# [Report 1923] / Medical Officer of Health, Stoke-upon-Trent Borough.

#### **Contributors**

Stoke-on-Trent (England). Borough Council.

## **Publication/Creation**

1923

#### **Persistent URL**

https://wellcomecollection.org/works/jkacype2

# 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.



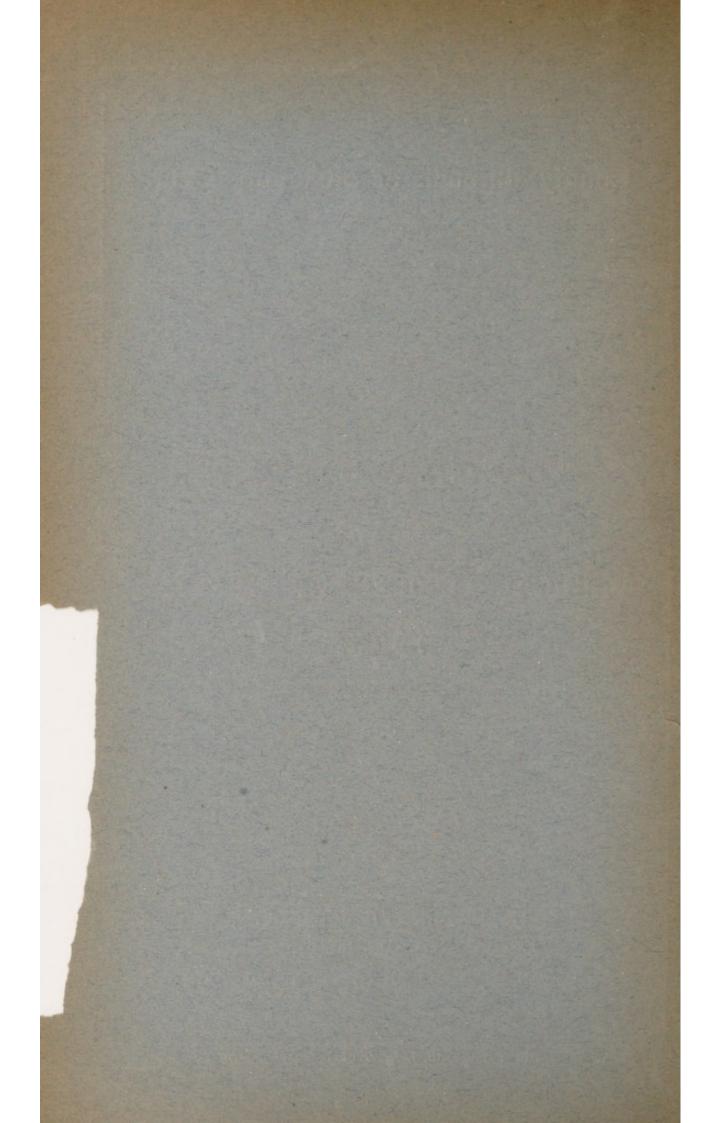
County Borough of Stoke-on-Trent.

# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH, 1923.

G. PETGRAVE JOHNSON, M.D., C.M., D.P.H.



# County Borough of Stoke-on-Trent.

# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH, 1923.

G. PETGRAVE JOHNSON, M.D., C.M., D.P.H.

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

# INDEX.

								PAGE
Acute Anterior 1								81
Acute Encephalit	tis Leth:	argica a	and Ac	ute Pol	io-Ence	phalitis		56
Adoptive Acts is								83
Alcoholism								58
Ambulance Arra	ngement	S						82
Ante-Natal Clini	ic .							7.5
Area-persons ar	nd popu	lation	per acr	e				14
Ashbins						***		33
Atmospheric Pol	ution							92
								0-
					***			.85
								15
Births-Illegitim	ate .							16
Births-Notificati								71
Birth Rate, Deat		and In	fantile	Mortali	ty Rate	in each	of	
the 28 War								18
Birth Rate, Dea	th Rate	and I	nfantile	Morta	lity Ra	te duri	ng	
last 24 yea	irs .							19
Byelaws								34
Canal Boats, Ins							***	49
Carcases, &c., I		d						42
Causes of Deatl								22
Cerebro-Spinal I								56
Child Welfare C	entres .							73
Closet Accommo	dation .							24
Common Lodgin	g Hous	es						35
Complaints recei	ved .							30
Conversion of P	rivies .							32
Cowsheds								40
Deaths								19
Deaths-Principa								20
Deaths-from Pr								20
Deaths assigned	to Preg	nancy	or Chil	d-birth				79
Destructors			or Chil	d-birth				6, 27
T				d-birth 				
Destructors Diarrhœa, Epede Diphtheria	emic .						2	6, 27
Destructors Diarrhœa, Epede Diphtheria	emic .						2	6, 27 82 54 57
Destructors Diarrhœa, Epede Diphtheria	emic .						2	6, 27 82 54 57
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van	emic						2	6, 27 82 54
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing	emic			  			2	6, 27 82 54 57 87 31
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec	emic					 	2	54 57 87 31
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery	emic						2	54 57 87 31 31 57
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I	emic						2	54 57 82 54 57 87 31 31 57 39
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever	emic						2	54 57 82 54 57 87 31 31 57 39
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I	emic  ction of 						2	54 57 82 54 57 87 31 31 57 39
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I Enteric Fever Erysipelas	emic						2	66, 27 82 54 57 87 31 57 39 55 56
Destructors Diarrhœa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita	ction of						2	6, 27 82 54 57 87 31 57 39 55 56 84
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting	ction of ime	   ommodā	    ation				2	6, 27 82 54 57 87 31 57 39 55 56 84 35
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I	emic ction of ime ary acco	ommodā	    ation				2	6, 27 82 54 57 87 31 57 39 55 56 84
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 57 39 55 56 84 35
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 37 39 55 56 84 35 48
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 37 39 55 56 84 35 48 45
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 37 39 55 56 84 35 48 45
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 37 39 55 56 84 35 48 45 35
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspectory Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 57 39 55 56 84 35 48 45 35
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspectors Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work	ction of	ommodā	ation				2	6, 27 82 54 57 87 31 57 39 55 6 84 35 48 45 35 48 45 35 48 45 35 48 48 48 48 48 48 48 48 48 48 48 48 48
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals	ction of	Stuffs	ation				2	6, 27 82 54 57 87 31 57 39 55 56 84 35 48 45 35
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspectors Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work	ction of	Stuffs	   ation  Act, 1				2	6, 27 82 54 57 87 31 57 39 55 56 84 35 48 35 34 86 82
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I	ction of	ommoda Stuffs	Act, I				2	6, 27 82 54 57 87 31 57 39 55 6 84 35 48 45 35 48 45 35 48 45 35 48 48 48 48 48 48 48 48 48 48 48 48 48
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I Housing	ction of	ommoda Stuffs		906			2	6, 27 82 54 57 87 31 57 39 55 56 84 35 48 35 34 86 82
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I Housing Ice Cream Shop	ction of	ommoda Stuffs		906			2	6, 27 82 54 57 87 31 57 39 55 6 84 45 35 48 45 35 48 45 35 48 45 35 48 45 35 48 45 45 45 45 45 45 45 45 45 45 45 45 45
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I Housing Ice Cream Shop	ction of	ommoda Stuffs		906			2	6, 27 82 54 57 87 31 57 39 55 56 84 35 48 35 34 86 82
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspect Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I Housing Ice Cream Shop Illegitimate Birt	ction of	ommoda Stuffs		906			2	6, 27 82 54 57 87 31 57 39 55 6 84 35 48 45 35 34 86 82 35 88 44 16
Destructors Diarrhæa, Epede Diphtheria Disinfection Disinfecting Van Drain Testing Drainage—Inspec Dysentery Distribution of I Enteric Fever Erysipelas Factories—Sanita Fat Melting Fertilisers and I Food and Drugs Fried Fish Shop Gratuitous Medic Gut Scraping Home Work Hospitals Houses Let in I Housing Ice Cream Shop	ction of ime ary according s Acts cal Reli	ommoda Stuffs					2	6, 27 82 54 57 87 31 57 39 55 6 84 35 48 35 34 86 82 35 88

# INDEX-Continued.

					1	PAGE
Inhabited Houses	200	110		***	***	11
Inspection of Drainage Work Isolation Hospitals			***			31 82
Vanalana' Vanda	***	***	***			
Knackers' Yards		***	•••		***	34
Ladies Voluntary Committees Lead Poisoning		***	***	***	***	75
Legal Proceedings					33. 4	3, 46
Malaria, Dysentery and Trend	h Feve					
Margarine Dealers						57
Marine Stores						35
Massey Square Improvement						90
Maternity and Child Welfare	e				***	67
	. 0	***		***		81
Midwives Acts, 1902 and 19 Milk Analysis		***	***	***		67
Milk and Cream Regulations,	1012	1017				40
Milk, Preservation in						39
Milk Shops and Purveyors of						39
Milk Supply						39
Motor Disinfecting Van						87
Milk and Dairies (Amendmen	nt) Act	, 1922				40
Notification of Births						71
Notification of Infectious Di						50
Nuisances dealt with						29
Nursing Arrangements						83
Occupations—Principal					***	13
Offensive Trades Ophthalmia Neonatorum		***	-11.			34
Other Foods						79 42
Outworkers						85
Overcrowding						31
_		777				
Pneumonia				***	***	57
Phthisis						60
Poor Law Relief				***		23
Preservative in Mills Butter	ate	***	***			1, 15
Preservative in Milk, Butter, Principal Causes of Death				***		47
Privies, Conversion of		***				32
Prosecutions					33. 4	3, 46
Puerperal Fever						79
Public Urinals				***		39
B. El l A.						
Rag Flock Act Rainfall, Register of				***		49
Rates Levied	***				9	
Rateable Value	***					12
Rateable Value Rats and Mice Destruction	Act to	10				38
Registration of Margarine D	ealers	,				48
Rent Restrictions Act						91
Respiratory Diseases						58
Report on Maternity and Ch	nild W	elfare V	Vork		***	67
Calmana						6 -0
Salvage						6, 28
Sanitary Administration Sanitary Defects found and					***	84
Sanitary Defects found and	ies.	WICH				84
Sanitary Defects in Works	iops				***	84
Sanitary Defects in Worksl Sanitary Inspection of the D	District					29
Scarlet Fever			***	***		52
Scavenging						24
Schools						39
School Closures						39
Seizures of Meat &c						4.3

# INDEX-Continued.

								PAGE
Skin Yards								34
Slaughter Houses								44
Smoke Nuisance								36
Staff, List of Stanfield Sanatorium		***						64
Still Births								16, 77
Stoke-on-Trent Corpora		ct, 192						83
Surgical Tuberculosis								63
Trench Fever								
Tripe Cleaning								57 35
Tuberculosis								59
Tuberculosis (Other Fe		***						62
Theatres, Music Halls								39
Unsound Food								42
Unsound Food Unfit Dwelling Houses								88
Unhealthy Areas								89
	.577							
Vaccination				• • • •			•••	66
Venereal Diseases Vital Statistics	***					17	18,	19, 22
vital Statistics		***	***			1/,	10,	19, 22
Waste Eliminator Plant								28
Water Supply								92
Whooping Cough	0						•••	81
Workshops, Inspections,	occ.	***						84
Zymotic Diseases-Deat	hs fron	n Princ	ipal					2 [
	AF	PENDI	CES.					
Housing, General Statis	tics:-							
Housing		***						88
Unfit Dwelling Ho								88
Unhealthy Areas		···	(Postvio	tion)	Act	1000		89, 90
Increase of Rent a	nd Moi	itgage	( Kestric	tion)	Act,	1920	,	91
LIST	OF TA	BLES	AND CH	HART	S.			
Areas, Population and I	Persons	ner Ac	ro					
in existing Wards		per Ac		Tabi	le No.	. 1		14
				100				- 4
Vital Statistics					53	2		17
Number of Birthe Birt	h Data	Numb						
Number of Births, Birt of Deaths, Death R								
Mortality Rate in								
Wards					,,	3		18
D D D D.								
Birth Rate, Death Rat								
Mortality Rate for	(wenty-)	tour yea	ars		33	4		19
Causes of and Ages of D	eath du	ring Ic	23		,,	5		22
					**	-		
Cases of Infectious I			ed			,		
during 1923			***		19	6	•••	51
Cases and Deaths from	Scarle	et Feve	er					
Diptheria, and Ent	eric Fe	ver sin	ce					
					,,	7		52
Infantila Mantality as								
Infantile Mortality oc			1					
Borough 1022	curring	in t				0		n.c.
Borough, 1923					35	9		70
Borough, 1923 Chart shewing Death I	 Rates in	n the						70
Borough, 1923 Chart shewing Death I Wards for the yea	 Rates in	n the		Орг	" oosite			70
Borough, 1923 Chart shewing Death I	 Rates in	n the	28	Орг				

# Staff of the Public Health Department.

71

Medical Officer of Health:
G. PETGRAVE JOHNSON, M.D., C.M., D.P.H.

Tuberculosis Officer:
ALLAN WOTHERSPOON, M.B., Ch.B., D.P.H.

Resident Medical Officer, Stanfield Sanatorium, and Assistant Tuberculosis Officer:

HENRY RICHMOND, M.B., Ch.B.

Surgical Tuberculosis Officer:
WM. MITCHELL SMITH, M.D., M.B., C.M. (PART TIME).

Lady Medical Officer: JESSIE BALSILLIE, M.B., Ch.B.

Assistant Lady Medical Officers:

GWENDOLINE M. COGSWELL, L.S.A.

FANNY GIBBENS, L.R.C.P., L.R.C.S. (PART TIME).

Bacteriologist:

EDGAR C. MYOTT, M.D., M.B., B.S., M.R.C.S., L.R.C.P. (PAID BY FEES).

Public Analyst:
E. V. JONES, F.I.C. (PAID BY FEES).

Chief Sanitary Inspector:
HARRY SPENCER, Cert. R.S.I., Cert. Meat Insp.

Cleansing Superintendent: TOM STAKE, Cert. R.S.I.

Assistant Cleansing Superintendent: COLIN CLEGG.

Senior Inspector of Meat, Provisions, &c.

JAMES TAYLOR, Cert. R.S.I., Cert. Meat Insp.

Assistant Inspector of Meat, Provisions, &c.:
THOMAS F. CARTLIDGE, Cert. R.S.I., Cert. Meat Insp.

Housing Inspector: WILLIAM A. EDGE, Cert. R.S.I.

Assistant Housing Inspector: JAMES BAILEY, Cert. R.S.I. Smoke Inspector:

JAMES NICKLIN, Cert. R.S.I., Cert. Meat Insp.

Assistant Chief Sanitary Inspector:
DOUGLAS HURST, Cert. R.S.I., Cert. Meat Insp.

Inspector under the Sale of Food and Drugs Acts and Milkshops
Inspector:

SYDNEY GREEN, Cert. R.S.I., Cert. Meat Insp.

Inspector of Canal Boats and Common Lodging Houses and Workshops: JOHN F. ADDISON, Cert. R.S.I.

Inspector of Dairies, Cowsheds, Bakehouses and Factories:
ALBERT E. HULME.

Executive Officer under the Rats Order: THOMAS BASSET, M.C.

District Sanitary Inspectors:

W. Ellerton, Cert. R.S.I.; W. H. T. Wilkins, Cert. R.S.I., Cert. Meat Insp.; J. A. T. Kent, Cert. R.S.I.; B. Turner, Cert. R.S.I.; F. J. Turner, Cert. R.S.I.; G. S. Hann, Cert. R.S.I.; E. G. Sherratt, Cert. R.S.I.; A. H. Holt, Cert. R.S.I.; H. W. Laughlin, Cert. R.S.I.; J. Plim, Cert. R.S.I.; A. N. Nicklin, Cert. R.S.I.; A. J. James, Cert. R.S.I.

### Health Visitors:

M. Forster, F. Tait, A. Taylor, A. Eccles, L. Mayer, E Dawson, E. Morgan, E. M. P. Thomas, E. Callon, E. A. Jolley, F. E. Beech, A. Hodgkinson, A. Tideswell.

Tuberculosis Nurses:

A. Rice, K. Gough, A. E. Myatt and M. Mood.

Chief Clerk:

JAMES E. SMITH, Cert. R.S.I.

#### Clerks:

Norman Wallett, A.C.I.S., A.L.A.A., Harold Willdigg, A.C.I.S., S. Frederick Littler, Victor Leek, L. J. Sargeant, May Appleton, Catherine Johnson, Doris Thorneycroft, Edith M. Hayes, Frank Scholes, Cecil Stubbs, F. Bird, S. Hodgkinson.

Matron—Stanfield Sanatorium: LAURA GARTON.

# County Borough of Stoke-on-Trent.

# PUBLIC HEALTH DEPARTMENT.

To the Mayor, Aldermen and Councillors of the County Borough of Stoke-on-Trent.

LADIES AND GENTLEMEN,

I have the honour to present to you the following report for the year 1923, the fourteenth since the federation of the Pottery towns.

I have pleasure in being able to report that the year proved the healthiest in the history of the district. The death rate was 12.7 and the infantile mortality 93. It is especially satisfactory to note that the present position has been attained by a steady improvement extending over the past 25 years and is not the result of any accidental occurrence; during that time the death rate has fallen from between 20 and 25 to less than 13 and the infantile mortality from over 200 to under 100. These results are, without doubt, due in a large measure directly to the public health activities of the Councils of the pre-federation days and of the present County Borough.

The position of the County Borough among the 105 large towns of England and Wales is not, however, entirely satisfactory. There were only fourteen large towns with higher infantile mortalities for the year, and the average death rate of the large towns was 1.1 less than the rate for the County Borough.

The birth rate was 24.6 and is the lowest on record with the exception of four years during the War. In the last 25 years the rate has fallen from 40 to less than 25, it is, however, more than four higher than the average of the 105 large towns.

The diseases which were the principal causes of death were Phthisis and other Tuberculous diseases, Pneumonia, Bronchitis and Influenza, Heart disease, Cancer, Diarrhoea and Enteritis, Measles and diseases of the kidneys.

It is encouraging to observe that the number of notifications of cases of Tuberculosis and the number of deaths are steadily falling. The general attack on this disease initiated twelve or fourteen years ago is making its mark. Notification followed by the setting up of Dispensaries and Sanatoria and the spread of knowledge of the disease among the people are proving effective, and the Council may now, in my opinion, feel assured that any money devoted to this work is wisely expended.

Pneumonia, Bronchitis and Influenza are formidable diseases and in the battle with them little progress has been made. Cancer has exacted its toll, more attention is being given to the disease than formerly. The age distribution of the population of the Borough as is shown by the Censuses of 1911 and 1921 is undergoing the same modification as in the country generally. The proportion of persons over the age of 50 is higher than it used to be and the proportion under 15 years is lower. Persons now live to an older age while the birth rate falls. Cancer is a disease of older persons and there are more persons liable to attack. Propaganda work has recently been begun in the Borough and leaflets on the nature of the disease are being distributed.

Diarrhoea was prevalent to a considerable extent during the year. This is an important disease in relation to infantile mortality. It is hoped that the improvement in the sanitary condition of the area will have an increasingly favourable effect. The scheme of conversion of cesspit closets and efficient scavenging are, with Child Welfare Work, measures to be relied upon for combating this disease.

Measles is not now notifiable. This proclaims the comparative impotence of public health authorities. The disease caused 83 deaths in children under the age of 5 years. It is a serious malady in young children.

Scarlet Fever was present in epidemic form at the beginning and end of the year; 1,373 cases were notified, a larger number than for any of the preceding thirteen years. The disease was, on the whole, of mild type. There were 22 deaths. A sharp local epidemic occurred in December due to milk-borne infection and though it was soon brought under control its effect is still, 5 months later, noticeable in the large number of cases reported from the district that was involved.

