Defects dealt with by

Formal Notice and the Results.

	Nature of Nuisance.		No. of Nuisances Abated.	No. on Books.	Total
Foul and	defective water-closets		51	34	85
	defective		8	3	11
oon pipe.	not ventilated	:: ::	16	12	28
,,	inadequately and improperly v		6	24	30
"	inside houses		5	4	9
	set without water supply		3		I
Defective	word and house drains		245	107	352
Delective	coller drains		18	8	26
Choked d	raina		II .		11
	d drains		9	3	12
Defective		:: ::	19	11	30
,,	cove enouting		12	13	25
	clonetone waste nines		20	10	30
	aullian		176	52	228
,,			1	32	2
	s and other waste-pipes connec				-
the	drain		40	26	66
	s connected with the drain		93	48	141
Defective			208	68	276
,,	manure pits		2	00	2,0
"	ashpits		4		14
	e privy accommodation		7	I	1
Defective	roofe and floore		2		2
11	ward and naccage nevernents		48	168	216
Sundries	,		5	5	10
			3	3	
	Total		1000	602	1602

The total number of Notices issued under the house-to-house inspection was 940, having reference to 1,602 nuisances. Of this number 472 Notices were complied with, representing 1,000 defects, leaving 468 Notices not complied with, these latter representing 602 defects or nuisances requiring abatement according to the Register.

Two hundred and seventy-eight complaints have been received and entered in the Register, which have at all times received prompt attention, and wherever nuisances were found to exist either by formal complaint or periodical inspection made by the Staff, preliminary Notices were served to abate, and if not complied with are duly reported to the Local Authority, and are afterwards dealt with by legal notice.

With reference to the cleansing and purifying of back yards and premises in cottage property, no less than four hundred and fifty brushes have been lent out to poor people, also eighteen chaldrons of lime have been supplied gratuitously in carrying out this work.

Also eighty-six houses and premises have been carefully examined and certified to be in a sanitary condition so far as could be ascertained by smoke tests and otherwise.

THE TOTAL NUMBER OF INSPECTIONS DURING THE YEAR

COMPRISED THE FOLLOWING :-

Inspections to drainage alterations	::		1130
Number of drains tested by smoke after alte Investigating as to cause of nuisance on co			852
otherwise	if No	tione	528
were complied with	11 140	iices	1840
Number of visits to Common Lodging-hous	es		76
Number of inspections Fish Market Hospitals Market			483
Number of visits to Slaughter-houses			110
Number of visits to Dairies and Cow-sheds			31
Miscellaneous	**		152
Total			4902

One hundred and seventy-nine letters have been written in transacting the business of the Department.

COMMON LODGING-HOUSES.

There are at the present time eleven Common Lodging-houses in the Borough. Two Lodging-house keepers have given up during the past year. It was found necessary to institute summary proceedings against two keepers for contravening the Bye-laws made for regulating the same, namely, overcrowding, mixing of sexes, also suffering beds to be

occupied by more than one male person above the age of ten years at any one time, also for neglecting to provide proper screens to be so furnished and fitted to rooms set apart for married couples so as to effectually screen from the view of any occupant of any other bed in the sleeping apartment.

The number of persons passing the night in such houses

during the year was as follows :-

Males.	Females.	Total.
51,982	4,908	56,890.

Of this number 1,056 were children under the age of ten years.

In the corresponding period last year the total number was 55,179, being on increase of 1,714.

It is interesting to note the rate, gathered from the weekly returns, of persons frequenting these premises at various periods of the year in any one week.

Week ending.	Rate.	Male.	Female.	Children under 10 years of age.
Jan. 11th Aug. 22nd	Min. Max. Mean.	634 1500 999:37	70 108 99:20	9 22 20·16

In addition to the eleven Common Lodging-houses aforesaid there is in course of erection a commodious and substantial Model Lodging-house, which will provide a long-felt want in the shape of baths and other improved sanitary conveniences, also cooking accommodation, and reading-rooms for the comfort and intellectual advancement of the masses frequenting those premises, which I believe to be a step in the right direction.