Diphtheria was less prevalent during the year than at any time since 1910 and indeed since 1897, when it reappeared in the Potteries area, first in Longton and subsequently spread through the whole of the district. There were only 221 cases and 10 deaths in the year. Thirty years ago the disease was little seen in the Potteries; it suddenly reappeared in 1897 and is now declining. This disease has "a tendency to cyclical epidemic waves lasting often for many years and followed by long intervals of comparative quiescence," so that we may now look forward with some confidence to the period of its comparative quiescence.

Enteric Fever or Typhoid Fever was the cause of 3 deaths during the year, it no longer occupies the important position it once did. Hanley was the district in which it seemed to linger, but only two cases were notified from that area and the ten cases notified in Stoke were all closely associated with one case.

The Sanatorium at Loggerheads for treatment of patients suffering from Phthisis was opened at the end of the year and 32 beds are available there for patients from this borough. A total of 121 beds are now provided by the Corporation in their Sanatoria and they are all fully occupied. Facilities for the treatment of Surgical Tuberculosis in adults are required and might well receive early attention, great advance has been made in the methods of treatment of these cases in recent years, but the cost is high.

Lead poisoning among pottery workers still attracts attention, 46 cases and 10 deaths were recorded during the year, this cannot be regarded as quite satisfactory.

Only 43 per cent. of the children born were vaccinated. Fortunately the Borough was entirely free from Smallpox. The disease is still present in several districts in the Country and though not of severe type, causes much loss and inconvenience to any community attacked.

Over 1,150 cesspit closets and pail closets were converted into water closets and 744 covered ashpits replaced by ashbins. There is no more important sanitary work being performed in the Borough than these conversions. There still remains a large number of covered ashpits, some 14,000 to 15,000, there are also upwards of 14,000 closets without proper flushing cisterns; the conversion of these will prove costly but it is imperative and might with advantage be begun in a systematic manner during the present year, as several years will be required for the completion of the work.

About 80,000 tons of refuse and nightsoil were collected and dealt with at a cost of £41,000.

Considerable attention was given to the question of smoke nuisances. In two instances proceedings for abatement were taken and in each case the offence was admitted and an Order made. A total of 701 half-hour and hour observations were made and the average duration of the emission of black smoke was  $5\frac{1}{2}$  minutes. This is much too high. I am confident that progress is being made in smoke abatement.

The supervision of the food supply of the people is a duty which rightly assumes more and more importance. I would urge the need of larger and better public slaughter-houses with a view to the abolition of all insanitary private ones. Of 29 samples of butter taken in the course of the year, no less than 15 were found to contain a preservative, viz., Boric Acid. All dealers in food stuffs should be compelled by law to declare the presence of any preservative. Butter is largely used by invalids and young children and it is important that they should be able with certainty to obtain a supply free from boric acid.

A large volume of work was done under the Maternity and Child Welfare scheme. The Ante-Natal Clinics were attended by 647 expectant mothers. This important work is increasing year by year. Twenty-nine mothers were certified as having died from Puerperal Fever and other diseases connected with pregnancy and child birth. The work of Ante-Natal Clinics is aimed at preventing those deaths and should be developed. It will be necessary to provide further staff for this work. A Maternity Hospital has yet to be provided, but it has not been possible to obtain the sanction of the Ministry of Health to building operations. The conditions in the Borough are such as to make a Maternity Hospital essential; it should have been provided years ago.

No case of blindness or impaired vision occurred among the 266 notified cases of Ophthalmia Neonatorum. Such success has not previously been achieved.

New dwelling houses to the number of 224 were certified for habitation during 1923, so small a number can have no appreciable effect on the housing conditions of the people. It is certainly astonishing that the health statistics of the area continue to show improvement. There are, it would seem, forces at work sufficient to mitigate the evil effects of the bad housing. The spread of knowledge among the people on matters relative to the preservation of their health is no doubt one factor, improved methods of treatment of disease is another, these, together with the cumulative effect of the innumerable public health activities of the Council must be the effective forces, but the housing conditions cry out for improvement none the less. A very large number of houses in the borough are houses with "two rooms up and two rooms down," and every day attention is attracted either to actual overcrowding or to the presence of two families in houses of this kind often with one of the inmates suffering from Phthisis. The conditions grow worse. In 1913 I reported to the Council as follows: "The housing accommodation for the working classes in the area is, in my opinion, insufficient, and the authority should seriously and without delay consider the best means of dealing with the matter," the housing question has been before the authority continuously since that time.

I have pleasure in again reporting that the Staff of the Department have displayed the keenest interest in their work and have carried out their various duties in an efficient manner. I beg to record my appreciation of their ready help.

I am, Ladies and Gentlemen,
Your obedient servant,
G. PETGRAVE JOHNSON.

Public Health Department, Stoke-on-Trent, May, 1924.

#### POPULATION.

The Census of June, 1921, showed that the population of the County Borough was 240,436, and, including the area added from the 1st of April, 1922, 267,611. The Registrar General gives the population of the County Borough as 276,100 at the middle of 1923.

The populations at the Census periods and the estimated population at the middle of 1923, were as follows:—

Santa at 107 I	Census 1901	Census 1911	Census 1921 (Extended Area)	Estimated Population to middle of 1923
TUNSTALL	24,709	27,390	27,791	28,674
BURSLEM	38,766	41,566	42,462	43,830
HANLEY	62,226	66,255	67,876	70,060
STOKE	30,458	36,218	39,277	40,536
FENTON	22,738	25,626	26,718	27,580
LONGTON	35,815	37,479	42,593	43,950
SMALLTHORNE, NORTON, BUCK- NALL, etc., Wards 27 and 28		_	20,894	21,470
Totals	214,712	234,534	267,611	276,100

The figures for 1921 and 1923 for Stoke include Hanford. The figures for Longton include Adderley Green, Meir, Lightwood, Trentham and other small areas added when the Borough was extended from April 1st, 1922.

The distribution of the population over the whole area at the time of the 1901 Census averaged 18.6 persons per acre, during the year 1911, 21.0 persons per acre, and in 1921 22.0 persons per acre. The number of persons per acre for the extended County Borough in 1923 was 13.3.

#### INHABITED HOUSES.

At the Census in 1901 there were in the County Borough 41,028 inhabited houses; at the Census in 1911 there were 46,906; and at the Census in 1921 there were 47,765. Taking the average number of persons per house at 5, the number of inhabited houses at the present time is probably about 55,224 for the extended County Borough. The proportion of population to houses was, at the Census in 1901, 5.2; in 1911, 5.0; and in 1921, 5.0 persons per house. There are practically no empty houses in the Borough.

In the fourteen years 1910 to 1923 inclusive, only 1,646 dwelling houses were erected in the County Borough.

During the year 1923, 224 new dwelling houses were certified for habitation in the County Borough. 143 of these were built by the Corporation and 81 by private owners. In 1922 the number was 375, in 1921 54, in 1920 none, in 1919 one, in 1918 3, in 1917 3, in 1916 20, in 1915 33, in 1914 90, in 1913 173, in 1912 158, in 1911 190, and in 1910 the number was 322.

# RATEABLE VALUE.

The rateable value of the Borough for the purposes of the Poor and Borough Rates in 1923 was :-

£1,033,385 compared to £1,025,761 in 1922.

The assessable value of the General District Rate-

£997,546 compared to £988,956 in 1922.

Number of Houses assessed at £8 and under as at June, 1922:-

Goldenhill			 )	
Tunstall .			 1	3,655
Burslem .			 	5,840
Hanley .			 	9,056
Stoke			 	4,078
Fenton			 	3,763
Longton .			 	5,141
Chell and I	Newcha	pel	 	508
Smallthorne			 	1,250
Milton			 	378
Norton			 	304
Stoke Rural			 	675
Caverswall			 	553
Stone Rura	1		 	16
Hanford .			 	257
Trentham .			 	88

35,562

Rateable value £233,800.

Average rateable value per house £6 11s. 6d.

The total rates levied in the Borough for all purposes during the years 1923-24 were:—

				1923	3-24
Tunstall .				17/6 in	n the £
Burslem .				19/-	,,
				$19/1\frac{1}{2}$	,,
Stoke .				17/7	,,
Fenton .				15/8	,,
		***		$17/11\frac{1}{2}$	33
Newchapel		***		13/9	,,
				13/9	"
Smallthorn	e			13/9	"
				13/9	,,
Norton		***	***	13/6	,,
Stoke Rur			***	15/3	"
Caverswall				13/9	"
Stone Rur				12/3	"
Hanford				13/9	,,
Trentham	211511			11/3	"

The sum represented by a penny rate was £3750.

# PRINCIPAL OCCUPATIONS.

County Borough previous to Extension, 1922).

	19	21	19	)11
	Number employed	% of total workers	Number employed	% of total workers
Pottery workers 42,442 Warehousemen and	No.			
women packers, etc. 4,876				
10:21	47,318	39.9	47,921	42.8
Miners	17,256	14.6	14,088	12.6
Engineers and Ironworkers Bricklayers and workers of	7,631	6.2	4,958	4.4
Construction	5,949	5.0	5,114	4.6
Transport workers Professional occupations, in- cluding Doctors, Lawyers, Clergy, Nurses, Teachers,	6,739	5.7	6,140	6.0
Public Officials, etc.	3,621	3.0	3,328	2'9
Domestic Servants	2,559	2,5	3,507	3.1
Charwomen, etc	1,560	1.3	888	0.8
All other occupations		21.8	25,862	22.8
Total Number employed	118,555	100.0	111,806	100.0

The figures with reference to Pottery workers are made up as follows:—

	1921			1911
	Makers	Warehouse, Packers, &c.	Total	All Pottery Workers
Male Workers Female Workers	 18,386 24,056	1,757 3,119	20,143 27,175	24,328 23,593
Total	 42,442	4,876	47,318	47,921

These figures show a reduction of over 4,000 in the number of men and boys employed in the trade, and an increase of over 3,500 in the number of women and girls.

Number of domestic servants per thousand of the population:—

1921 1911
10.6 15.0

The actual number employed in 1921 was 2,559, as compared with 3,507 in 1911.

The number of married women in 1921 was 46,902, and of these 10,286 were engaged in some occupation, the percentage being 21.9, as compared with 9,293 married women engaged in occupations in 1911 out of a total number of married women of 42,303. The percentage in 1911 was 21.9, the same as in 1921.

TABLE 1.—Areas, Population and Persons per Acre in Existing Wards.

Ward No.	Acreages	Population at Census 1921 (Revised)	Population to middle of 1923 (Registrar General's Estimate.)	No. of persons per acre
1	1,090.93	10,321	10,429	9.55
2	249.70	10,046	10,140	40.60
3	417'94	8,021	8,105	19.39
4	439.66	8,191	8,277	19.05
5	433.25	8,481	8,569	19.77
- 6	214.84	9,773	9,876	45.96
7	294.94	8,574	8,664	29.38
8	480 95	8,355	8,444	17.55
9	226.95	11,909	12,034	53.00
10	255.75	10,497	10,608	41.47
11	500.23	10,773	10,887	21.75
12	203.77	8,958	9,052	44 42
13	315.91	9,237	9,333	29.53
14	266.96	8,304	8,390	31.42
- 15	202.92	9,655	9,756	48.07
16	611 60	10,097	10,203	16.68
17	280.85	9,511	9,612	34.52
18	200.03	10,084	10,190	50.94
19	417.58	8,330	8,419	20'16
20	565.65	9,208	9,304	16.44
21	1,595.70	10,422	10,531	6.59
22	747'92	9,754	9,857	13.17
23	1,898 43	10,333	10,444	5 02
24	1,092.84	12,879	13,015	11.90
25	305.80	9,409	9,509	31.09
26	1,640.40	10,866	10,982	6.69
27	2,701'20	13,700	13,841	5.13
28	3,106.00	7,550	7,629	2.45
100 2007	20,759.00	273,238	276,100	13.30

Table showing the Numbers and Percentages of the Population at various ages:-

#### CENSUS 1911.

	Ma	ALES	FEN	TALES	To	TAL
Age	Number	per 100 of population	Number	per 100 of population	Number	per 100 of population
Under 15	40,599	35.3	41,249	34.2	81,848	34.8
15 & under 50	60,546	52 9	63,569	53 2	124,115	53.0
50 " " 70	11,978	10.4	12,555	10 6	24,533	10.5
70 & over	1,641	1.4	2,397	2:0	4,038	1.7
	114,764	100:0	119,770	100 0	234,534	100.0

#### CENSUS 1921.

	MA	ALES	FEM	ALES	To	TAL
Age	Number	per 100 of population	Number	per 100 of population	Number	per 100 of population
Under 15	38,955	33.5	38,973	31.3	77,928	32.4
15 & under 50	60,207	51 9	67,001	53 9	127,208	52 9
50 " " 70	15,027	12.9	15,654	12.6	30,681	12.8
70 & over	1,803	1.7	2,808	2.2	4,611	1.9
	115,992	100.0	124,436	100.0	240,428	100.0

#### BIRTHS.

There were 6,776 births registered in the County Borough of Stoke-on-Trent in 1923, giving a birth rate of 24.6 per 1,000.

The rate for the 105 large towns of England and Wales was 20.4 per thousand, and for England and Wales, 19.7.

The rate is 1.3 lower than in 1922. The birth rate in the County Borough in 1906 was 35.2, 1907—33.5, 1908—34.5, 1909—33.1, 1910—33.5, 1911—31.3, 1912—31.2, 1913—31.9, 1914—31.6, 1915—26.9, 1916—23.9, 1917—20.8, 1918—22.3, 1919—22.5, 1920—30.9, 1921—29.0, 1922—25.9, and 1923, 24.6.

In 1876 the birth rate in this country attained the highest point on record, viz:—36.3 per 1,000 living. Since that date the rate has, with few exceptions, fallen year by year.

The ratio of births of males to births of females during the year was 1,024 to 1,000. For the year 1922 the ratio was 1,048 males to 1,000 females; 1921, 1,081 to 1,000; 1920, 1,038 to 1,000; 1919, 1,071 to 1,000; 1918, 1,019 to 1,000; 1917, 1,034 to 1,000; 1916, 1,055 to 1,000; 1915, 1,007 to 1,000; 1914, 1,018 to 1,000; 1913, 1,018 to 1,000; 1912, 1,067 to 1,000; and for the year 1911 it was 1,003 to 1,000. In the years 1865—1920 the ratio in England and Wales has varied from 1,032 per 1,000 to 1,060 per 1,000.

Of the 6,776 children born, 3,429 were males, and 3,347 were females. The number of births and barth rates for the various areas were as follows:—

Tunstall		762	Birth rate	26.6 J	per 1,000.
Burslem		1,140	,,	26.0	,,
Hanley		1,727	,,	24.6	,
Stoke		919	"	22.7	21
Fenton	***	634	"	22.9	,,
Longton		1,098	,,	24.9	**
Smallthorn	e, Nort	on,	CENSUS		
Bucknall	, etc.	496	,,	23.I	"

The birth rate was highest in Tunstall and lowest in Stoke, it was the same in 1919, 1920, 1921 and 1922.

The natural increase of population, that is, excess of births over deaths was 3,265. The previous year it was 3,169, a difference of 96 lives, the number of births registered being 339 less than in 1922, while the number of deaths was 435 less.

# ILLEGITIMATE BIRTHS.

Of the total births, 278 or 4.1 per cent. were illegitimate. The percentage of illegitimate births in England and Wales was 4.3 for the year 1922. The Illegitimate Birth Rate per 1,000 of population was 1.0 in Stoke-on-Trent as compared with 0.9 in England and Wales for the year 1922.

Of the 278 illegitimate births 147 were males and 131 females.

# STILL BIRTHS.

Under the Notification of Births Act, all still births must be notified to the Medical Officer of Health. 411 were notified during the year under the Act, and of these 256 were attended by midwives, and 155 by medical men.

Taking the number of still births that occurred in 1923 as 411, it is equal to 6.0 per cent. of the total births. In 1922 there were 383 still births, equal to 5.1 per cent.

	Nett Deaths belonging to the district	At all ages	er Rate	3 19.6	2 15-6	18.7	17-6	18.4	3 16.8	2.91 2	7 20.5	9 16-5	5 12.6	14.8	3 14-5	12.7
	ging to		Number	4,686	3,782	4,561	4,240	4,154	3,692	3,555	4,227	3,879	3,205	3,647	3,946	3,511
years.	eaths belor	Under 1 year of age	Rate per 1,000 Nett Births	203	128	169	141	147	196	116	111	111	86	134	115	93
evious	Nett D	Under 1 y	Number	1,495	947	1,295	1,101	955	725	629	585	658	759	626	818	630
and pr	Transferable Deaths		dents not registered in the district	191	170	190	189	224	242	231	259	174	163	143	111	06
TABLE 2. District during 1923 and previous years.	Transfera	- NJ	residents registered in the district	112	135	160	162	151	170	149	207	192	150	500	221	203
TABLE 2. strict during	Total Deaths	district	Rate	19-7	15.7	18.5	17.4	18.1	16.4	16.1	20.0	16-2	15.8	15.1	14.7	13-1
TAB District	Total	dist	Number	4,637	3,747	4,531	4,213	4,081	3,620	3,473	4,175	3,897	3,192	3,714	4,056	3,624
Whole		Nett	Rate	31.3	31-2	31-9	31.6	56-9	53.6	8.02	22.3	5.55	30-9	29.0	25.9	94.6
Statistics of Whole	BIRTHS	Z	Number	7,367	7,399	7,643	7,640	6,494	5,728	4,991	5,219	5,635	7,712	7,132	7,115	6,776
			Un- corrected Number	7,374	7,403	7,655	7,647	902,9	5,731	4,992	5,222	5,638	7,716	7,132	7,135	6,779
Vital	20 00 00	Population	middle of each	235,069	237,159	239.284	241,430	225,405	219,755	215,116	208,365	239,316	248,852	245,600	*274,300	276,100
			Year	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1951	1922	1923

Area of District in acres (land and inland water), 20,759. Total population at all ages—267,611 at Census, 1921.

TABLE 3.

Showing the number of Births, Birth Rate, number of Deaths, Death Rate, and Infantile Mortality Rate in each of the 28 Wards.

WARD	al	No. of Births registered	Birth Rate	No. of Deaths registered	Death Rate	Infantile Mortality Rate
I		325	31.1	155	14.8	86
2		275	27 · I	165	16.5	131
3		162	19.9	80	9.8	80
4		252	30.4	115	13.9	91
5		154	17.9	89	10.4	71
6		267	27'1	146	14.8	105
7		230	26.5	120	13.8	104
8		237	28.1	95	11.3	97
9		310	25.8	188	15.6	90
10		256	24'1	125	11.8	90
11		270	24.7	188	17.3	159
12		263	29.1	134	14.8	118
13		212	22.7	119	12.7	104
14		194	23.1	81	9.6	72
15		222	22.7	110	11.3	50
16		266	26.1	114	11'2	71
17		178	18.2	96	9.9	90
18		227	22.3	140	13.7	100
19		205	24.3	105	12.2	83
20		.261	28.0	128	13.7	111
21		248	23.5	98	9.3	56
22		168	17.0	110	11.5	95
23		296	27.3	156	15.0	95
24		341	26.2	144	11.1	- 88
25		206	21.6	108	11.3	63
26		255	23.2	149	13.6	86
27		341	25'3	163	11.8	88
28		155	20.3	90	11.7	96
Whole Boro	0.	6,776	24.6	3,511	12.7	93

TABLE 4.

Birth Rate, Death Rate, and Infantile Mortality Rate for the whole Borough for the past twenty-four years.

Doroug	n for the past	twenty rour	y curs.
ton book and	Birth Rate	Death Rate	Infantile Mortality Rate
1900	39.1	25.3	207
1901	35'1	20.9	208
1902	36.6	19.6	173
1903	34.6	18.2	179
1904	35'9	198	195
1905	33 6	198	191
1906	33.9	18.4	175
1907	33.2	19.0	162
1908	34.2	18.2	171
1909	33.1	19'4	163
1910	32.2	17 1	149
1911	31.3	196	203
1912	31.5	15.9	128
1913	31.9	18.7	169
1914	31.6	17.4	144
1915	26.9	18.4	147
1916	23.9	16.8	126
1917	20.8	16.5	116
1918	22.3	20.3	111
1919	22.2	16.5	111
1920	30.9	12.8	98
1921	29.0	14.8	134
1922	25'9	14 3	115
1923	24.6	12.7	93

#### DEATHS.

The number of deaths registered in the County Borough during the year 1923 was 3,624. This gives a death rate of 13.1 per 1,000 of the population. Of the total deaths 932 occurred in public institutions in the district. If the deaths of non-residents which occurred in the district be excluded, and the deaths of residents which occurred beyond the district be included, the nett deaths belonging to the district is 3,511 (1,904 males and 1,607 females), and the death rate 12.7 per 1,000.

The death rate for the 105 large towns of England and Wales was 11.6 per 1,000, and for the whole of England and Wales, 11.6.

The death rate of 12.7 per 1,000 was 1.6 lower than that for 1922.

The death rate for the 105 large towns of England and Wales was 1.4 lower in 1923 than 1922.

The birth rate is lowest in the Stoke-upon-Trent District and highest in the Tunstall district, the death rate is also lowest in Stoke and highest in Tunstall.

The number of deaths, and the death rates, in each of the districts of the County Borough were as follows:—

			No. of I	eaths.	Death Rate.
Tunstall			400		13.9
Burslem			565		12.9
Hanley			945		13.5
Stoke			448		II.I
Fenton			343		12.4
Longton			557		12.7
Smallthorn		nall,			
Norton,	etc.	***	253		11.8

## PRINCIPAL CAUSES OF DEATH.

				1923	1922
Phthisis and o	ther Tubero	cular Dis	eases	332	361
Congenital Del	bility and M	Ialformat	ion,		
including	Premature	Birth		270	 312
Bronchitis				442	 561
Pneumonia				272	 329
Organic Heart	Disease			259	 283
Cancer				271	 254
Violence				104	 102
Diarrhœa and	Enteritis			138	 102
Nephritis and	Bright's D	isease		95	 97
Influenza				83	 162

## DEATHS FROM PRINCIPAL ZYMOTIC DISEASES.

				1	923	1922
Smallpox			 	-		-
Enteric Fever			 	3		10
Diphtheria		***	 	10		16
Scarlet Fever			 	22		23
Whooping Co	ugh		 	7		98
Measles			 	84		99
Diarrhœa and	Ente	eritis	 	138		102

The death rate from the seven principal Zymotic Diseases was 0.96 per 1,000 of the population, compared to 1,26 per 1,000 in 1922. The Diarrhœa death rate accounted for 0.5 per 1,000 compared to 0.36 in 1922.

The following table shows the death rate from the principal Zymotic Diseases compared with the death rate of the 105 large towns:—

		S	toke-on-Trent.	105 Large Towns.
Diarrhœa (under 2	years)	per	1923	1923
1,000 births			19.0	 9.9
Measles			0.31	 0.15
Diphtheria			0.04	 0.09
Scarlet Fever			0.08	 0.03
Whooping Cough			0.26	 0.12
Enteric Fever			0.01	 0.01

Of the 3,511 deaths in the County Borough, 36 or 1.0 per cent. were not certified either by a registered medical practitioner or by a coroner. In the 105 large towns the percentage of uncertified deaths was 0.6.

TABLE 5.

Causes of, and Ages at Death during the year 1923.

			-							_							- 3
Causes of Death		eside	or w	at the wheel s and ithou	ther	oecu	rring	wit	hin	Tunstall	Burslem	Hanley	Stoke	Fenton	Longton	Smallthorne, orton, Bucknall, etc. (Wards 27 & 28)	Total Deaths whether "Resident or "Nor Residents in Insti- tions in the district
									-							Z	uistrict
All Causes Certified	3473	615	191	128	107	160	426	948	898	396	557	939	445	340	549	248	932
Uncertified	38	15	1		1		***	4	17	4	8	6	3	3	8	5	***
Enteric Fever	3					2	1				1		1	1			3
Smallpox														***			
Measles	84	19	40	24	1					9	16	17	4	8	11	19	15
Scarlet Fever	22		6	11	3		1	1		1	5	2	3	1	4	6	19
Whooping Cough	7	4	1	2			**			4	1		1			1	
Diphtheria and Croup	10	1	-1	3	3	2				1	2	1	4	1		1	9
Influenza	83	3	4	2	2	5	22	29	16	18	13	12	15	8	12	5	7
Erysipelas	16	5			1	1	1	4	4	3	4	4	2	1		2	7
Phthisis (Pulmonary Tuberculosis)	267	2	1		8	61	112	78	5	13	43	89	40	31	40	11	56
Tuberculous Meningitis	28	2	9	7	6	2	2			1	2	8	2	8	6	1	12
Other Tuberculous Diseases	37	4	7	7	4	6	3	3	3	3	5	11	3	3	12		22
Cancer, Malignant Disease	271	1			1	1	23	159	86	25	46	65	40	24	49	22	84
Rheumatic Fever	17				3	7	3	4		2	1	6	2	1	4	1	6
Meningitis	21	6	3	2	5		2	3		3	3	7		2	2	4	5
Organic Heart Disease	259			1	13	13		107	10000	29	45	77	***	26	25	20	34
Bronchitis	442	59	23	9	3	1	17	135	195	63	66	114	46	42	86	25	75
Pneumonia (all forms)	070	46	51	24	16	15	47	58	17	45	42	74	25	19	38	29	46
Other Diseases of Respiratory	2000000															1	
Organs	64	2	1	2	1	1	13	26	18	7	4	19	10	6	14	4	20
Diarrhœa and Enteritis	138	113	16	8					1	17	26	44	10	11	26	4	24
Appendicitis and Typhlitis	18			1	6	2	3	6		2	2	3	6	2	2	1	24
Cirrhosis of Liver	17					1	1	9	6	4	1	4	1	3	4		8
Alcoholism	2						2				1		1				
Nephritis & Bright's Disease	95	1		1	4	3	14	40	32	10	14	19	20	9	21	2	22
Puerperal Fever	5					2	3				1	3				1	4
Other accidents and diseases of Pregnancy & Parturition	24						24			4	6	7	2		3	2	12
Congenital Debility and Mal- formation, including Pre- mature birth	270	264	4	1	1					28	49	65	39	36	33	20	35
Violent Deaths, excluding Suicide	104	5	4	9	13	13	17	27	16	11	19	30	18	7	13	6	57
Suicide	19					1	2		2	2	5	6	2		2	2	3
Other Defined Diseases	909	92	21	14	15	21			417			258	114	93	149	63	322
Diseases ill-defined or unknown		1			1			3	2	2	3				1	1	1
	3511	630	192		108	160	_		-	400	565	945	448	343	557	253	932
Entries included in above				I			T	T		T	i				I	i	
figures :					100												
	11				1	1.0	***									1	
Cerebro-Spinal Meningitis	1																



#### POOR LAW RELIEF.

Mr. T. Wood, Clerk to the Stoke-on-Trent and Wolstanton Union, has kindly supplied the following returns with reference to Poor Law Relief for the parishes in the County Borough of Stoke-on-Trent:—

TOTAL COST OF OUT-DOOR RELIEF:-

For year ending 31st March, 1922 ... £39,209 ,, ,, 1923 ... £52,303

Number of persons in receipt of Out-door relief on-

31st March, 1922 ... 2,392

31st March, 1923 ... 3,273

Unemployed Relief, 31st March, 1922 ... 1,855

TOTAL COST OF IN-DOOR RELIEF:-

For year ending 31st March, 1922 ... £30,005 ,, ,, 1923 ... £28,116

Number of persons relieved in the Institution on-

31st March, 1922 ... 844

31st March, 1923 ... 1,299

#### GRATUITOUS MEDICAL RELIEF.

NORTH STAFFS. INFIRMARY.

Number of Civilian In-Patients treated annually from November 1st, 1909, to October 31st, 1923:—

1909-10	 	2,193
1910-11	 	2,262
1911-12	 	2,370
1912-13	 	2,322
1913-14	 	2,549
1914-15	 	2,852
1915-16	 	2,632
1916-17	 	2,803
1917-18	 	2,947
1918-19	 	3,056
1919-20	 	3,440
1920-21	 	3,554
1921-22	 	3,907
1922-23	 	4;393

The number of Out-Patients for the year ending October 31st, 1923, was 30,216, as compared with 25,691 for the year ending October 31st, 1922.

In addition to the North Staffs. Infirmary there are two other Voluntary General Hospitals in the area, viz.: Haywood Hospital, Burslem, and the Longton Cottage Hospital. The Haywood Hospital has 35 beds for In-Patients, and an Out-Patient Department. The Longton Cottage Hospital has 42 beds for In-Patients, and an Out-Patient Department.

There is also a Special Institution in connection with the North Staffordshire Cripples' Aid Society for dealing with Orthopædic cases, including cases of surgical Tuberculosis.

#### CLOSET ACCOMMODATION.

There are in the extended Borough 48,817 water closets, but of these approximately 14,735 have no flushing cistern attached. There are 1,270 pail closets and about 4,084 cesspit closets or privies.

The numbers of privies and pail closets converted into water closets during the years 1911 to 1923 were as follows:—

Year			Number
1911	 	 	366
1912	 	 	338
1913	 	 	658
1914	 	 	1150
1915	 	 	498
1916	 	 	38
1917	 	 	35
1918	 	 	45
1919	 	 	68
1920	 	 	181
1921	 	 	766
1922	 	 	829
1923	 	 	1153

#### SCAVENGING.

The following table gives the sanitary accommodation of the houses in the Borough in certain years.

nouses in the Dorough a	ii ccitaiii y	cars.		
	1911	1921	(Extended )	1923
Number of houses, in- cluding new houses and deducting demolitions	48,516 Census	49,034 Census	55,000	55,224
Number of water closets	18,601	23,480	25,668	27,045
Number of privies	6,428	2,635	4,998	4,084

	1911	1920	1921	1922 (Extended As	1923
Number of pail closets	1,285	908	907	1,540	1,270
Number of hand-flushed closets	13,934	13,811	13,801	14,826	14,735
Number of slop-water closets	7,142	7,027	7,020	7,080	7,037
Number of houses served by ashpits	24,825	18,767	18,299	19,025	15,801
Number of ashbins	24,670	32,396	32,864	37,945	41,169
Number of covered ashpits	_	-	_	-	6,833

Ashbins are emptied once weekly, but those used in connection with shops in the centres of the towns (about 1,000) are emptied daily.

The following table shows the number of times ashpits and cesspit closets were emptied during the years 1919 to 1923:—

		ASHP	ITS.			
		1919	1920	1921	1922	1923
*Packmoor		-	-	-	9	12
Tunstall		7	8	9	12	14
Burslem		6	7	6	II	13
*Smallthorne		-	-	-	12	15
Hanley, North		6	5	6	10	15
Hanley, South		6	5	6	9	14
*Bucknall		_	_	-	8	15
*Milton		_	_	_	9	15
Stoke		7	8	9	13	14
*Hanford and						
Trentham		_	_	-	9	14
Fenton		8	9	7	13	12
Longton		6	6	7 8	7	II
*Meir				_	8	II
*Adderley Green		_		_	8	II
	C	ESSPIT	rs.			
*Packmoor		_	_	_	9	15
Tunstall		12	12	12	12	15
Burslem		8	9	11	10	1.4
*Smallthorne			_	_	12	16
Hanley, North		12	12	12	12	15
Hanley, South		12	12	12	12	15
*Bucknall		_	_	_	12	15
*Milton			_	_	10	15
Stoke		10	11	10	12	16
*Hanford and						
Trentham		-	_	-	12	15
Fenton		12	12	12	12	14
Longton		12	12	12	12	14
*Meir		_	_	-	9	13
*Adderley Green		-	-	_	9	13
*Districts taken ove	er on	the ard	Anril	1022	only	

<sup>\*</sup>Districts taken over on the 3rd April, 1922, only 9 months work is shown for that year.

The year has proved a record one. Ashpits and ashbins have been cleared more regularly and frequently than in previous years and practically no complaints were received. There has been a large increase in the number of dust-bins with weekly emptyings and a decrease in the number of ashpits. The Publicity Campaign undertaken in 1922-23 assisted in reducing the number of dust-bins with wet contents and in diminishing the bulk of the refuse to be collected. Through the Education Department, the aid of teachers was secured and prizes to the value of £20 were offered to school children for the best essays on the subject of "The Use and Abuse of Dust-bins." Leaflets were distributed generally and a film produced and exhibited at the cinemas.

It has not been possible to introduce motor haulage for the removal of nightsoil from the northern portion of the district on account of the bad condition of the road to Tunstall Sewage Works.

The average number of teams employed by the Corporation during 1923 was 60. Of these 15 were hired and 45 owned by the Corporation. The number of teams owned by the Corporation was the same as in 1922. These teams were exclusive of five motor vehicles.

The cost per ton of removing house refuse in December 1923 was Six Shillings and Four Pence, while in December 1922 it was Six Shillings and Nine Pence.

Nighsoil from several districts has still to be tipped on sites in the Borough situated at:—Packmoor, Brindley Ford, Chell Heath, Milton, Bucknall and Hanford: in all other cases it is dealt with at the Sewage Works. Prior to the Extension of the Borough Boundaries in April, 1922, all nightsoil was taken to the Sewage Works; all the foregoing districts are parts of the added areas.

The following table shows the amount of refuse removed during the past four years:—

	1920	1921	1922	1923
Loads destroyed (ashes)	39,844	37,948	38,350	41,246
Loads tipped (ashes)	15,621	24,769	26,545	21,703
Total loads of refuse removed (ashes)	55,465	62,717	61,895	62,949
Weight destroyed (tons)				
(ashes)	45,051	46,490	44,433	47,744
Tubs of nightsoil removed	8,520	7,356	11,347	11,071

There are four Destructors in the area, one each at Burslem, Hanley, Stoke and Longton. The following is a record of the work done at the Destructor Works:—

#### HANLEY DESTRUCTOR WORKS.

The weight of refuse destroyed during the year 1923 was 14,589 tons.

The weight of mortar made and sold was 918 tons 11½ cwts. Concrete slabs manufactured, 692 square yards.

Concrete slabs sold, 896 square yards.

Scrap Tin sold, 14 tons 9 cwts.

Crushed Clinker sold, 50 tons.

# LONGTON DESTRUCTOR WORKS.

Refuse destroyed, 12,726 tons.

Mortar made and sold, 1,070 tons, 10 cwts. 3 qrs.

Scrap Iron and Tin sold, 49 tons 17 cwts.

# BURSLEM DESTRUCTOR WORKS.

During the year 8,385 tons of refuse were destroyed. Scrap Tin sold, 14 tons 10½ cwts.

# STOKE DESTRUCTOR WORKS.

Weight of refuse destroyed during the year, 13,350 tons.
Weight of mortar made and sold, 1,373 tons.
Scrap Iron sold, 12 tons 13 cwts.
Scrap Tin sold, 100 tons 14 cwts.

At the following places refuse was tipped throughout the year, the number of loads tipped being shown:—

the number of 1	oads upped being snown:—		Loads
Tunstall.	Latebrook		1,436
	Clayhills		5,302
	Linehouses		104
	Newfields		137
	Turnhurst, Packmoor		189
	Lane Ends, Packmoor		363
Smallthorne.	Cricket Field		1,643
	The Flatts, Norton		371
	Wedgwood Farm, Bring	dley	
	Ford		469
Burslem.	Sytch		496
Hanley.	Abbey Farm, Milton		980
	James' Farm, Bucknall		781
Stoke.	Hanford		602
Fenton.	Bailey's, Fenton Park		3,399
	Stanley's, Blurton		89
	Manor		88
Longton.	Balfour		364
	Lightwood		140
	Dividy Lane		195

The following tips were used for the special reason stated:-

	L	oads
Smallthorne.	Outcrop Holes (Dangerous, required filling).	124
Hanley.	Udall's, Cromer Road I (Hanley Destructor being reconstructed).	,563
	Leek Road Sewage Works, do.	638
	Outcrop Holes, Sneyd Street do.	606
1	Etruria Park (for tennis courts)	66
	Hanley Cemetery (for levelling)	111
Stoke.	Sideway (for levelling)	204
	Racecourse (for bowling greens, &c.)	261
Fenton.	Park Lane (for bowling green)	430
Meir.	(Long transport distances)	333

A further 279 loads were tipped at 8 other places.

In the second list, the tips were purely temporary and precautions were taken to see that there was no cause for complaint. The larger tips are now completely covered with grass except where tipping is actually being done.

Where refuse is used for making up tennis courts and greens, it is covered by a sufficiently thick layer of inert material.

It is anticipated that when the sifting and sorting plants are completed at the Hanley and Burslem Destructors, the tipping of refuse will cease entirely.

#### PAPER AND SACKING.

During the year 186 tons of paper and sacking were disposed of.

#### SCRAP IRON.

One hundred and eighty tons of scrap iron were sold during the year. The value of the material has improved greatly.

# WASTE ELIMINATOR PLANT.

This plant was in operation the whole year.

## MATERIAL RECIEIVED.

Meat. Fish.		Offals.	Total.		
T. C. Q.	T. C. Q.	T. C. Q.	T. C. Q.		
51 13 3	138 14 3	11 7 3	201 16 1		

#### MATERIAL PRODUCED.

Meat Meal.	Meat and Bone Meal.	Fish Meal.	Fats.	Total.
T. C. Q.	T. C. Q.	T. C. Q.	T. C. Q.	T. C. Q.
16 11 2	7 18 0	47 4 2	6 10 3	78 4 3

For the year ending 31st March, 1924, the net expenditure incurred in dealing with refuse and nightsoil, inclusive of desstruction and salvage, but exclusive of loan charges, was £40,241; in the previous year it was £42,689.

## SANITARY INSPECTION OF DISTRICT.

During the year 1923, 18,894 nuisances were dealt with, compared with 19,054 in 1922.