FISH MARKET.

The Fish Market has been periodically inspected during the year and every means taken to keep it in a good sanitary condition, and I am highly pleased with the manner in which the premises have been kept, for at certain times of the year it is a great tax on the management in clearing away the large accumulations of refuse collected from the cleansing and packing of fish to be sent away by rail to all parts of the country.

The amount realized from the letting of Fish Stalls on the South Foreshore slipway during a few weeks of the season was

£40 18s. 8d.

THE DAIRIES, COW-SHEDS, AND MILK-SHOPS ORDER OF 1885.

The inspection of Cow-Sheds and Dairies in the Borough has again received the careful attention of the Medical Officer of Health and myself. In several instances where over-crowding of animals and other sanitary defects existed, as reported in my Annual Report last year, have now been abated. In several instances new Cow-Sheds have been erected. In other instances they have been enlarged so as to provide the necessary amount of cubic air space, whilst in other specific instances the number of cattle kept have been reduced in numbers so as to meet the requirements specified under the Bye-laws made in that behalf for regulating the same.

The defects found in the drainage and ventilation, &c., of the premises have also been attended to with the greatest willingness on the part of the parties concerned after the defects were brought to their notice.

Number of Cow-keepers on the Register			48
Do. Dairymen and Purveyors of Milk			166
Cow-keepers registered during the year			3
Purveyors of Milk Do. do			13
Number of Cow-keepers cancelled during the		:	I
Do. Dairymen or Purveyors of Milk	cano	elled	
during the year			9

BAKEHOUSES.

A periodical inspection of these premises have been made by the Medical Officer of Health and myself. The majority of these houses were found in a good condition, and I am happy to say any suggestions of ours as to cleansing, &c., were speedily met with by the occupiers of the premises, and in no instance was it found necessary to take further proceedings.

OFFENSIVE TRADES.

The premises in which these trades are carried on have been well conducted during the year. They are all subjected to a minute inspection and every care taken to ensure a most thorough and perfect state of efficiency as regards cleanliness or undue accumulation of offensive matter. Two applications have been made to the Local Authority during the year to establish businesses coming under this category, namely, gut scraping and a knacker's yard for the slaughtering of horses, &c. The first-named was refused, the latter is still under the consideration of the Authority, the site in my opinion being the greatest obstacle. Whilst it is no doubt a grave responsibility on the part of the Authority in registering any more such like businesses within their district, I believe the last-named to be a most pressing necessity.

SLAUGHTER-HOUSES.

These premises have been constantly visited at all hours of the day, and occasionally surprise visits paid at night time, when slaughtering is being done, in the interests of the public, to detect any unsound cattle slaughtered or dressed on the premises, and to prevent it finding its way into the Market or shops and palmed off on the public as a genuine article. In several instances during the year unsound meat has been found in preparation for sale by the Medical Officer of Health and myself, which would if not found in this early stage have been sold in the ordinary way. The results from such inspection have no doubt been most beneficial. At the same time such inspection has produced good effects in other ways, by the Inspector being sent for by butchers to examine carcases of beasts and sheep, &c., when there has been signs of disease in the animals on being dressed. I am sorry to say in some instances attempts have been made to cut away all traces of disease before sending for the Inspector, but on the whole the houses have been well conducted during the year and kept in a cleanly condition inside the premises. The entrance and yards to the buildings are in a bad state of repair and almost impassable at certain periods of the year, which might be greatly improved by paving with concrete blocks or other suitable impervious material.