Table of premises visited and of revisits made:-

	Districts	1	2	3	4	5	6	7	8	9	10	11	Total
Houses completely	Infectious Diseases	158	325	139	203	176	71	187	66	82	191	105	1703
	Alleged Nuisances	-	-	-	-	38	5	11	-	-	-	12	66
	House inspection	-	-	-	_	-	3	-	_	-	-	-	3
Houses in which ex-	Overcrowding	1	1	5	2	1	1	5	3	-	10	6	35
aminations were made	Drainage	-	-	-	-	-	2	18	1	-	-	-	21
in relation to	Structure	-	-	_	_	-	-	1	-	-	-	-	1
Total Himming	er of above houses	159	326	144	205	215	82	222	70	82	201	123	1829
	h defects were found defects in above	25	3	67	37	93	40	60	18	30	86	60	519
houses	visited for other	112	14	237	150	506	186	193	118	159	334	265	2274
	n those set out above	391	573	372	514	831	460	371	340	469	553	690	5564
Revisits to	nuisances	2535	2467	3704	3080	2370	2078	1754	4216	2018	2578	4135	30935
"	infectious disease	54	54	54	57	40	29	54	17	30	14	37	440

Table of defects discovered and dealt with:-

District	1	2	3	4	5	6	7	8	9	10	11	Total Nui- sances Found
Houses dirty	12	7	7	13	18	12	11	11	9	31	9	140
" overcrowded	1	1	4	2	1		4	2		5	2	22
" damp or dilapidated	533	626	438	983	661	478	424	518	443	715	358	6177
" badly lighted or ventilated	11	99	3	31	32	35	16	17	10	31	22	307
Drainage defective	71	13	41	61	42	30	81	44	15	79	35	512
n no disconnection			5	4	4	4	3	11	10	6		47
" want of	3		22	2	10	9	38	6	9	25	16	140
" stopped	212	142	65	122	107	49	92	74	48	101	82	1094
Sinks defective or required	8	30	40	53	41	53	24	16	25	77	30	397
Bath, lavatory and sink waste pipes untrapped		1				1		1		4		7
Other drainage defects	38	40	48	78	93		17	15	37	18	21	479
Privies defective			9			19	34	3	3	6	1	75
Additional closets required .			1	1	1	2	9	2	3	2		20
Defects in W.C's	148	109	16	507	292	24	146	170	214	378	505	2509
W.C's without flush	1	5	2	54	12	1	54	4	18	78	86	315
Waste water closets defective	1	4						1		7	1	14
Ashpits open		7	4		1	79	14	4	98	12	66	285
" required	1	14	4	20	59	24	32	57	95		5	311
" structure defective		34	48	2	34	67	12	32	11	107	147	494
Ashbins defective	98	181	95	159	409	76	85	58	49	105	68	1383
Outbuildings-defects	68	47	44	1	28	43	41	19	35	34	37	397
Paving	207	151	63	206	166	45	72	103	110	217	251	1591
Houses without water supply	17	14	6	16	12	16	10	6	5	11	15	128
Other house nuisances	20	37	7	20	46	11	27	37	22	28	2	257
Accumulations dealt with	141	77	2	136	62	10	37	42	59	120	117	803
Manure receptacles		1			2	5		1	4		4	17
Keeping of animals		30	14	21	34	3	24	7	27	22	34	216
Other outside nuisances	250	113	13	39	71	24	40	36	62	29	71	748
Totals	1842	1784	999	2530	2242	1194	1351	1299	1423	2247	1983	18894

The number of Informal Notices served during the year was 3,702, and the number of Statutory Notices 4,295.

## Complaints.

During the year, 1,281 complaints were received, 865 at the office, and 416 by the District Inspectors—47 of the total were unfounded.

Included in the total of 865 are 375 referred from the Health Visitors.

The following matters brought to the notice of the Department during the year were referred to the Borough Surveyor:—

Dangerous structures		 14
Offensive sewer ventilators		 7
Stopped sewers		 12
Stopped surface water gu	llies	 I
Defective street paving		 3
Other matters		 39
Total		 76

Complaints were received with regard to 35 cases of overcrowding. These were investigated, 13 of the complaints were unfounded and in 22 instances the fact of overcrowding was established, in 10 of these the overcrowding was subsequently remedied.

## Inspection of Drainage Work.

District	1	2	3	4	5	6	7	8	9	10	11	Tota
New drains inspected	15	6	30	2	8	150	6	3	10	6	6	242
Revisits while work in progress	34	69	133	15	126	76	205	15	46	38	21	778
Drains inspected after reconstruction	32	18	29	3	26	46	10	16	5	28	1	214
Revisits while work in progress	31	156	74	15	4	_	16	27	6	23	43	395
Other visits on account of drainage works	_	88	-	25	1	117	5	25	19	94	42	416

#### Drain Testing.

Chemical:-Negative	 	320
	 	-
Positive	 	112
Colour:-Negative	 	29
Positive	 	2 I
Smoke:-Negative	 	413
Positive	 	42
Hydraulic:-Negative	 	2
Positive	 	-
Total:-Negative	 	764
Positive	 	175

Of the above tests 191 were applied on account of infectious disease, 151 were made on receipt of complaints, and 597 were made during the progress of drainage work.

## Voluntary Conversion of Privies, etc.

Privies converted	 124
Pails converted	 13
Waste water-closets converted	 43
New water-closets provided	 I
Hand flushed closets converted	 91

The Council contributed £3 per conversion towards the cost of voluntary conversions of 124 privies, 13 Rochdale pans, and 43 waste water closets, and a contribution of 30/- towards the cost of the provision of 91 cisterns and water supplies to 91 hand flushed closets.

## Conversion of Privies. Public Health Acts Amendment Act 1907.

During the year the work of converting privies into water closets was continued. The number of conversions completed under this scheme during the year was 790.

Privies demolished ... ... 24
Openings under Section 41, Public
Health Act, 1875 ... 10

## DRAIN TESTING IN CONNECTION WITH THE SCHEME.

			Colour		SMELL		ROCKETS		TAL
DRAIN TESTS		Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg	Pos.
New Drains		_	-	81	3	901	56	982	59
Repaired Drains		-	-	9	-	7	-	16	-
Old Drains		-		-	-	1	4	1	4
TOTAL		_	_	90	3	909	60	999	63

SUMMARY OF WORK OF CONVERSION OF ROCHDALE PAILS, 192	23
Number of pails for which notices have been served 412	
Number of pails for which contracts have been signed 404	
Number of pails completed by contract 226	
Number of pails in progress by contract 38 264	
Number of pails completed by owners after notice 3	
Number of pails in progress by owners after notice 1 . 4	
SUMMARY OF WORK OF CONVERSION OF PRIVIES, YEAR 1923.	
Number of privies for which notices have been served 511	
Number of privies for which contracts have been sent out 500	
Number of privies completed:—	
(a) By contract 790	
(b) By owners after notice 28 818	
Number of privies in progress:—	
(a) By contract	
(b) By owners after notice 8 8	

#### Legal Proceedings.

(1) In 14 instances, proceedings were taken to enforce the compliance of notices.

	£	s.	d.	
In one, the Court made the necessary Order and imposed costs amounting to	4	8	6	
In eleven, proceedings were withdrawn on payment of costs, the work having been complied with after the service of the summons, the costs amount-				
ing to	I	18	6	
In two instances of smoke nuisance, orders for abatement within three months were made. Orders and				
costs amounted to	6	8	6	
The Department obtained Contracts to carry out works to abate nuisances after the service of notices which were not complied with by the owners, the total amount of which was £197 13s. od., and in three instances, proceedings had to be taken to recover monies expended under Section 30 of the				

- which were not complied with by the owners, the total amount of which was £197 13s. od., and in three instances, proceedings had to be taken to recover monies expended under Section 39 of the Public Health Act (Amendment) Act, 1907. The Court made the necessary Orders and imposed costs amounting to ... ... ... ... ... ... ... ... 1 19 o
- (3) In one instance, proceedings were taken under Section 100 of the Public Health Act, 1875. A house had been abandoned and the furniture left in the house; the premises were in a dirty condition. An Order was made to enter, disinfect and thoroughly cleanse the same, the costs being charged to the owner who had occupied the premises.

(2)

#### Ashbins.

During the year 1,204 notices were served on owners requiring them to provide sufficient ashes accommodation. In many cases, on the expiration of the time stated in the notices, it was found that bins had not been provided, the Corporation delivered them and afterwards the owners were charged with the cost.

The number thus delivered during the year was 1,084.

#### Free Ashbin Scheme.

The Free Ashbin Scheme has been continued; under this scheme property owners were supplied with a first ashbin free, on demolishing or suitably altering a covered ashpit.

Under this arrangement 1,429 ashbins were delivered during the year at a cost of £643 is. od., and 744 covered ashpits were either demolished or so altered as to prevent their further use as ashpits.

## Bye-Laws.

Byelaws are in force in the County Borough with respect to:-

New Street and Buildings;

Slaughter Houses;

Nuisances:

Common Lodging Houses;

Dairies, Cowsheds and Milkshops;

Public Conveniences;

Houses Let in Lodgings;

Offensive Trades;

Removal of Offensive and Noxious Matters.

#### Offensive Trades.

There are in the area:-

Three Knacker's Yards;

Two Skin Markets;

Several Bone-Burning Works;

Several Marine Stores, Tripe Boilers, and Gut Scrapers;

One Fat Melter:

A large number of Fish Fryers.

A list of Offensive Trades has been scheduled by the Authority and Byelaws are in force for their control.

The list of Scheduled Trades is as follows:—Fish friers, tripe boilers; Dealers in rags, bones, fat, animal skins or other like matter in an offensive condition; manure manufacturers; brick burners, gut scrapers, bone burners, tanners, leather dressers, fat melters or fat extractors, glue makers, size makers (except Potters' sizes), and blood driers.

#### GUT SCRAPING.

There are four premises specially used for Gut Scraping in the Borough. Three are connected with private Slaughterhouses and occupied by Wholesale Butchers. Most of the Butchers who have private Slaughterhouses clean the guts from animals slaughtered on their own premises.

#### KNACKER'S YARDS.

There are three Knacker's Yards; sanitary improvements have been carried out at two of the premises, they have been visited regularly during the year and found in order on each visit. Three complaints were made of nuisances arising, but were remedied.

#### SKIN YARDS.

There are two Skin Yards; one at Cross Street, Stoke, and one at Mollart Street, Hanley.

No complaints were received during the year. Frequent inspections have been made and the premises have been kept in a cleanly condition.

## FAT MELTING (EDIBLE).

This is carried out on a large scale at the Public Abattoirs. Up-to-date machinery has been installed and no complaints have been received of any nuisance arising.

#### TRIPE BOILING.

There are many tripe shops in the Borough, but in most cases the tripe is bought ready cleaned. The greater part of the tripe cleaned in the Borough is dealt with at seven establishments. Several persons have been warned against carrying on the trade without being registered and a public notice has been issued.

## MARINE STORES.

There are, as last year, 13 Marine Stores; lead, metal, rags, bones and bottles are the chief materials dealt with. These premises have been periodically inspected and found to be in a fairly satisfactory condition. The total number of inspections was 64.

During the year one application was made for the opening of a marine store, but this was subsequently withdrawn.

#### FRIED FISH SHOPS.

During the year in ten instances permission has been given for premises to be used for the purpose of fish frying. 1,624 visits have been made to the premises used for this purpose. 138 defects were found and dealt with. The condition of the utensils, pans, etc., was generally found to be satisfactory. The Authority does not now permit a room in an ordinary working class dwelling house to be converted into a fried fish shop.

#### Common Lodging Houses.

There are 12 common lodging houses in the County Borough. During the year 461 inspections of common lodging houses were made—437 by day, and 24 by night. Thirty-eight notices were served for the rectifying of minor offences, they were all complied with.

The 12 lodging houses are registered for the accommodation of 386 persons per night. There were, according to the returns sent in, 81,041 persons accommodated during the year, as compared with 77,599 in 1922.

The premises are in the majority of cases old houses adapted for the purpose and one or two of the buildings are in a very poor condition.

There is room for one or two model lodging houses in the Borough—and the Council might seriously consider whether the time has not arrived for applying their powers in this respect.

#### Houses let in Lodgings.

There are now on the register 122 houses. Six hundred and twelve inspections have been made during the year. Ninety defects were found, these have since been attended to.

#### Smoke Nuisances.

For the abatement of smoke nuisances 709 timed half-hour observations of boiler chimneys were taken during the year, as compared with 560 in the previous year.

In addition to the above, 42 observations were taken of one hour each.

Twenty complaints were received and investigated.

One hundred and thirty notices were served for the abatement of smoke nuisances and several special letters written.

In ninety-four instances warnings were given.

Proceedings before the Court were ordered in two cases out of 22 offences reported. Orders were made in both cases for the abatement of the nuisance within three months.

Seven visits were made to Collieries and nine visits to brick and tile works, and interviews had with the managers and firemen.

Of the 709 half-hour observations taken 379 showed black smoke emitted for four minutes or more during half-an-hour. The number of observations showing no black smoke was 141.

Of the 42 hourly observations taken 16 showed black smoke emitted for eight minutes or more during the hour, and the number showing no black smoke was eleven.

The art of stoking requires not merely physical strength and endurance, but also skill, experience and a keen appreciation of the influence of the various kinds of fuel, and the weather as well as the work expected from the apparatus in relation to its capabilities.

The education of the public to a sense of the evils arising from the unrestricted emission of smoke, is of importance if strong measures for abatement are to be undertaken.

OBSERVATIONS.					1922	1923
Boiler Sta	cks				557	751
Oven Stack	ks				8	15
Kiln Stack	cs				II	44
INSPECTION OF.						
Boilers					381	441
Ovens					36	94
Kilns					70	151
Interviews	with ow	ners o	r occup	iers	282	465
Interviews	with En	gineers	and Fi	remen	484	1023
Warnings	given				55	94
Preliminar	y notices	serve	1		14	13
Statutory	notices s	erved			130	117
Improveme	ents effec	ted			63	145
Re-inspecti	on of pr	remises			132	440

DEMONSTRATIONS IN	Fini	NC		1922	1923
		NG.			
Boilers			 	37	47
Ovens			 	2	2
Kilns			 	5	12
Reports for i	non-ab	atement	 	37	22
Special Repo	rts su	bmitted	 	8	10
Visits for oth	ner car	uses	 	152	295
Prosecutions		***	 	-	2

The following is a summary of the alterations made, and appliances fitted in order to prevent the emission of excessive quantities of smoke:—

Air tubes fitted				4
Boilers provided				2
Flues cleaned				II
Patent joints fitted				3
Improvements in fuel				14
Improvement in firing				41
New boiler stack				I
Patent furnaces provide	d			3
Mirrors fixed or replace				.3
Patent bars fitted in set	S			18
Steam jets provided				2
Smoke consumers fitted				22
Patent grates provided				4
Repairs to boilers, boil				
economisers, kiln fur	naces, ovens,	stacks	and	
Ventilators				96

The following is a summary of the work and results of the half-hour observations taken of boiler chimneys:—

No. of chimneys observed.	No. of observations taken.	Average No. of observations taken per chimney.
207	 709	 3.42

Results of observations:-

	Black.	Moderate.	None.
Total amount of smoke in minutes	3958.5	8,711	8600.5
Average amount of smoke in minutes	5.58	12.29	12.13

The following is a summary of the hourly observations:-

No. of chimneys observed.		No. of observations taken.		observations taken per chimney.
23		42		1.8

Results of observations:-

	Black.	Moderate.	None.
Total amount of smoke in minutes	367	1,246	907
Average amount of smoke in minut	es 8.97	29.9	21.13

The duration of the emission of black smoke as shown in the above observations, is altogether too great and indicates the need for steady pressure on those responsible.

#### Ovens and Kilns.

More time was devoted to the firing of ovens and kilns than in previous years, as 44 observations were made of kilns and 15 of ovens.

During the year 191 interviews and conversations were had with firemen with respect to 124 kilns and 67 ovens. In some cases owners and managers were interviewed at the same time.

Although it cannot be said that ovens and kilns can be fired without the emission of black smoke, the firemen themselves have proved that the emission can be very much reduced when the fuel is used intelligently.

The following are the particulars of half-hour observations taken before and taken after interviews with the firemen.

Twenty observations taken before visit to the works and interviews with the firemen:—

		Black.	Moderate.	None.
	smoke in minutes		285	112
Average amount	of smoke in minutes	10.15	14.25	5.6

Nineteen observations taken after visits to works and interviews with the firemen:—

		Black.	Moderate.	None.
Total amount of	smoke in minutes	53	363	154
Average amount	of smoke in minutes	2.7	19.1	8.2

## Rats and Mice (Destruction) Act 1919.

An Inspector was appointed by the Council in March, 1920, and has been continually at work since that date.

The number of rats known to have been killed during the year, and the methods employed were as follows:

70	97	 			ıs	Poison
	2,82	 		Ferrets		
42	1,04	 				Traps
33	93	 			Lime	Bird
58	1,35	 	ouses	acking He	ng Pac	Clear
_	-					
	11.000					

The number of visits paid to various premises was as follows:-

received or tropped between t		and handar	 11 cen cen w
Factories			 668
Farms and Stables			 950
Shops and Bakehouses			 764
Private houses			 956
Warehouses			 575
Collieries and Ironwor	rks		 37
Garden allotments			 67
Hotels and Restaurant	ts		 352
Schools and Public Bu	ildings		 74
Tips			 30
Picture Palaces			 86
Other premises, etc.			 102

HUNTING WITH DOGS AND FERRETS. Ferretting has again been found to be the best method for open spaces or in buildings where there is plenty of room for dogs to kill.

#### Schools.

The Medical Officer of Health is not the School Medical Officer.

All the schools were inspected four times during the year in relation to the sanitary conditions and water supply. The list of sanitary defects numbering 306 were referred to the Education Authority.

In two cases, it was found necessary to reconstruct the drainage entirely and convert the sanitary conveniences.

#### School Closure.

One school was closed on account of Scarlet Fever, one on account of Chicken Pox and Whooping Cough during the year, and several on account of Measles.

## Sanitary Condition of Theatres. Music Halls, etc.

There are twenty-nine picture palaces and theatres. These premises were inspected periodically, and 17 minor defects found were immediately remedied by the managers.

#### Distribution of Lime and Lime Brushes.

Facilities exist throughout the district for the free distribution of lime and the loan of whitewash brushes for the cleansing of houses where this is desirable, this has assisted in obtaining a higher standard of cleanliness in the poorer class of houses.

#### Public Urinals.

The whole of the public urinals were systematically inspected. They were found to be in a fairly satisfactory condition.

# Milk Supply. Milkshops and Purveyors of Milk.

The following statement shows the number of purveyors of milk registered under the Dairies, Cowsheds and Milkshops Order:—

Number on register	at 31st	December,	1923	402
Number registered	during	the year		49
Visits paid				1,950

These premises are usually kept in a cleanly state.

An effort is being made to obtain entirely separate accommodation for the milk and receptacles where a mixed business is carried on at the premises, by the erection of small dairies. This applies to places where milk has been retailed for a considerable period. In the case of new registrations, separate accommodation on the same lines is insisted upon.

#### Cowsheds.

The number of cowsheds on the register is 337. Visits paid 726. The number of dairies on the register is 223. Visits paid 193.

All the sheds have been lime-washed at least twice during the past year, and more often in a number of cases.

The approximate number of cows throughout the district is 1,795, as compared with 1,883 in the previous year.

## Milk and Dairies (Amendment) Act, 1922.

Two hundred and fifty-one samples of milk were taken during the year and 10 were proved to be not genuine on analysis. No samples contained preservative.

Fifteen samples of milk were examined for the presence of Tubercle Bacilli. Twelve of these samples were taken from street vendors and three obtained direct from the cow. One sample was reported to contain Tubercle Bacilli. The particular animal was not traced.

# Report of the Administration of the Public Health (Milk and Cream) Regulations, 1912, 1917. County Borough of Stoke-on-Trent.

#### Report for the year ending December, 1923.

I. MILK AND CREAM NOT SOLD AS PRESERVED CREAM.

		Number of samples examined for the presence of a Preservative	Number in which a Preservative was report to be present		
Milk		252	Nil		
Cream		Nil	Nil		

## 2. CREAM SOLD AS PRESERVED CREAM.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to preservatives were correct.

(1)	Correct statements made	 I 2
(2)	Statements incorrect .	 _
	Total	12

No. of Sample	Percentage of Preservative found in each Sample		Percentage stated on Label			
40	0.35%	of Bo	ric Acid	o 40% of	Bori	c Acid
41	0.34%	"	"	"	11	1.
87	0.37%	11	11	"	11	11
125	0.38%	11	11		11	.11
268	0.40%	11	"		11	11 5
269	0.23%	11		11	11	11
270	0.40%	11	.0	11	"	
376	0.34%	11	11	11		11
383	0.19%	11	11	- 11	11	11
481	0.33%	11		. 11	11	11
482	0.33%	11	11	и	15	п
484	0.23%	11	11	11	11	11

(b) Determination made of milk fat in cream sold as preserved cream.

(1)	Above	35%	 	 12
(2)	Below	35%	 	 -
			Total	 12

(c) Instances where (apart from analysis) the requirements as to labelling or declaration of preserved cream in Article V (1) and the proviso in Article V (2) have not been observed.

Nil.

(d) Thickening substances found.

Nil.

The percentages of milk fat found in the samples of Preserved Cream were as follows:—

Sample	No	. 40		 	Fat	46.66%
"	,,	4 I		 	,,	45.25%
,,	,,	87		 	"	45.39%
,,,	,,	125		 	,,	46.37%
"	,,	268		 	"	50.73%
"	,,	269		 	,,	52.95%
,,,	,,	270		 	,,	50.43%
,,	,,	376		 	,,	59.9%
,,	,,	383		 	"	58.6%
"	,,	481		 	,,	48.02%
"	,,	482		 	,,	51.66%
,,	,,	484	•••	 	"	45.81%

#### Other Foods.

Two Inspectors devote the whole of their time to the inspection of slaughter-houses, food, the supervision of premises where food is manufactured and stored, and premises such as Greengrocers' Shops, Tripe Cleaning premises, Cold Stores, Wholesale Fruit Stores, Grocers' shops, premises in which sausages and meat pies are made, etc.

During the year 18,441 visits were paid, compared with 10,933 during the previous year as follows:—

4,736 visits were paid to slaughter-houses in the Borough.

5,395 visits were paid to Meat Shops, English and Foreign.

771 visits were paid to Fish Shops, Retail and Wholesale.

1,188 visits were paid to Markets, and

6,351 visits were paid to other premises.

## Carcases, etc., Examined.

Carcases of Home Killed animals specially examined, 30,396. Carcases and Quarters of Frozen and Chilled Meat, etc., 41,020. Rabbits, English, 7,150 couples. Rabbits, Imported, 660 cases.

Also a large quantity of Bacon, Cheese, Ham, Eggs, Butter, Fish, Tinned Foods, Fruit and Vegetables.

#### Condemnations:-

Home-kille	d Beef	, incl	luding		
174 car	rcases			129,309	lbs.
Mutton				2,414	,,
Pork				7,461	,,
Veal				1,574	,,
Beef (Impe	orted)			5,282	,,
Mutton (In		1)		593	,,
Pork (Impe	orted)			83	,,
Offals				71,896	,,
Fish				$3,595\frac{1}{2}$	,,
Shell Fish				200	,,
Tinned Foo	ods			1,941	,,
Fruit-Veg	etables			6,658	,,
Rabbits				6301	,,
Eggs (Imp	orted)			704	,,
Bacon, Ha				248	,,
Coconuts				20	,,
Cheese				99	,,
Poultry				62	,,
Cocoa				10	"
Goat				40	
Wine (one				7	"
wille (one	Dottie	,.			
100					

... 232,820

or 103 Tons 18 Cwts. 3 Qrs.

Total

Number of surrenders ... 1,084 Number of seizures ... 1

Of the 174 Bovine Carcases condemned-

81 or 46.55% were affected with Tuberculosis, and 93 or 53.45% with other diseases.

Meat seized, 74 lbs.

The whole of the meat found to be unfit for human consumption is now dealt with at the Waste Eliminator Plant at Hanley.

#### Prosecutions under the Public Health Act.

Market Ma	Offence Committed	Penalty					
(No. 1 Case) 1st Defendant.	Being in possession of portions of Cow and Edible offal for	Fined Costs	30	s. o 5	0		
2nd. Defendant.	the purposes of Sale.  Aiding and abetting	Costs		5	0		

## Prosecutions under Sale of Food Order, 1921.

	Penalty				
No. 1 Case	For exposing imported meat for sale unlabelled.	Fined 2 Special Costs	s. d. 2 0 1 0		
No. 2 Case	For exposing for sale imported meat unlabelled.	Fined 2 Special Costs	2 O		

#### Stoke-on-Trent Corporation Act, 1923.

	Offence Committed				Penalty					
No. 1 Case	For exposing for sale inflated	Fined	£	S. 2	d.					
	veal.	Costs	I	I	0					

#### Slaughter-houses.

There are 67 slaughter-houses in the County Borough (including the Corporation Abattoirs).

	Total	F	Registered	Licensed	Vacant
Tunstall and Goldenhill	1 9		7	 2	_
Burslem	10		8	 2	-
Hanley	I 2		9	 3	_
Stoke and Hanford	5		2	 3	_
Fenton	8		8	 	
Longton, Meir and					
Rough Close	12		10	 2	_
Smallthorne	3		1	 2	_
Bucknall	5		1	 4	_
Chell Heath, Brindley					
Ford and Packmoor	3		1	 2	_
	_		_	-	_
	67		47	20	
				In Decembe 1923	r
Registered				 	
Licensed				 20	
	Total	1		 67	

104 Personal Notices were served throughout the year for the limewashing of slaughter-houses, lairs, etc., and also for the replacing of worn-out garbage vessels. In every case the notices were complied with.

Various sanitary improvements have been carried out at several private slaughter-houses, but owing to their situation and construction they cannot all be made to comply with the existing bye-laws.

The private slaughter-houses are scattered throughout the whole of the County Borough and as the hours of slaughtering vary, it is impossible to carry out satisfactory the duties of Meat inspection.

Several private slaughter-houses are hardly fit to be used as such.

New up-to-date Abattoirs are urgently needed. The present one is too small, not properly arranged and badly situated both in relation to dwelling houses and railway facilities—there is no Isolation slaughter-house, no sufficient cooling sheds, no lavatories for washing purposes and no Mess rooms. It is agreed that it would be unwise to spend any large amount of money on necessary repairs. This question has been before the Corporation for many years and should now receive serious attention.

ICE CREAM SHOPS. During the year 361 visits have been made to these premises. The defects found and dealt with were 32.

## SALE OF FOOD AND DRUGS ACTS.

The number of Samples taken for Analysis by the Public Analyst during the past year was 627.

Table giving number of Samples, &c.

9 Almonds, Ground	of	5 1 8 1 1 1 2 38 8 3 3 1 12 2 8 8 2 5 12 1	Informal  4 8 17 11 10 1 3 5 6 2 2 1 7 1	Genuine  9 1 11 1 1 1 6 29 36 1 13 3 1 18 3 1 12 7 14 2 2 3 5 19	Not Genuin  5 3
1 Arrowroot	of	1 8 1 1 1 6 12 38 13 3 8 3 8 3 11 12 2 8 2 5 12	8 1 17 1 1 10 1 3 5 6 2 2 1 7	1 11 1 1 6 29 36 1 13 3 1 18 3 1 18 3 4 12 7 14 2 2 3 5 19	3
16 Beef Suet, Shredded 1 Beef Suet, Flaked 1 Blanc-Mange Powder 1 Borax, Refined 6 Brawn 29 Butter 39 Cake, Sponge 1 Calves Feet Jelly 3 Camphorated Oil 3 Cheese 1 Cinnamon, Ground 18 Cocoa 3 Coffee 1 Coffee Extract 3 Coffee and Chicory, Essence Cornflour 12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 15 Egg Powder Substitute 16 Egg Self-Raising Flour 17 Eucalyptus Oil 18 Egg Self-Raising 19 Flour, Self-Raising 10 Flour 11 Flour 12 Ginger, Ground 13 Golden Syrup 14 Honey 15 Jam 17 Lard 18 Lemon Cheese 18 Lemon Cheese 19 Hory 10 Lemon Cheese 10 Milk	of	8 1 1 1 6 12 38 13 3 8 3 8 3 11 12 2 8 2 5 12	8	11 1 1 1 6 29 36 1 13 3 1 18 3 1 18 3 4 12 7 14 2 2 3 5 19	3
1 Beef Suet, Flaked 1 Blanc-Mange Powder 1 Borax, Refined 6 Brawn 29 Butter 39 Cake, Sponge 1 Calves Feet Jelly 13 Camphorated Oil 3 Cheese 1 Cinnamon, Ground 18 Cocoa 3 Coffee 1 Coffee Extract 3 Coffee and Chicory, Essence 4 Cornflour 12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 12 Egg Powder Substitute 13 Egg Self-Raising Flour 14 Eucalyptus Oil 15 Eucalyptus Oil 16 Flour 17 Ginger, Ground 18 Golden Syrup 19 Glycerine 10 Glycerine 11 Honey 12 Lemon Cheese 13 Lemon Cheese 14 Margarine 15 Milk	of	1 1  6 12 38  13 3  8 3  8 3  2 8  2 5 12 	1 17 1 1 1 10 1 3 5 6 2 2 1 1 7	1 1 1 6 29 36 1 13 3 1 18 3 1 18 3 4 12 7 14 2 2 3 5 19	3
1 Blanc-Mange Powder 1 Borax, Refined	of	1 6 12 3 8 3 3 3 2 2 5 2 5	1 17 1 1 1 10 1 3 5 6 2 2 1 1 7	1 1 6 29 36 1 13 3 1 18 3 1 18 3 4 12 7 14 2 2 3 5 19	3
1 Borax, Refined 6 Brawn 29 Butter 39 Cake, Sponge 1 Calves Feet Jelly 13 Camphorated Oil 3 Cheese 1 Cinnamon, Ground 18 Cocoa 3 Coffee 1 Coffee Extract 3 Coffee and Chicory, Essence 4 Cornflour 12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 12 Egg, Liquid 13 Egg Self-Raising Flour 15 Eucalyptus Oil 16 Flour, Self-Raising 17 Flour 18 Golden Syrup 18 Glycerine 19 Jam 19 Jam 10 Lard 10 Lemon Cheese 10 Lemon Curd 11 Margarine 12 Lemon Curd 13 Milk 14 Margarine 15 Milk 15 Milk 16 Milk 17 Milk 18 Margarine 18 Margarine 18 Milk 18 Margarine 18 Margarine 18 Margarine 18 Milk 18 Margarine 19 Milk 10 Margarine 10 Milk 10 Margarine 10 Milk 10 Margarine 10 Milk 11 Margarine 11 Milk 11 Margarine 11 Milk 11 Margarine 11 Milk 11 Margarine 12 Milk 13 Milk 14 Margarine 15 Milk 15 Milk 16 Milk 17 Milk 18	of	6 12 38  13 3  8 3  3 1 12 2 8  2 5 12	1 17 1 1 1 10 1 3 5 6 2 2 1 1 7	1 6 29 36 1 13 3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	3
6 Brawn 29 Butter 39 Cake, Sponge 1 Calves Feet Jelly 13 Camphorated Oil 3 Cheese 1 Cinnamon, Ground 18 Cocoa 3 Coffee 1 Coffee Extract 3 Coffee and Chicory, Essence 4 Cornflour 12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 12 Egg, Liquid 15 Egg Self-Raising Flour 16 Eucalyptus Oil 17 Flour, Self-Raising 18 Flour 19 Flour, Self-Raising 10 Flour 10 Ginger, Ground 11 Golden Syrup 12 Ginger, Ground 13 Golden Syrup 14 Honey 15 Jam 17 Lard 18 Lemon Cheese 19 Lemon Cheese 10 Lemon Curd 10 Margarine 11 Margarine 12 Milk 15 Milk 16 Milk 17 Milk 18 Margarine 18 Milk 18 Margarine 19 Milk 19 Margarine 10 Milk 10 Milk 11 Margarine 12 Milk 12 Margarine 13 Milk 14 Margarine 15 Milk 15 Milk 16 Milk 17 Milk 18 Margarine 18 Milk 18 Milk 18 Milk 18 Milk 19 Milk 10 Milk 10 Milk 10 Milk 10 Milk 11 Milk 11 Milk 11 Milk 11 Milk 12 Milk 12 Milk 13 Milk 14 Milk 15 Milk 16 Milk 17 Milk 18 Milk 19 Milk 10 Milk 11 Milk 12 Milk 12 Milk 13 Milk 14 Milk 15 Milk 16 Milk 17 Milk 18	of	12 38  13 3  8 3  3 1 12 2 8  2 5 12 	17 1 1 1  1 10  1  3  5 6 2 2 2 1  7	6 29 36 1 13 3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	3
29 Butter	of	12 38  13 3  8 3  3 1 12 2 8  2 5 12 	17 1 1 1 10 1 3 5 6 2 2 1 7	36 1 13 3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	3
1 Calves Feet Jelly	of	13 3  8 3  3 1 12 2 8  2 5 12 	1 1 10 1 3 5 6 2 2 1 1 7	1 13 3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	
13 Camphorated Oil	of	13 3  8 3  3 1 12 2 8  2 5 12 	 1 10  1  3  5 6 2 2 2 1  7	13 3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	
3 Cheese	of	3  8 3  3 1 12 2 8  2 5 12	1 10  1  3  5 6 2 2 2 1  7	3 1 18 3 1 3 4 12 7 14 2 2 3 5 19	
1 Cinnamon, Ground  18 Cocoa  3 Coffee  1 Coffee Extract  3 Coffee and Chicory, Essence  4 Cornflour  12 Cream, Preserved  7 Cream of Tartar  14 Custard Powder  2 Egg, Liquid  2 Egg Powder Substitute  3 Egg Self-Raising Flour  5 Eucalyptus Oil  1 Flour  2 Ginger, Ground  3 Golden Syrup  3 Glycerine  4 Honey  5 Jam  7 Lard  2 Lemon Cheese  2 Lemon Curd  1 Margarine  1 Milk	of	8 3  3 1 12 2 8  2 5 12	1 10  1  3  5 6 2 2 2 1  7	1 18 3 1 3 4 12 7 14 2 2 3 5	
18 Cocoa	of	8 3  3 1 12 2 8  2 5 12	10  1  3  5 6 2 2 2 1  7	18 3 1 3 4 12 7 14 2 2 3 5 19	
3 Coffee	of	3  3 1 12 2 8  2 5 12	 1  3  5 6 2 2 2 1  7	3 1 3 4 12 7 14 2 2 3 5	
1 Coffee Extract 3 Coffee and Chicory, Essence 4 Cornflour 12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 15 Egg, Liquid 16 Egg Powder Substitute 17 Eucalyptus Oil 18 Flour, Self-Raising Flour 19 Flour, Self-Raising 10 Flour 11 Flour 12 Ginger, Ground 13 Golden Syrup 14 Golden Syrup 15 Glycerine 16 Honey 17 Lard 18 Lemon Cheese 19 Lemon Curd 10 Margarine 10 Milk	of	3 1 12 2 8  2 5 12	1  3  5 6 2 2 2 1  7	1 3 4 12 7 14 2 2 3 5	
3 Coffee and Chicory, Essence 4 Cornflour	of	1 12 2 8  2 5 12	3  5 6 2 2 1  7	3 4 12 7 14 2 2 3 5 19	
4 Cornflour		1 12 2 8  2 5 12	3  5 6 2 2 1  7	4 12 7 14 2 2 3 5 19	
12 Cream, Preserved 7 Cream of Tartar 14 Custard Powder 15 Egg, Liquid 16 Egg Powder Substitute 17 Egg Powder Substitute 18 Egg Self-Raising Flour 19 Flour, Self-Raising 10 Flour 10 Ginger, Ground 11 Glycerine 12 Ginger, Ground 13 Glycerine 14 Honey 15 Jam 16 Lard 17 Lard 18 Lemon Cheese 19 Lemon Curd 19 Lemon Curd 10 Margarine 10 Milk		12 2 8  2 5 12	5 6 2 2 1 	12 7 14 2 2 3 5 19	
7 Cream of Tartar		2 8  2 5 12	5 6 2 2 1 	7 14 2 2 3 5 19	
14 Custard Powder		8  2 5 12	6 2 2 1 	2 2 3 5 19	
2 Egg, Liquid 2 Egg Powder Substitute 3 Egg Self-Raising Flour 5 Eucalyptus Oil 19 Flour, Self-Raising 2 Ginger, Ground 3 Golden Syrup 4 Honey 5 Jam 7 Lard 2 Lemon Cheese 2 Lemon Curd 4 Margarine 5 Milk		2 5 12	2 2 1  7	2 3 5 19	
2 Egg Powder Substitute 3 Egg Self-Raising Flour 5 Eucalyptus Oil 9 Flour, Self-Raising 1 Flour 2 Ginger, Ground 3 Golden Syrup 4 Honey 5 Jam 7 Lard 2 Lemon Cheese 2 Lemon Curd 4 Margarine 6 Milk		2 5 12	2 1  7	2 3 5 19	
3 Egg Self-Raising Flour 5 Eucalyptus Oil 9 Flour, Self-Raising 1 Flour 2 Ginger, Ground 3 Golden Syrup 4 Honey 5 Jam 7 Lard 2 Lemon Cheese 4 Margarine 6 Milk		5 12 	7	5 19	
9 Flour, Self-Raising		12	7	19	
1 Flour					***
2 Ginger, Ground			1		
3 Golden Syrup	555			1	
3 Glycerine			1	2	";
4 Honey		3 3		2 3	1
5 Jam	***		4	4	
7 Lard		5		5	
2 Lemon Cheese		6	i	7	
2 Lemon Curd 4 Margarine 1 Milk		2		7 2	
4 Margarine		2		2	
1 Milk		13	1	14	***
	·	248	3	241	10
1 Milk (Appeal to Cow)			1	1	
3 Milk, Dried			3	3	
6 Milk, Condensed		6		6	
6 Mincemeat		4	2	6	
1 Ointment, Boric		1	";	1	***
4 Ointment, Sulpher 5 Peas, Tinned		3 3	1 2	5	
9 Danner		3	2	3	
1 Ports Preserved	**	1		1	
1 Rice		1		1	
4 Rice, Ground		3	1	4	
5 Sausage		15		15	
1 Semolina			1	1	
3 Spirit of Turpentine		3		3	
2 Totals carried forward		470		543	19

Sale of Food and Drugs Acts-continued.

46

	Total number of San			MINO 3	Result of Analysis		
Total number of Samples submitted for Analysis				Formal	Informal	Genuine	Not Genuine
562	Totals carried	forward		470	92	543	19
1	Sugar, Castor				1	1	
1	Sweet Spirit of Nitre			1			1
1	Tapioca			1		1	***
20	Tea				20	20	
	Tomatoes, Tinned			4		4	
	Vinegar			28		26	2
1	Wine, Cowslip			1		1	
6	Wine, Ginger			6		5	1
1	Wine, Orange and Qu	inine		1		1	
2	Wine, Raisin			2		2	
327		7		514	113	604	23

Formal samples, 514. Informal samples, 113. Genuine, 604. Not genuine, 23.

All informal samples were obtained by Agents.

32 samples of milk were taken in course of delivery at railway station.

## Proceedings under the Acts were instituted as follows:-

Date of Purchase	Charge	Results	Penalty	Costs
1923		A Breeze	£ s. d.	£ s. d.
Jan. 3rd	Selling Milk containing 18 per cent. of added water	Convicted	10 10 0	1 1 0
" 3rd	Selling Milk containing 14 per cent. of added water	Convicted	1 1 0	1 1 0
April 24th	Selling Milk containing 6 per cent. of added water	Convicted	3 0 0	1 11 6
May 10th	Selling Vinegar 32 per cent deficient in Acetic Acid	Convicted	0 10 0	1 1 0
July 3rd	Selling Milk containing 12 per cent. of added water	Case Withdrawn (Wholesaler	76	
Aug. 15th	Selling Sponge Cake containing 0.106 per cent of Boric Acid	Convicted)	2 0 0	1 1 0
n 22nd	Selling Milk containing 12 per cent. of added water	Convicted	10 0 0	3 0 0
" 22nd	Selling Milk containing 14 per cent. of added water	Convicted	5 0 0	3 0 0
" 28th	Selling Milk containing 9 per cent. of added water	Convicted	5 0 0	1 11 6
" 28th	Selling Milk containing 11 per cent. of added water	Convicted	5 0 0	1 11 6
Sept. 4th	Selling Shredded Beef Suit contain- ing 26.6 per cent. of Ground Rice	Case dismissed (Relied upon Warranty) Wholesaler Convicted	2 2 0	7 7 0
19th	Selling Vinegar 22 per cent deficient in Acetic Acid	Convicted	1 0 0	1 1 0
Dec. 12th	Selling Golden Syrup containing 70 per cent. of Glucose Syrup	Convicted	3 0 0	1 1 0
		Total	48 3 0	24 7 6

Details of Non-Genuine Samples where proceedings were not instituted.