There are 21 Fish-curing and smoke-houses situate in the Borough, which have been frequently visited during the year, especially in the autumn, when a large quantity of herrings are landed by numbers of fishing-boats hailing from Scotland, Penzance, Lowestoft, Grimsby, Hull, and other ports, besides other local boats. A large number of these herrings are kippered and sent away in boxes specially prepared to all parts of the country. I am happy to state that the premises in which this particular branch of trade is carried on has received every attention, and every precaution has been taken to keep the premises in a clean and wholesome condition.

FACTORY AND WORKSHOPS' ACTS, 1878, 1891, & 1895.

The responsibility of the administration of these Acts have now been thrown on to Sanitary Authorities as regards their sanitary condition relating to internal or external sanitary fittings, cleanliness, overcrowding, a fixed cubic air space, separate accommodation of sanitary conveniences for both sexes, also the providing of lists of outworkers by the occupiers of every Factory and Workshop to Sanitary Authorities.

During the year under notice thirty-seven different rooms or workshops have been inspected by the Medical Officer of Health and myself. Of this number we found overcrowding in two instances, in eight instances foul and defective lavatories, and in one case without any convenience provided, and in two instances no Notice affixed in workshop, whilst in three instances we found defective drainage and ventilation. The number of persons employed therein was 98 males, 315 females, and 32 young persons under the age of 18 years. The sanitary defects have been attended to and printed circulars distributed as to required Notices been affixed, whilst in the case of overcrowding verbal notices have been given to abate.

SHOP HOURS' ACT, 1892.

The inspection of premises under this heading has been carried out conjointly in conjunction with the Factory and Workshops' Act. In nine instances no Notices were affixed in the shops as to hours of labour in which any young persons may be employed under the age of 18 years, required under the Act. Printed copies have in all cases been given cautioning the parties concerned.

JAMES BASTIMAN,

Assoc. San. Inst.

February 4th, 1897.

Number of Cases Removed into Sanatorium, also Number of Houses, Bedding, and Clothing Etc., Disinfected, also Number of Articles Burnt to prevent Contagion.

		orac.
Number of cases removed into Sanatorium		 68
Number of Rooms disinfected by the Inspecto	r	 111
Sundry articles burnt to prevent contagion		 11
Beds disinfected		 65
Mattresses and palliasses disinfected		 53
Dillows and halstons do		260
Plankata disinfeated		 182
Sheets disinfected		 133
Counterpanes disinfected		 102
Rugs disinfected		 19
Curtains disinfected		 17
Carpets disinfected		 47
Personal clothing disinfected		 328
Sundry articles		 127
		 /
Total		 1522
		_

Showing the Amount of Bad Meat and other Unwholesome Articles of Food Seized and Destroyed during the Year 1896.

Class of Food.	No. of Seizures	We	ight.	No. of persons sum- moned.	No. of convic- tions.	Amount of penalties imposed.
Beef, Mutton, & Pork Diseased Lungs, Liver,		st. 219	lb. 5	4	4	£ s. d. 23 17 o
and Kidneys	6	I	10			
Chicken	1	8	$1\frac{1}{2}$			
Fish	1		10			
Shrimps	I		7			
Fruit	4	28	II			
Vegetables (Asparagus)	I	12	0			
Total	26	263	21/2	4	4	£23 17 0

LIST OF CASES IN WHICH IT WAS FOUND NECESSARY TO ADOPT MAGISTERIAL PROCEEDINGS.

Particulars of information or complaint to Justices.	No. of Cases.	How disposed of.		nalt	
Premises in such a state as to be a nuisance or injurious to health	6	Two magistrates' orders were made to abate nuisance in seven days, and to pay costs. Four adjourned for seven days, the owners promising to execute works, and summons withdrawn on payment of costs.		s.	d.
House unfit for human habitation	t	Summons withdrawn, house demolished after the issue of summons. House re- built and made fit for human habitation.			
Breach of Bye-laws for regulating Common Lodging-houses	7	Dismissed on payment of costs in each case.	1	18	6
Breach of Food and Drugs Act	1	Fined 10s. including costs.	0	10	0
Total	15		£3	9	6

Showing the various Acts under which proceedings were taken, and the result of such proceedings.

Act or Bye-law under which proceedings were taken.	No. of Cases.	Con- victions.	Dis- charged.	Nuisances abated and summonses withdrawn on payment of costs.
Public Health Act	8	4		4
Scarborough Improvement Act	2			2
Housing of the Working Classes Act	- 1			1
Borough Bye-laws	7	.:	7	On payment of
Food and Drugs Act	1	1		costs.
Total	19	5	7	7

Number of Samples taken under the Food and Drugs Act and Results.

Description of Sample.	No. of Samples.	Gehuine.	Adulter- ated.	Prosecu- tions.	Results.
Milk	17	16	I	I	Fined 10s. inclu- ding costs.
Butter	2	2			
Gin	3 4	3			
Whiskey	4	4			
Brandy	I	1			
Rum	1	1			
Mustard	1	1			
Coffee	1	1	**		
Total	30	29	I	1	IOS.

METEOROLOGICAL REPORT.

To the Town Council of the Borough of Scarborough.

GENTLEMEN.

I have the honour to present my Meteorological Report for the year 1896, together with a description of the instruments at present in use. During the past twelve months the instruments have been kept in good working order, the barometers and thermometers being frequently cleaned and the anemometer and wind vane occasionally oiled.

The instruments belonging to the Corporation are:—Standard Kew-pattern Barometer, reading to 'ooz inches; set of shade Thermometers, viz., Dry Bulb, Wet Bulb, Maximum and Minimum, exposed in a Stephenson's Screen; Meteorological Office pattern Rain-gauge, 8 inches in diameter, and made of copper, used for daily readings; Symons's Earth Thermometer, exposed 2 feet 6 inches below the surface of the ground; and Minimum Thermometer, exposed on the tips of the grass.

The following instruments (my own private property) have been in use during the year to make the readings more complete:—Barometer for comparison, with standard; complete set of shade Thermometers, viz., Dry Bulb, Wet Bulb, Maximum and Minimum, exposed in a single-louvred screen; 5 in. copper Rain-gauge, used for weekly readings; large Robinson Anemometer with 8 in. cups, for registering the velocity of the wind in miles per hour; large wind vane with Beckley fans, for recording the true direction of the wind.

The usual readings are made three times daily, at 9 a.m., 1 p.m., and 9 p.m., local time, but during the season daily reports were telegraphed to the Sheffield Daily Telegraph at noon. Throughout the year reports have appeared in the Scarborough Daily and Weekly Post, and full weekly reports have been printed in the Gazette, from which no fewer than 1,290 reprints have been posted to various Observatories, private individuals, &c. The usual weekly and monthly returns have been sent to the Royal Meteorological Society throughout the year, and the rainfall of the year has been sent to the Secretary of the Yorkshire Fishery Board for publication in his annual report.

The instruments are at present situated at the Astronomical Observatory, South Cliff, but a more suitable site is, in my opinion, necessary.

All the instruments were tested during the year by Mr. Marriott, of the Royal Meteorological Society, and found correct. He suggested some spot in the Holbeck Gardens as a suitable site for the instruments. My thanks are due to the Meteorological Office, Director of Observatories, and private individuals, for daily, weekly, monthly, quarterly, and annual reports, which they have been kind enough to send me.

I may say in conclusion, that if the instruments were in a more open position, a great deal of public and popular interest would be taken in the Meteorological work, as even in its present position no less than 60 persons have visited the Observatory during the year.

I am, gentlemen,

Your obedient servant,

ERNEST W. ELLERBECK, F.R.A.S., M. Soc. A. Fr., F.L.A.S., &c.

Meteorologist.

The Observatory, Scarborough, January, 1897.

SHADE TEMPERATURE.