No. of Sample	Article	Remarks
154	Sweet Spirit of Nitre	Sample was 16% deficient in Ethyl Nitrate, containing only 1.2% instead of at least 1.52%.
220	Milk	Sample was 4% deficient in soli 's not fat. Warning was sent, and further sample taken proved genuine.
249	Milk	Sample was 4% deficient in fat. Warning was sent, and a further sample taken proved genuine.
368	Sponge Cake	Contained the percentage of foreign ingredients as under viz:—0.02% (1.4 grains per lb) of Boric Acid. Warning sent, and further sample taken proved genuine.
95A	Shredded Beef Suet	Sample contained 19% of ground rice, which is 4% in excess of the amount regarded as necessary, viz.:— 15%. A formal sample taken proved genuine.
97A	Shredded Beef Suet	Sample contained 20% of wheat flour, which is 5% in excess of the amount regarded as necessary, viz.;—15%. A formal sample taken proved genuine.
99A	Shredded Beef Suet	Sample contained 18.7% of rice flour, which is 3.7% in excess of the amount regarded as necessary, viz.:— 15%. A formal sample taken proved genuine.
424	Shredded Beef Suet	Sample contained 20% of ground rice, which is 5% in excess of the maximum amount regarded as necessary, viz:-15%. Warning was sent.
518	Ginger Wine	Sample containing 0.0172 per cent. or 1.59 grains per pint of Salycylic Acid, which is 0.59 grains per pint in excess of the maximum amount allowed. Warning was sent.

#### Preservatives in Milk, Butter, Margarine, etc.

None of the 251 samples of milk submitted for analysis contained preservative.

Of twenty-nine samples of Butter: 15 contained Boric Acid as follows:—0.15 per cent., 0.08 per cent., 0.15 per cent., 0.17 per cent., 0.08 per cent., 0.09 per cent., 0.09 per cent., 0.15 per cent., 0.16 per cent., 0.15 per cent., 0.17 per cent., 0.13 per cent., 0.08 per cent.

Of fourteen samples of Margarine: 13 contained Boric Acid as follows:—0.47 per cent., 0.25 per cent., 0.34 per cent., 0.54 per cent., 0.34 per cent., 0.11 per cent., 0.19 per cent., 0.18 per cent., 0.29 per cent., 0.07 per cent., 0.30 per cent., 0.23 per cent., 0.26 per cent:

Of five samples of Tinned Peas: one contained o.1 grain of copper sulphate per lb.

Ten samples of Wine were purchased: one of Ginger Wine contained 0.59 grains excess of Salycylic Acid per pint, and one of Raisin Wine 0.73 grains of Salycylic Acid per pint.

Of fifteen samples of Sausage: two contained Boric Acid as follows:—0.29 per cent. and 0.05 per cent.

Of 5 samples of Jam, two contained the percentage of Salycylic Acid as follows:—0.82 grain per lb. and 0.56 grain per lb.

The two samples of Liquid Egg contained 0.61 per cent. and 0.51 per cent. of Boric Acid.

All Lard and Margarine samples submitted for analysis were tested for the presence of paraffin. None was found.

## Registration of Margarine Dealers.

No registrations of margarine dealers were made during the year. 31 visits were paid to registered premises and no breach of the Regulations was found.

## Fertilizer and Feeding Stuffs Act 1906.

13 Samples of Ground Oats were taken for Analysis during the year, a detailed statement of those samples is given below.

N		nd numb imple	er	Formal	Informal	Result of Analysis	Remarks
1.в.	Sussex	Ground	Oats	_	Yes	Not Genuine	Was entirely Barley Meal
2.в.	11		11	-	Yes	Not Genuine	Was a sample of Sharps
3.в.	11	"	11	_	Yes	Genuine	THE RESERVE THE PARTY OF THE PA
5.c.	- 11	- 0		Yes	-	Genuine	
6.c.		"	"	_	Yes	Genuine	
7.c.		11	11	-	Yes	Genuine	
8.c.	.11			Yes	-	Genuine	
9.c.	"	"	"	Yes	-	Not Genuine	About equal parts of Ground Oats and Barley Meal
10.c.		11	11	Yes	-	Genuine	PA SOLD THE STREET, NAME OF STREET, ST
11.c.		"	"	Yes	-	Genuine	a hilluminessess
12.c.	Ground	Oats		Yes	-	Genuine	
13.c.	Sussex	Ground	Oats	Yes	-	Not Genuine	Contained about 75% of Ground Oats with about 25% of Barley Meal
I4.c.			11	Yes	-	Genuine	en de la contrata
							Formal samples were taken in all cases where the in- formal proved unsatisfac- tory, the results were genuine.  All formal samples found to be unsatisfactory were re- ported upon and the Board of Agriculture acquainted with the facts. No further action was taken

#### Rag Flock Act.

Seven samples of Rag Flock were procured for analysis during the year, all were reported by the Analyst to come within the standard of cleanliness laid down in the Act. A satisfactory state of cleanliness was found to exist at all the 21 premises visited.

#### Canal Boats.

During the year 1,507 Canal Boats have been inspected in this district. They were found to be clean, well ventilated, and in a good state of repair.

The accommodation provided on these 1,507 canal boats was as follows:—

4,514½ persons, being an average of 3.0 per boat. The number of persons in occupation was:—4,220, viz.: males, 1,837; females, 1,293; children, 1,090; being 43.52 per cent. males; 30.63 per cent. females; 25.82 per cent. children; or an average of 2.8 persons in occupation per boat; but, if two children are counted as one adult, it reduces the average in occupation to 2.43.

Of the 1,090 children on board, there were 560 or 13.2 per cent. over 5 years, and therefore of school age, 530 or 12.6 per cent. were under 5 years of age, 548 or 12.9 per cent. were boys, and 542 or 12.8 per cent. were girls.

These canal boats were registered to carry the following number of persons:—

5	boats were	registered	to carry	53	persons
14	"	,,	,,	5	,,
I	,,	,,	,,	4 1/3	4,
223	,,	22	,,	4	,,
2	"	,,	,,	3 3	2)
2 I	,,	,,	,,	$3\frac{1}{2}$	,,
138	,,	,,	,,	3	,,
10	,,	,,	,,	$2\frac{1}{2}$	,,
93	not registe	red or voice	d.		
-					

1507

Of this number 198 had a fore cabin, being 14.9 per cent. of the boats inspected.

These were registered as follows:-

198

In 33 cases the captains were also the owners of their canal boats, and 32 boats inspected had women captains. In 115 cases a pair of canal boats were worked by one family (in some cases with assistance).

#### Infringement of Acts and Regulations.

(a)	Registration				1
(b)	Notification of	change	of mass	ter	0
	Certificates				16
(d)	Marking				10
(e)	Overcrowding				II
(f)	Separation of	Sexes			6
(g)	Cleanliness				I
(h)	Ventilation				0
(i)	Painting				6
	Provision of v		essel		14
	Removal of b				I
	Notification of			ease	0
	Admittance of				0
,					
					66

No legal proceedings were taken under the Canal Boats Acts or Regulations during this period.

The usual notices were served in 59 cases for 65 infringements, of these 58 have been returned, duly signed, signifying that the said infringements had been rectified.

No cases of infectious disease were met with on a canal boat during this period. Therefore it was not necessary to detain any canal boat for cleansing and disinfection.

There are at present on the register (according to revised list):-

- (a) 536 canal boats known to be working;
- (b) 330 canal boats that are cancelled, broken up or cannot be traced.

866

Twelve canal boats were registered during the past year (one was a motor propelled boat):—

New canal boats	 	 6
Change of ownership	 	 6
		_
		12

#### INFECTIOUS DISEASES.

The following is a list of the diseases which at present have to be notified to the Medical Officer of Health:—Scarlet Fever, Diphtheria, Membraneous Croup, Typhoid Fever (Enteric and Paratyphoid Fever), Puerperal Fever, Cholera, Erysipelas, Smallpox, Typhus Fever, Relapsing Fever, Continued Fever, Plague, Cerebrospinal Fever, Acute Poliomyelitis, Pulmonary Tuberculosis, Other forms of Tuberculosis, Ophthalmia Neonatorum, Malaria, Dysentery, Trench Fever, Acute Primary Pneumonia, Acute Influenzal Pneumonia, Acute Encephalitis Lethargica, Acute Polio-Encephalitis, and Chickenpox.

Table 6.—Cases of Infectious Diseases notified during the year 1923.

			Numb	r of Ca	Number of Cases Notified	tified				Total C	ases n	stiffed i	n each 1	Localit	A	
				At Ag	At Ages-Years	sars					of t	he Dis	of the District		an an	
Disease	At all Ages	I asbnU	d of I	6 to 15	15 to 25	29 or 92	45 to 65	65 and upwards	IlstenuT	Burslem	Hanley	Stoke	Fenton	Longton	% Norton, and Bucknall, and etc.	Total Cases removed to Hospital
Smallpox Cholera	11	11	11	11	11	11	11	11	11	11	11	11		11	11	11
Diphtheria and Membraneous Croup Erysipelas	189	4 0	90	96 1	48	18	25 -	12	38	43	61	36	18	53	36	217
Fever	and.	-1	325	836	156	4	5	1	88	287	277	210		239	199	122
:	18	11	1-	1 %	×	14	1-		1	1 00	10	12	4	1-	11	
Continued Fever	1	1	1	1	1	1	. 1	1	1	, 1	1	1	1	1	1	1
Puerperal Fever	59	1	1	1	6	20	1	1	-	=	7	4	1	C1	00	1
Cerebro Spinal Meningitis	G1 0	1	- 0	-	1	1	1	1	1	1	1	1	1.		1	
Follomyelitis Encephalitis Lethargica	N 4G	1 1	1 1	-	-	1-	67	11	11	000	1-	01	- 1	- 1	1 1	1.03
	38	33	6	28	82	154	79	01	35	7	118	49	43	62	15	1
Other Forms of Tuberculosis	. 124	4	35	49	20	15	65	-	13	31	50	18	17	83	00	
	266	566	13	1	11	1	1	1	19	64	93	13	53	30	18	1
	909	97	103	200	96	129	64	9 ;	98	94	129	26	96	19	98	1
	5/4	4/	182	60	10	20 00	# :	11	3.	000	0.5	40	30	63	13	1
Malaria.		- 1	2	2	9 -	3 -	: -	1	- 1	2 -	3	0	12		11	
		1	1	-	1	1	1	1	1	-	1	1	1	1	1	-
	1140	87	484	554	1=	14	11	11	119	314	207	1 82	153	132	33	1
TOTALS	4723	485	1216	1760	501	488	934	43	445	1063	1095	199	440	858	361	1487

Total available beds, 264. 1:: Isolation Hospitals— | Infectious Diseases Hospital, Bucknall Name and Situation | North Stafford Joint Smallpox Hospital

TABLE 7, showing the numbers of cases and deaths from Scarlet Fever, Diphtheria and Enteric Fever since 1910.

	SCARLET	FEVER	DIPHT	THERIA	ENTERI	c Fever
	Cases	Deaths	Cases	Deaths	Cases	Deaths
1910	2005	66	637	83	122	30
1911	1687	63	819	90	139	26
1912	696	29	514	60	139	27
1913	266	4	634	95	103	23
1914	223	1	528	79	86	18
1915	874	28	932	104	48	12
1916	722	24	865	108	31	6
1617	387	14	622	66	20	4
1918	260	8	508	60	21	
1919	807	31	466	29	10	5 3
1920	1060	40	342	21	11	2
1921	651	14	311	20	27	7
1922	875	23	302	16	23	10
1923	1373	22	221	10	20	3

## Scarlet Fever.

Number of cases notified		1373
Number of deaths		22
Case fatality per cent.		1.6
Number of cases removed	to hospitals	1227
Percentage of cases remov	ed	92.2

The attack rate for the County Borough during the year was 4.97 per 1,000 of the population. The disease was more prevalent than it had been since 1911.

Table showing the number of cases in the various districts of the Borough:—

District	8	Tun	stall	Burs	lem	Han	ley	Sto	ke	Fen	ton	Long		Small Nor Bucks	ton,	Tot	tal
Year		Cases	Deaths	Cases	Deaths	Cases	Deaths										
1917		56	6	104	4	81	1	43	1	46	1	57	1	-	-	387	14
1918		15	1	112	4	34	1	33	1	36	-	30	2	-	-	260	8
1919		31	-	198	15	276	10	104	5	148	1	50	-	-	_	807	3
1920		78	3	194	8	298	13	156	5	190	7	144	4	-	_	1060	4(
1921		61	3	172		129	2	79	4	59	1	151	4	-	_	151	14
1922		65	4	148	2	205	4	179	3	63	1	102	8	113	1	875	2
1923		89	1	287	5	277	2	210	3	72	1	239	4	199	6	1373	25

The attack rates per 1,000 of the population for the various districts were as follows:—Tunstall, 3.10; Burslem, 6.54; Hanley, 3.95; Stoke, 5.17; Fenton, 2.61; Longton, 5.44; Smallthorne, Bucknall, Norton, etc., 9.31. The disease was most prevalent in Burslem, Bucknall and Smallthorne.

The percentage of removals to the Hospital was 92.2, as compared with 88.0 for the previous year.

The mortality rate in the district during 1923 was 0.08. The mortality rate for the disease in England and Wales was 0.03 per 1,000 of the population, and in the 105 large towns 0.03 per 1,000.

One school was closed on account of the prevalence of the disease.

All cases are promptly visited on notification, and removal to Hospital urged where there are no means of isolating the patients. Disinfection is carried out promptly and thoroughly. The head teachers of the elementary schools are advised of the occurrence of Scarlet Fever among the scholars, or in the families of the scholars, and such scholars are excluded from school until the expiration of the time advised in the memorandum of the Local Government Board and the Board of Education. Every case is kept under supervision until disinfection is completed. It is understood that all information transmitted from this Department is promptly sent on to the School Medical Officer. Generally, in dealing with infectious disease, there is close-co-operation between the School Medical Department and the Health Department. Leaflets containing instructions for preventing the spread of the disease, and extracts from the Acts of Parliament relating to infectious diseases, are left at each infected house.

The case fatality for the year was 1.6 per cent., compared with 2.6 in 1922.

#### Milk borne epidemic of Scarlet Fever.

In the week commencing December 7th a sharp epidemic of scarlet fever occurred in the Burslem district due to the consumption of infected milk. It was traced on the second day to contamination of milk at a farm in a neighbouring county—practically the whole of the farmer's family were discovered to be suffering from scarlet fever—no medical man had been called in—members of the family had been in close contact with the milk—they were under the impression that they were suffering from influenza. All necessary steps were immediately taken to control the outbreak. During the eight days, December 7th to December 14th inclusive, 65 cases were notified from the district involved.

The cases were reported from the hospital as, on the whole, of mild type.

Although the number of cases due to direct milk borne infection immediately diminished on the stopping of the infected milk supply, a larger proportion of cases have been reported continuously up to the present time from Burslem than from the other parts of the Borough—due, no doubt, to the numerous foci of infection.

## Diphtheria.

Number of cases notified			22 I
Number of deaths			10
Case fatality per cent			4.5
Number of cases removed	l to hospi	tal	217
Percentage of cases remove	ed		98.1

The attack rate for the Borough was 0.88 per 1,000 of the population.

Diphtheria is steadily declining in prevalence in the Borough, and the number of deaths are correspondingly decreasing, it is many years since so few cases were notified and so few deaths occurred.

Districts	Tun	stall	Burs	lem	Han	ley	Sto	ke	Fen	iton	Lon	gton	Nor	th ne, ton, n'lletc	То	tal
Year	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1917	 53	8	139	17	187	17	124	7	86	15	33	2			622	66
1918	 51	12	178	25	113	7	62	4	87	9	17	3		***	508	60
1919	 26	5	55	2	182	9	112	6	77	6	14	1			466	29
1920	 9	1	73	6	148	7	56	2	35	3	21	2			342	21
1921	 11	1	49	4	134	7	57	5	32	2	28	1			311	20
1922	 21	5	49	3	96	1	70	5	21		20		25	2	302	16
1923	 17	1	40	2	61	1	36	4	18	1	23		26	1	221	10

The attack rates per 1,000 of the population for the various districts were as follows:—Tunstall, 0.58; Burslem, 0.92; Hanley, 0.87; Stoke, 0.9; Fenton, 0.65; Longton, 0.52; Smallthorne, Norton, Bucknall, etc., 1.21. The disease was least prevalent at Longton, Tunstall and Fenton.

The death rate from Diphtheria in the County Borough was 0.03, compared to 0.09 in the 105 large towns, and 0.07 in England and Wales.

No schools were closed on account of the prevalence of the disease among the scholars.

All cases are promptly visited on notification, and removal to hospital carried out where isolation is not up to a fair standard, and also in cases of serious illness or where tracheotomy is required. The County Borough provides means for carrying out promptly bacteriological examinations. Arrangements have been made for a gratuitous supply of antitoxin at any time, day or night, to medical men on demand, and a fee is paid for its use, both for purposes of treatment and prevention. Disinfection is carried out promptly and thoroughly. The head teachers of schools are kept regularly informed of the occurrence of cases among the school children and contacts,

and they are dealt with according to the Memorandum of the Local Government Board and the Board of Education. The head teachers are informed in all cases as to the date on which patients and contacts may return to school. Leaflets containing instructions for preventing the spread of the disease, and extracts from the Acts of Parliament relating to infectious diseases, are left with the householder in each case.

Bacteriological examinations of swabs from suspected cases is made free of charge to medical men. In 1923, 190 examinations were made, with a positive result in 18 cases; in 1922, 255 examinations were made, with positive results in 40 cases.

During the year 40 patients were injected with antitoxin at their homes by their medical attendants. The average amount of serum used in each case was 4,312 units.

21 contacts were injected for preventive purposes, the amount of serum used averaged 962 units in each case.

The cost to the Corporation was £6 9s. od. paid to medical men for injecting serum, and £65 18s. 1d. paid to chemists for the supply of the serum.

#### Enteric Fever.

Number of cases notified			20
Number of deaths			3
Case fatality per cent			15.0
Number of cases removed to	hospita	als	19
Percentage of cases removed			95

The attack rate for the Borough was 0.07 per 1,000 of the population.

District	ts	Tun	stall	Bur	slem	На	nley	St	oke	Fer	nton	Lon	gton	No	lth'ne, rton, n'll etc	Te	otal
Year		Cases	Deaths	Cases	Danthe												
1917		1	-	7	2	4	-	5	-	1	-	2	2	-	_	20	
1918		3	2	5	_	10	3	1	-	2	-	-	-	-	-	21	
1919		1	_	_	1	8	-	1	1	-	1	_		-	-	10	
1920		_	-	2	1	7	1	-	_	2	_	-	_	-	-	11	
1921		1	-	4	2	11	4	2	_		_	9	1	-	-	27	
1922		1		2	2	15	5	1	-	2	_	2	3	-	-	23	1
1923		_	_	3	1	2	_	10	1	4	1	1	-	_	_	20	03

No cases were notified from Tunstall and only one from Longton and two from Hanley.

Eight of the ten cases in Stoke were notified from the Stoke and Wolstanton Union Infirmary, where a family of five was admitted as suffering from influenza which subsequently proved to be enteric fever—this was not diagnosed till other inmates and nurses had become infected.

The death rate from Enteric Fever in the 105 large towns during the year 1923 was 0.01 per 1,000. In England and Wales 0.01. In Stoke-on-Trent it was 0.01.

Bacteriological examinations were made by the Corporation Bacteriologist in 12 instances, with 5 positive results. In 1922, 12 examinations were made, with one positive result.

## Erysipelas.

There were 189 cases notified during the year, with 16 deaths. In 1922, 158 cases were notified with 22 deaths. 23 cases were removed to the Isolation Hospital.

Enquiries are made into these cases and the sanitary condition of the houses attended to.

## Cerebo Spinal Fever.

Two cases were notified as Cerebro Spinal Fever during the year, both died; in one case the death was certified as due to tuberculous meningitis.

TABLE OF CASES.

No.	Sex	Age	Occupation (if any)	District	Results
1	Female	11 years	At school	Bucknall	Patient died
2	Male	1½ years	At home	Longton	Patient died from Tuberculous Meningitis

Full enquiry was made, but the source of infection could not be traced.

Disinfection was carried out, the sanitary condition of the house was attended to, and contact children excluded from school for two weeks.

#### Acute Encephalitis Lethargica and Acute Polio-Encephalitis.

Five cases of Acute Encephalitis Lethargica were notified during the year, two of them died.

TABLE OF CASES.

No.	Sex	Age	Occupation (if any)	District	If recovered
I	Female	18 years	At home	Hanley	Yes
2	Female	36 years	At factory	Burslem	Patient died
3	Male	5 years	At school	Burslem	Yes
4	Male	63 years	Canal lock Attendant	Stoke	Doctor still in attendance; no improvemen
5	Female	52 years	At home	Stoke	Patient died

## Malaria, Dysentery and Trench Fever.

The number of cases of these diseases notified were as follows: Malaria 3; Dysentery 1; Trench Fever o.

The three cases of malaria occurred in men who had contracted it while abroad.

The case of Dysentery was that of a child aged five years admitted to the Infectious Diseases Hospital as suffering from food poisoning. The child was very ill when removed to the institution—two other children had been ill in the house, but had both recovered in a day or two. Specimens of the excreta were sent (under the arrangements made by the Ministry of Health) to Bristol University for examination. The report received by telegram was to the effect that Flexner Baccilli were present in abundance. The source of infection was not traced.

#### Influenza, Pneumonia and Broncho Pneumonia.

The number of cases notified during the year was:—Influenzal Pneumonia 79; and Pneumonia and Broncho Pneumonia 875. The number of deaths was:—Influenza 83, being equal to a rate of 0.30 per 1,000 of population; and Pneumonia and Broncho Pneumonia 272, being equal to a rate of 0.98 per 1,000 of the population.

These diseases were less prevalent than in 1922.

#### Disinfection.

Disinfection is carried out at one Central Station where there are two Washington-Lyons Steam Disinfectors with a constant supply of steam from the adjoining destructor works. There are employed in this work five men with two motor vans.

The method of disinfection adopted is as follows:—All bedding, clothing, etc., which has been exposed to infection is removed for disinfection at the Station after all cases of infectious disease (including Tuberculosis), excepting Measles. The surfaces of infected rooms are sprayed with a solution of Izal at a strength of I in 20, or fumigated by means of formalin lamps.

The total number of houses disinfected during the year was 2,281, and the number of rooms in such houses, 2,753. Some 24 rooms in four schools were sprayed. The number of articles passed through the Disinfector totalled 26,802. 149 Books were disinfected.

## Respiratory Diseases.

During the year there were 778 deaths from Respiratory Diseases, giving a death rate of 2.81 per 1,000 of the population, as compared with 3.44 for the year 1922.

The distribution of these deaths is shown in the following table:-

Name of District	No. of Deaths from Bronchitis	No, of Deaths from Pneu- monia	No. of Deaths from Fibroid Phthisis	No. of Deaths from Pluerisy	No. of Deaths from other Re- spiratory Discases	TOTAL	Rate per 1000
TUNSTALL	 63	45		1	6	115	4.00
BURSLEM	 66	42		1	3	112	2.55
HANLEY	 114	74	2	5	9	204	2.91
STOKE	 46	25	1	5	4	81	2.0
FENTON	 42	19		1	5	67	2.40
LONGTON	 86	38	2	3	12	141	3.20
SMALLTHORNE NORTON, BUCKNALL, Etc	25	29		***	4	58	2.70
WHOLE BOROUGH	 442	272	5	16	43	778	2.82

The death rate from Bronchitis in the County Borough was 1.60 per 1,000 of the population. There were 442 deaths from this disease, as against 561 last year. The rate for 1922 was 2.04.

The death rate from Pneumonia was 0.98 per 1,000 of the population. The rate for 1922 was 1.19.

#### Alcoholism.

Alcoholism caused 19 deaths during 1923. 17 of these were certified as due to Cirrhosis of the Liver. In 1922 there were 13 deaths due to Alcoholism.

#### Lead Poisoning.

This is an affection which is associated with pottery manufacture. Through careful supervision, and under the Special Rules of the Home Office, lead poisoning has diminished. There were increases in the number of cases in 1910 and 1911, but the numbers diminished in 1913, 1914, 1915, 1916, 1917 and 1918. The years 1919, 1920, 1921 and 1922 show increases and in 1923 the number is only two less than in 1922.

According to the Report of the Departmental Committee there were engaged in 1907, as lead workers under the Earthenware and China Rules in North Staffordshire, 5,299 persons (3,371 males and 1,928 females). In 1906 there were 85 cases of lead poisoning; in 1907, 82 cases; in 1908, 91 cases; in 1909, 49 cases; in 1910, 63 cases; in 1911, 78 cases; in 1912, 74 cases; in 1913, 55 cases; in 1914, 23 cases; in 1915, 22 cases; in 1916, 21 cases; in 1917, 16 cases; in 1918, 8 cases; in 1919, 25 cases; in 1920, 32 cases; in 1921, 34 cases; in 1922, 48, and in 1923, 46.

ns:-

Potters' Placers	 	 .3
Potters' Dippers	 	 4
Decoration Manager	 	 I
Groundlayer	 	 I
Majolica Paintress	 	 I
		-
		10

In 1918 there was one death only attributed to Lead Poisoning; in 1919 there were 7; in 1920, 15; in 1921, 11; and in 1922, 13.

#### TUBERCULOSIS.

The following table shows the number of cases of Tuberculosis notified, and the number of deaths since 1912:—

PULMONARY.	Non-Pulmonary.

		Notified Ca-es	Deaths	Notified Cases	Deaths
1912		730	300		120
1913		815	304	381	129
1914		675	308	201	112
1915		686	293	126	94
1916		580	326	142	123
1917		501	330	100	125
1918	7.1.	606	325	211	108
1919		742	283	100	78
1920		587	260	151	86
1921		491	292	96	74
1922		452	294	95	67
1923		390	267	124	65
					INDUA

Table showing numbers of cases of Tuberculosis notified at various ages during 1923, together with the number of deaths:—

			New	CASES		DOI 7	DEATHS			
Age Periods		Pulmonary			Non- Pulmonary		onary		Non- Pulmonary	
		M.	F.	M.	F.	M.	F.	M.	F.	
0		2	1	3	1	1	1	5	1	
1		5	4	23	9	1		19	11	
5		11	14	9	15	1	2	1	5	
10		14	19	15	10	2	3	3	1	
15		15	18	5	9	8	18	2	2	
20		21	31	1	5	18	17	2	2	
25		38	37	7	3	27	32	3		
35		47	32	3	2	37	16	2		
45		40	15		1	45	9		2	
55		18	6	2		18	6	1		
65 an upv	d vards	1	1		1	3	2		3	
Total	s	212	178	68	56	161	106	38	27	

The number of cases of Pulmonary Tuberculosis notified from year to year is diminishing, this is satisfactory, it is taken as an indication that fewer new cases are occurring. One may now surely hope for a marked inprovement in the public health in relation to this disease.

## Phthisis Pulmonalis.

Three hundred and ninety cases were notified in accordance with the provisions of the Public Health (Tuberculosis) Regulations.

The cases and deaths were distributed as follows:-

				Number notified	Number of deaths	Death Rate per 1000 of population
T	unstall			32	13	0.45
В	urslem			71	43	0.98
Н	anley			118	89	1.27
St	toke			39	40	0.98
F	enton			43	31	1.12
L	ongton			62	40	0.91
S	mallthorne	, Nort	on,			
	Bucknall			15	II	0.51

The following Table shows the period which elapsed between the Notification of Phthisis and the death in the 267 cases which died during the year:—

Dead when notified	 26
Died within I week of notification	 28
Died from I week to I month of notification	 34
Died from 1 month to 2 months of notification	 2 I
Died from 2 months to 3 months of notification	 19
Died from 3 months to 4 months of notification	 10
Died from 4 months to 5 months of notification	 7
Died from 5 months to 6 months of notification	 7
Died from 6 months to 12 months of notification	 40
Over 12 months	 44
Not notified	 29
	267

During the year a circular letter was sent out to medical men by the Town Clerk, drawing their attention to the necessity of more prompt notification.

Out of the 267 deaths from Phthisis during the year, 29 had not been notified, a percentage of 10.8. There were 65 deaths from other forms of Tuberculosis, and 24 of these had not been notified, a percentage of 37.0.

The 267 deaths gave a death rate of 0.96 per 1,000; in 1922 there were 294 deaths and a death rate of 1.06 per 1,000. In England and Wales, in 1922, the death rate was 0.88 per 1,000.

The average death rate from Phthisis for Stoke-on-Trent for 1912-14 was 1.27 per 1,000 of the population; for 1915 it was 1.30 per 1,000; for 1916, 1.48; 1917, 1.53; 1918, 1.56; 1919, 1.18; 1920, 1.04; 1921, 1.18; 1922, 1.06; and 1923, 0.96.

The average death rate from Phthisis for England and Wales for 1912—1914 was 1.03 per 1,000 of the population; for 1915 it was 1.16 per 1,000; for 1916, 1.18; 1917, 1.25; 1918, 1.34; 1919, 0.99; 1920, 0.89; 1921, 0.88 and 1922, 0.88.

Sixty-one deaths occurred in persons aged 15 to 25, and 195 in persons between the ages of 25 and 65 years.

Nine hundred and eleven Bacteriological Examinations were made in 1923, and tubercle bacilli were found in 156 of the specimens submitted.

Four hundred and ninety-eight sputum specimens were submitted to the Bacteriologist for examination by the Tuberculosis Officer. Tubercle Bacilli were found in 73 of the specimens submitted.

During the year 4939 visits were paid by the Tuberculosis Nurses. The number of visits paid by the Tuberculosis Officers was 361. There were 65 deaths in the year from forms of Tuberculosis other than Phthisis, equal to a rate of 0.23 per 1,000 of the population. In 1922 the death rate for England and Wales was 0.23.

The total death rate from all forms of Tuberculosis, including Phthisis, was 1.20 per 1,000. In 1922 the rate for England and Wales was 1.12 per 1,000 of the population.

#### Other Forms of Tuberculosis.

There were 124 cases notified of other forms of Tuberculosis, and 65 deaths, giving a rate of 0.23 per 1,000 of the population. Of these deaths, 6 occurred in children under one year of age, and 14 among children between one year and five years.

Table showing the number of cases notified as suffering from other forms of Tuberculosis during 1923.

mi facilitati or medical im	t	Jnder 1	1—5	5—15	15—25	25—45	45—65	Over 65	Totals
Tabes Mesenterica		2	10	7	2		1		22
Tubercular Meningitis		1	11	5	3	2	1		23
Glands			2	16	5	6			29
Osseous		1	9	15	9	7	1	1	43
Skin				3	1				4
General						1			1
Other Forms				1		1			2
Totals		4	32	47	20	17	3	1	124

The Tuberculosis Dispensary was opened in Stoke on the 24th June, 1913; it consists of Waiting, Consulting, and Examination Rooms, with a Laboratory.

A Branch Dispensary at Longton was opened on the 20th August, 1919. The number of attendances during the year 1923 was 992.

During the year there were 6,529 attendances at the Stoke Dispensary, making a total of 7,521 for both Stoke and Longton.

Number of new patients dealt with:-

	Males	Females	Total
Adults—Insured	152	84	236
" Non-Insured	23	44	67
Children	93	92	185
	268	220	188

The foregoing nur	mbe	r was fro	m the d	istricts	as follows:-
Tunstall					40
Burslem					80
Hanley					135
Stoke					74
Fenton					41
Longton					67
Smallthorn	ie, l	Norton,	Bucknall,	etc.	51
					dent in the
					488

It will be noticed that the number of attendances at the Dispensary has fallen considerably. This has been brought about by eliminating the indefinite cases which had been stationary for some years, and has enabled the Tuberculosis Officer to devote more time to other cases.

The accommodation at the Dispensary is scarcely adequate for the increase of nursing and clerical staff, but the work is being carried on as well as possible under the circumstances. The need for a Dispensary at the northern end of the Borough is as urgent as ever, as the patients find it expensive to come to Stoke from the out-lying districts.

Two hundred and seventy contact cases were examined during the year; there is difficulty in getting these patients to realise the necessity for attending.

As the work has proceeded during the year attention has been more and more attracted to the poor housing conditions of the people and also to their lack of knowledge of the most elementary measures for preserving health.

#### AFTER-CARE.

A Voluntary After-Care Committee has been at work in the Borough for several years. Milk and clothing have been supplied to many cases, and several persons referred to other bodies for help. It is hoped that the work of the Committee will be considerably relieved at an early date.

#### SURGICAL TUBERCULOSIS.

The Corporation have arranged with the North Stafford Cripples' Aid Society for the treatment of cases of Surgical Tuberculosis at their Institution in the Borough. Seven wards are reserved for Stoke-on-Trent cases at the Institution.

The Medical Officer of the Institution is the Surgical Tuberculosis Officer of the Corporation. During the year an average of 8.01 patients were in daily residence. Patients after discharge from the Institution are attended to at their houses by Nurses from the Institution.

There are in the Borough at the present time 134 known active cases of non-Pulmonary Tuberculosis and 11 quiescent cases under the age of 16 years; and 19 active cases and 18 quiescent cases 16 years and over. Of these 31 are in Institutions.

Dr. Mitchell Smith, Surgical Tuberculosis Officer, reports as follows:—

"During the year 1923-24, 145 cases of Surgical Tuberculosis in children of the Borough of Stoke-on-Trent were under treatment at the Orthopædic Hospital, Hartshill.

"Fifty-six of these cases were treated as In-Patients for a longer or shorter period according to their necessities. Two of them have been In-Patients for the whole year. Thirty have been discharged as cured.

"Roughly, under modern methods of treatment, 70 per cent. of all cases results in a cure, *i.e.*, the disease becomes quiescent and the maximum of function is restored. The permanent deformity and limitation of function depend entirely on what destruction of the bones and joints has occurred before treatment is commenced. The recognition of Surgical Tuberculosis in its earliest stages is therefore of prime importance.

"Unfortunately, no provision is made in this district for the modern treatment of Surgical Tuberculosis in adults.

#### CLASSIFICATION OF CASES.

Spines			 	55
Hips			 	47
Knees			 	27
Ankles			 	9
Toe			 	I
Elbows			 	4
Fingers			 	2
	Т	otal	 	145"

#### STANFIELD SANATORIUM.

This Sanatorium consists of four ward blocks and 12 double shelters, with accommodation for 89 patients. One block is used for male adults and another for children, both of these blocks are provided with sleeping verandahs and three double shelters. The new block of 24 beds was opened in October, 1922, and is at present used for females, verandahs were added to this block during the year. The other block of 18 beds has no verandah, and is used for the treatment of children.

## ADMISSION TO STANFIELD SANATORIUM:-

Males		Females		Children		Total	
172		85		98		355	

#### CONDITION ON DISCHARGE:-

Improved	Stationary		Worse		Deaths		Total	
272		40		19		20		351

Twenty-four selected cases were sent to other Sanatoria through the Ministry of Health's Scheme for Ex-service men, in connection with the Ministry of Pensions, for a course of Vocational Training combined with treatment, and 6 to Preston Hall by the Ministry of Pensions. CHESHIRE JOINT SCHEME.

The County Borough is joined with the County of Chester and County Boroughs of that County in a formation of a Joint Board for the erection of a Sanatorium. The Sanatorium will consist, when completed, of 240 beds, the number to be allocated to the County Borough being 48. The institution was opened in November for the reception of patients and two-thirds of the total beds were then available. Up to the end of 1923 34 patients were admitted.

PROVISION OF SLEEPING SHELTERS FOR CONSUMPTION.

Sleeping Shelters are provided by the Corporation for the use of consumptive patients at their own homes if the surroundings are suitable, and the making of these provides occupation for male patients at Stanfield.

#### Venereal Diseases.

A Clinic was established at the North Staffordshire Infirmary, and work was commenced there on November 1st, 1918. The clinics are held four times weekly, twice for men and twice for women. The total cost to the Borough was £1,525 for the year 1923, 75 per cent. of which will be refunded by the Ministry of Health. Two Medical men are in attendance at each clinic. The hours of the clinics are:—

For men: Monday, 4 to 6 p.m. Friday, 5 to 7 p.m.

For women:—Wednesday, 5 to 7 p.m. Saturday, 12 noon to 2 p.m.

More clinics are required, also arrangements for interval treatment.

For the purposes of pathological work, arrangements have been made with Professor Topley of the Public Health Laboratory, Manchester.

The following is the return as to the work done at the clinics during the year 1923:—

(1) Total number of persons dealt with during the year at, or in connection with the Out-Patient clinic and suffering from:

		Number of persons who were under treatment or observation on Jan. 1st, 1923	Number of persons dealt with during the year for the first time	TOTAL
(a)	Syphilis	1170	322	1492
(b)	Seft Chancre	7	1	8
(c)	Gonnorhæa	274	254	528
(d)	Conditions other than Venereal .	92	41	133
8 30	Tetal	1543	618	2161

The number of persons dealt with for the first time in 1923 was considerably greater than 1922.

- (2) Total attendances of all patients during the year at the Outpatient clinic: County Borough, 4,696; Staffs. County, 1,253; and outside the district, other than the County, 148.
- (3) Aggregate number of "In-patient days" of treatment during the year: County Borough, 136; Staffs. County, 105.

Twelve medical men in the Borough are registered for the free supply of Salvarsan and its substitutes. These drugs are supplied on application by the medical practitioner to the Senior Medical Officer of the clinic at the North Staffs. Infirmary.

Twelve medical men have been supplied with Salvarsan substitutes. The number of doses of Novarsenobillon being 587, the doses varying in strength from .15 grammes to .9 grammes. 38 doses of Neokharsivan were supplied, varying from .45 grammes to .9 grammes in strength.

No action has been taken in the district under the Venereal Diseases Act, 1917.

In the month of February a propaganda campaign was arranged in conjunction with the National Association for Combating Venereal Diseases. Lectures were delivered, with cinema displays—they were largely attended—and it is believed that much useful work was done.

Statement of Vaccination for the year ending June 30th, 1923.

(Furnished by the Vaccination Officers.)

District	Births	Successfully Vaccinated	Insusceptible	Had Smallpox	Died Unvaccinated	Postponed by Medical Authority	Certs, of Exemption (conscientious objection)	Removals Certified	Removals not found and not accounted for	Not dealt with for various reasons
TUNSTALL	1389	495			98	3	777	2	7	7
BURSLEM	1205	414			90	1	684	2	10	4
HANLEY	1761	722	1		102	35	794	5	44	58
STOKE	917	414			61	8	408	3	15	8
FENTON	823	402	2		45	7	339	3	11	14
LONGTON	1096	641			67	28	344	3	9	4
COUNTY	7191	3088	3		463	82	3346	18	96	95

Of the total births, 43 per cent. were vaccinated during the year.