Month.	Max. Mean.	Min. Mean.	Mean Temp- erature	Range	High- est.	Date.	Low'st	Date
January February March April May June July August September October November December	Degs. 44.6 45.7 49.7 53.0 54.5 64.0 66.6 61.4 59.9 48.8 55.5 43.2	Degs. 36.8 32.2 37.1 41.0 43.0 51.8 53.2 50.9 50.0 40.2 38.0 35.3	Degs. 40.7 39.0 43.4 40.6 48.8 57.9 59.6 56.4 55.0 49.5 42.1 39.3	Degs. 7.8 13.5 12.6 12.0 11.5 12.2 12.8 10.5 9.9 8.6 6.9 7.9	Degs. 50·6 53·4 61·1 62·8 72·5 77·2 79·2 69·3 65·1 61·4 51·1 55·0	17th & 18th 11th 25th 25th 31st 13th 12th 13th 27th 2nd 11th 26th	Degs. 27.9 25.7 31.3 35.0 33.9 46.3 46.5 43.5 39.6 29.2 28.9 26.0	23rd 3rd 31st 3rd 4th ,1st 23rd 26th 21st 27th 6th 24th
Year	53.9	43.6	47.7	10.2	79.2	July 13th	26.0	Dec. 24th

* DIRECTION AND VELOCITY OF THE WIND.

Month.	N.	N.E.	E	S.E.	s.	S.W.	W.	N.W.	Calm.	Greatest velocity. Miles per hour.	Date.	Time.
January February March April May June July August September October November December	0 1 0 4 8 4 8 1 3 14 6 5	4 2 5 0 I 3 2 2 2 5 8 5	0 0 2 0 0 0 0 0 0 1	0 9 2 0 0 0 2 2 1 0	4 2 3 0 0 0 1 0 2 5 0	24 20 20 21 4 10 17 18 18 14 13 18	0 2 2 4 0 2 1 3 0 0	4 1 5 7 19 5 6 2 11 5 4	26 21 23 24 30 36 25 26 29 19 27 23	69·375 41·875 38·250 27·750 33·375 22·125 17·625 24·750 24·250 29·250 34·500 39·750	15th 12th 6th 28th 20th 30th 4th 29th 23rd 10th 10th 26th	1 p.m. 1 p.m. 1 p.m. 9 a.m. 1 p.m. 1 p.m. 9 a.m. 1 p.m. 9 a.m. 1 p.m. 9 a.m. 1 p.m.
Total for Year	54	39	5	26	17	197	14	69	309	69.375	Jan.	í p.m.

^{*} Two Observations were taken daily.

BAROMETER AND RAIN.

1896.	Mean at 9 a.m.	Mean at 9 p.m.	Highest.	Date.	Lowest.	Date.	Total amount.	Number of wet days.	Greatest fall 24 hours.	Date.
January . February March April May July August Sept October . Nov	30·322 30·349 29·731 30·098 30·268 30·001 30·001 29·983 29·741 29·697	30·318 29·734 30·107 30·273 29·937 29·998 30·008 29·738 29·727 30·155	30·980 30·792 30·221 30·478 30·520 30·188 30·252 30·442 30·444 30·684	9th 3rd 3oth 2oth 25th 26th 1oth 1oth 3oth 1st 24th 2oth	29·311 29·781 28·704 29·575 29·724 29·007 29·571 28·770 29·178 29·234 28·779	3rd 29th 20th 10th 3rd 26th 22nd 18th 15th	inches. 0.86 0.57 2.33 6.68 0.85 1.40 2.02 2.69 2.61 4.58 1.12 2.72	14 7 15 11 9 16 11 18 18 23 13 20	inches. 0'32 0'22 0 50 0'25 0 28 0'52 1'04 1'15 0'40 0'85 0'43 0'57	13th 20th 13th 4th 17th 4th 26th 3rd 24th 10th 7th 4th
Year	29.982	30.000	30.980	Jan. 9th	28.704	Mar. 3rd.	22.49	175	1.12	Aug 3rd