No revaccinations have been performed by the Medical Officer of Health under the Public Health (Small Pox Prevention) Regulations, 1917.

### MATERNITY AND CHILD WELFARE.

## Midwives' Acts, 1902 and 1918.

Ninety-five midwives notified their intention to practice in the County Borough of Stoke-on-Trent during the year 1923: nine of these reside outside the Borough and most of their work is done in the surrounding districts. Fifty-six of the ninety-five midwives practising in the Borough are trained and possess the certificate of the Central Midwives' Board.

During the year ten midwives ceased to practice, and nine additional midwives notified their intention to practice. These nine midwives are all trained, and possess the certificate of the Central Midwives' Board.

The number of trained midwives in the Borough is gradually increasing. There are now only seven midwives who are unable to keep satisfactory records of the pulse and temperature of the patients, and who require assistance in the filling up of their registers.

The Public Health Authority does not subsidise any midwives in the area. Two of the midwives are employed as district nurses by the District Nursing Associations of the districts in which they work.

In addition to 478 routine inspections, eighty-five special visits to midwives were made in relation to the following:—

Still Births				7
Late notifications of	Births			7
Puerperal Fever				26
Ophthalmia				6
Medical Aid Forms	, Infant	Deaths,	etc.	39
				85

In connection with the Stoke-on-Trent Midwives' Association, lectures were given to the midwives of the district.

The subjects of the lectures were as follows:-

Ophthalmia Neonatorum.

Ante-natal Work.

Puerperal Fever.

Care of the Premature Infant.

History of Midwifery.

Varicose Veins and Thrombosis.

Pemphigus.

The Local Supervising Authority interviewed one midwife during the year with reference to failure to notify that medical aid had been summoned, and also failure to exercise proper care during her attendances. The Town Clerk was instructed to send to her a letter of warning. During 1923 there were received from the midwives:-

- 950 Records for calling in Medical Aid;
- 266 Ophthalmia Notifications.
  - 17 Notifications of death of new-born children.
  - 4 Notifications of death of the mother.
- 214 Still-births on special forms.
  - 42 Notifications re failure to breast feed.

The 950 records of calling for Medical Aid were divided as follows:-

542 for abnormality or complication during labour;

104 for abnormality or complication during lying-in period;

304 for abnormality or complication in the case of the child.

Under the Midwives' Act, 1918, claims were made by Doctors for the payment of fees in 275 cases out of 950 instances in which medical aid was called in. The 275 claims amounted to £443 os. 6d.

The number of instances in which Medical Aid is sought by midwives is steadily increasing.

## Infantile Mortality.

The total number of deaths of infants under the age of one year was 630, being equal to an infantile mortality rate of 93 per 1,000 births. In 1922 it was 115; in 1921 it was 134; in 1920 it was 98; in 1919 it was 111; in 1918 it was 111; and in 1917 it was 116.

In 1921 Stoke-on-Trent had the highest infantile mortality rate amongst the 105 large towns. In 1922 the rate was the second highest, but in 1923 there were 14 large towns with higher rates.

During the ten years 1912-1921, the infantile mortality rate for the County Borough averaged 130. During 1923, 1922 and 1921, the rates for the districts were:—

	1	1	923	1922	(1921
Tunstall			IOI	123	134
Burslem			96	136	161
Hanley			100	114	153
Stoke			78	84	115
Fenton			98	127	99
Longton			85	103	116
Smalltho	rne, N	Vorton,			
Buck	nall, e	etc	91	116	_

Of the 630 infants who died in the County Borough before reaching the age of 12 months:—

160 or 25.4 per cent. died in the first week; 42 or 6.7 per cent. died in the second week; 31 or 4.9 per cent. died in the third week, and 27 or 4.3 per cent. died in the fourth week.

The number of deaths in the first months was 260, or 41.3 per cent. of the total number of deaths.

15.4 per cent. of the infants died between the ages of one and three months; 16.2 per cent. between the ages of three and six months; 14.9 per cent. between the ages of six and nine months; and 12.2 per cent. between the ages of nine and twelve months.

This year 41.3 per cent. of the infant deaths occurred in children under one month old, compared to 34.9 per cent. in 1922.

In the following list the relation of certain diseases to the infantile mortality of the district is shown. Enteritis and Diarrhœa accounted for 113 deaths; Premature Birth, 133; Convulsions, 46; Bronchitis, 59; Tuberculosis Diseases, 8; Pneumonia, 47; Atrophy and Debility, 88; Congenital defects, 39.

Four deaths were attributed to overlying, as against 5 last year.

The Infantile Mortality for the year, viz.: 93, was the lowest ever recorded, this was a direct result of the smaller number of deaths from lung diseases and from atrophy and debility.

-100101400

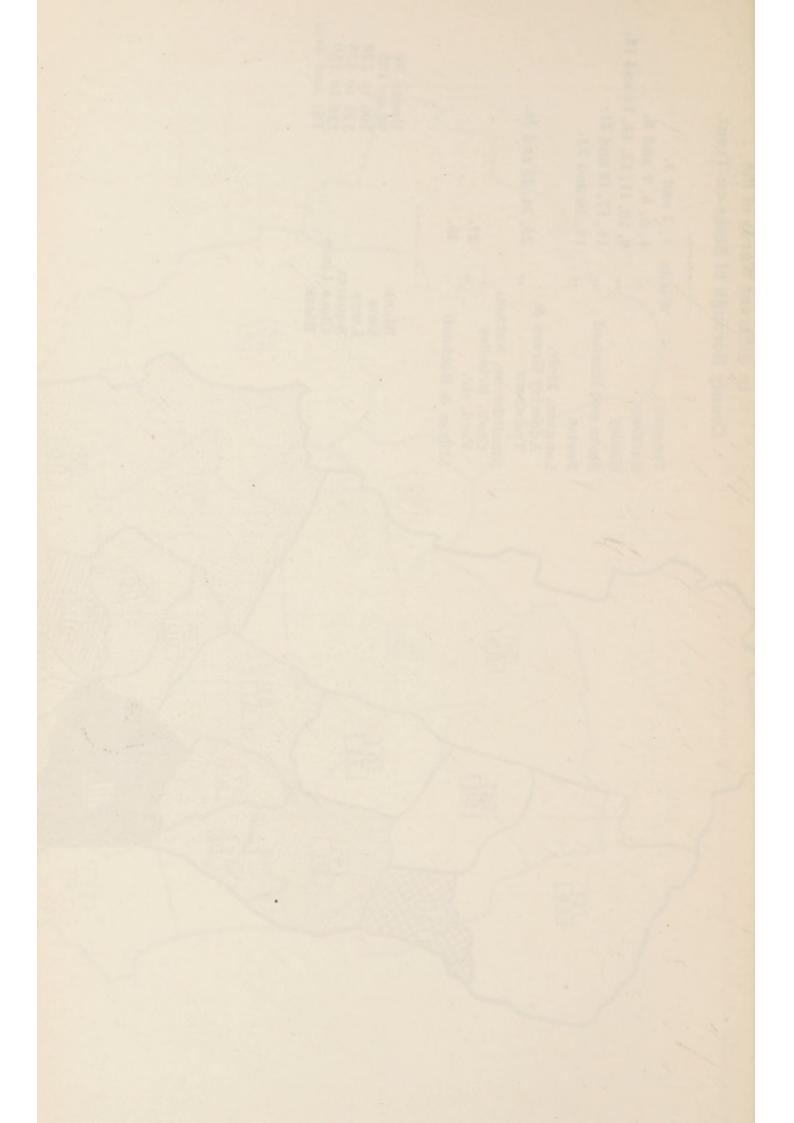
630

615

Total Deaths under CIC Norton, Bucknall, 11.67:22:11 45 Smallthorn :::01-Longton 90 8 1: 13485: 93 10 00 : 62 Penton 6 Six Districts, 1923. 27 7 Stoke 169 172 12204-110 Hanley 103 109 :2000 Burslem : 01 00 . : : 2 [[etsunT Infantile Mortality occurring in the Borough and :01--014 73 5555 : 03 and under squou 6 squoou 6 squoou 9 300 :01-10 13 94 : squom 9 102 --and under 102 33 6 123: :- 01 3 months 3 months 94 and under :01888014 :03 6 4 weeks 250 260 Total under Meeks 3 to t 27 27 меска з го 3 31 33 neeks 1 to 2 45 Under 1 week 160 10 Marasmus : Other Tuberculosis Diseases Meningitis (not Tuberculous) Certified ... Congenital Malformations TOTALS : Abdominal Tuberculosis Tuberculous Meningitis Causes of Death Diphtheria and Croup Erysipelas ... Atrophy, Debility and Pneumonia (all forms) Premature Birth ... Whooping Cough Injury at Birth Scarlet Fever Laryngitis ... Diarrhœa ... Other causes : Atelectasis... Bronchitis ... Chicken-pox TABLE causes Smallpox Enteritis Measles

Nett Deaths in the year :- Legitimate, 575; Illegitimate, 55 Nett Births in the year :- Legitimate, 6498; Illegitimate, 278





Deaths under one year per 1,000 Births in the Borough.

Year	Total Births	From all causes	From Diarrhea	From all causes excluding Diarrhœa	From Respira- tory Disease	From Debility, Congenital De- fects and Pre- mature Births	From Measles	From Whooping Cough
1917	4991	116	5.8	110'2	27.0	48.6	I 2	6:0
1918	5219	111	6.9	104.1	26.0	41.9	4.5	1.5
1919	5635	111	4.7	106.3	27'1	46.4	0.1	5.6
1920	7712	98	10.1	87.9	17.1	48.7	1.9	0.6
1921	7132	134	39.8	94.2	18.8	49.5	0.0	1.5
1922	7115	115	9.8	106.5	31.9	42'1	2.9	7.7
1923	6776	93	16.7	76.3	15.6	38.3	2.8	0.6

Average rate for the ten years (1913-22)	 120
Highest rate for the ten years (1915)	 147
Lowest rate for the ten years (1923)	 93

The infantile mortality rate in Stoke-on-Trent for the first quarter of the year was 122.

,, second quarter of the year was 80.
,, third quarter of the year was 75.

" fourth quarter of the year was 92.

The infantile mortality rate in the 105 large towns in 1910 was 115; in 1911 it was 140; in 1912 it was 101; in 1913 it was 117; in 1914 it was 114; in 1915 it was 117; in 1916 it was 99; in 1917 it was 104; in 1918 it was 106; in 1919 it was 93; in 1920 it was 85; in 1921 it was 87; in 1922 it was 81; and in 1923 it was 72.

The rate for England and Wales during 1923 was 69.

## Notification of Births Act.

Of the 7,217 births notified in the County Borough of Stokeon-Trent during 1923, 5,496 were attended by midwives, or 76.2 per cent.

In England and Wales midwives attend between 50 and 60 per per cent. of births.

## Summary of Visits Paid by the Lady Medical Officer and Health Visitors.

Visits to infants under	year	of age			6,742
Revisits—Under 1 year Over 1 year				21,886	-47,467
Visits to Ophthalmia cas					692
" in connection wi			and	infant	479
					1,244
					5,078
Wasted visits	1.0	,			1,509
					63,211

Births notified (including 411 still-births):-

	Total	Doctors in attendance	Midwives in attendance	Public Institutions
Tunstall	830	204	615	11
Burslem	1181	370	809	2
Hanley	1807	314	1490	3
Stoke and Hanford	993	146	731	116
Fenton	712	207	502	3
Longton	1156	255	897	4
Smallthorne, Bucknall, etc	538	85	452	I
Stoke-on-Trent	7217	1581	5496	140

Of the total births, 278, i.e., 4.2 per cent., were illegitimate.

Infantile Mortality Rates amongst Illegitimate and Legitimate Children in the County Borough of Stokeon-Trent:—

	Illegitima	te	Legitimat	e	Whole
1918	 214		106		III
1919	 182		107		III
1920	 166		95		98
1921	 230		129		134
1922	 207		IIO		115
1923	 198		88		93

The Infantile Mortality of the illegitimates was more than twice that of the legitimates.

As far as possible a monthly visit has been paid to all the illegitimate children, and during the year a total of 2,186 home visits have been paid to them by the Health Visitors.

Three additional Infant Welfare Centres were opened in the County Borough during the year, at Smallthorne, Bucknall, and Hanford, so that there are now eleven Centres in the Area. The Smallthorne and Bucknall Centres were opened in October and the Hanford Centre in November. Nine of these Centres are directly under the Council, and two under Voluntary Committees. The two Voluntary Centres, i.e., The Thomas Twyford Centre at Bath Street, Hanley, and the Etruria Centre work in conjunction with the Corporation and are assisted by the Corporation. The new Centres at Smallthorne and Bucknall are held weekly and the one at Hanford fortnightly. The opening of the new Centre at Smallthorne has helped considerably to relieve the congestion at Burslem, as many mothers at Smallthorne who were attending the Burslem Welfare have been transferred to Smallthorne. The Bucknall Centre has relieved the Bath Street Centre in a lesser degree.

The number of children on the registers at the Centres at the end of the year was as follows:—

ic year was as	1011011	٥.	Total	Ne	w Cases 1923
Tunstall			584		381
Burslem			844		603
Shelton			532		304
Etruria			329		172
Hanley			698		428
Fenton			296		189
Stoke			482		310
Longton			1,006		688
Smallthorne			346		27
Bucknall			91		15
Hanford			15		9
			5,223		3,126

Average number of attendances of each Infant Consultation:-

Tunstall		 	 60	to	70	
Burslem		 	 130	to	150	
Shelton		 	 50	to	60	
Etruria		 	 40	to	50	
Hanley		 	 60	to	80	
Stoke		 	 50	to	60	
Fenton		 	 30	to	40	
Longton		 	 150	to	160	
Smalltho	rne	 	 30	to	40	
Bucknall		 	 20	to	25	
Hanford		 	 15	to	20	

At Burslem and Longton the Centres are open for the whole of one day each week, and the Stoke and Fenton Centres are open for one morning each week. The Centre at Shelton is now open for two afternoons each week, the consultations being held one afternoon, and the additional afternoon being used for baby weighing and lectures.

The total number of attendances at the Infant Welfare Centres was as follows:—

Attendances ... ... 34,602 Consultations ... ... 25,039

AGES OF CHILDREN AT DATE OF ENTRY TO WELCOMES.

Under 1 mth.	1-2 mths.	2-3 mths.	3-4 mths.	4-6 mths.
261	1182	543	229	232
	6-9 mths.	9-12 mths.	12 mths2 yrs.	
	194	124	139	
	2-3 yrs.	3-4 yrs.	4-5 yrs.	
	133	80	9	

The classification of infants which was commenced in 1920 has been continued during the year. The standard was as follows:—

- Class 1. Healthy infants who are free from any physical defect.
- Class 2. Healthy infants who are suffering from defects not likely to interfere with life.
- Class 3. Infants who are poorly nourished, and whose vitality is below the average but who are not suffering from any serious constitutional diseases or defects.
- Class 4. Infants suffering from Marasmus, Rickets, and serious constitutional diseases or defects.

CLASSIFICATION OF INFANTS UNDER ONE YEAR.

Class	1	 782	 39.2
Class	2	 633	 31.7
Class	3	 466	 23.4
Class	4	 110	 5.5

CLASSIFICATION OF INFANTS OVER ONE YEAR.

Class	I	 72	 21.1
Class	2	 59	 17.3
Class	3	 125	 36.7
Class	4	 84	 24.7

TABLE SHOWING AGE AT DATE OF ENTRY OF CLASS 3 CHILDREN.
Under 1 mth. 1-2 mths. 2-3 mths. 3-4 mths. 4-6 mths. 6-9 mths.

43 166 89 53 53 43 9-12 mths. 12 mths.-2 yrs.

32 112

FEEDING. Every endeavour has been made to promote breast feeding, and with the object of emphasizing the importance of breast feeding, one morning each week has been specially devoted to the formation of a Breast Feeding Clinic at the Thomas Twyford Centre in Hanley. This Clinic is opened every day and it has been found possible for the Superintendent and her Staff to give all the needful time to this. The first meeting was held in April, and from then until the end of the year, 60 mothers attended, making a total of 198 attendances. In several cases where the mothers had almost entirely ceased to breast feed their infants, lactation was successfully re-established.

From July 9th to October 20th a careful record was kept of 1,326 entirely milk fed infants who attended the Clinics in the Borough between these dates, with the following results:—

EEDING.		DIARRHŒA CASES			
Breast			565		6.7
Breast and	Dried	Milk	144		11.8
Dried Milk			461		13.8
Cow's Milk			156		16.6

For the year ending 31st March, 1924, £3,523 worth of milk was used, £1,158 worth being sold and the rest given free. This Dried Milk, which has been given free to the necessitous cases, has been of the greatest possible value, not only in the feeding of these poorer infants but also in assisting many of the mothers in Breast Feeding.

#### LADIES' VOLUNTARY COMMITTEES.

The Ladies' Voluntary Committees at Burslem and Longton have again given their kind help during the year, and have done much valuable work in assisting with the clothing, and with the distribution of the Dried Milk and Virol. Several ladies have also kindly assisted to provide clothing for the Shelton Centre.

#### LECTURES.

The Education Committee have again provided teachers of cookery and needlework.

In October an examination was held on the work dealt with at the lectures on Mothercraft, Cookery and Needlework. Over 300 mothers entered for the competitions, and the sum of £20, which was granted by the Health Committee for prizes, was spent on various useful household articles and cooking utensils. The prizes were distributed by the Mayoress, who afterwards very kindly provided tea for the 60 prize winners.

#### Ante-Natal Clinic.

Ante-Natal Clinics are conducted regularly at four Centres, viz.:—Tunstall, Burslem, Longton and Richmond Lodge, Shelton.

Clinics are held at Shelton on Tuesday morning and Wednesday evening; at Burslem on Thursday morning; at Tunstall on Friday morning; and at Longton on Monday morning. The evening Clinic at Richmond Lodge has the highest number of attendances. The number of women attending the Clinics shows a gradual increase.

The	number	attending	in—
-----	--------	-----------	-----

1917		 	 47
1918		 	 66
1919		 	 144
1920		 	 243
1921		 	 301
1922	ru 1 11	 	 484
1923		 	 647

## Of those attending there were-

Primipara			 	.71
Multipara			 	576
Total	atten	dances	 	2154

Many of the cases have been sent to the Clinics by the midwives of the district, and other suitable cases have been sent by the Health Visitors.

Subjoined is a list of the abnormal conditions found on examination:—

 	109
 	49.
 	48
 	51
 	42
 	37
 	6
 	29
 	7
 	13
 	2
 	27
 	I
 	I
 	3
 	I
 	I
 	2
 	I
 	I
 	2
 	I
 	14
 	2

On examination 3 women were found to be not pregnant.

Forty-five cases were referred to their own Dctor, and 17 to Institutions in the district.

One hundred and fifty-four mothers had a history of infant deaths under 1 year; 62 of these infant deaths were from premature birth and debility, and in 97 there were histories of previous still-births and miscarriages.

Seventy-three of the mothers worked during pregnancy. Working until—

3rd	month	 	 	12
4th	"	 	 	7
5th	,,	 	 	10
6th	,,	 	 	13
7th	,,	 	 	22
8th	"	 	 	9

During the year 3,048 free dinners were provided for mothers attending Clinics, and 193 were allowed free milk. Very great benefit was derived from this, especially in those cases where the state of nutrition was obviously poor.

Many of the mothers had very unfortunate histories, such as:-

- 1. Four pregnancies, no children alive, all died under 1 year.
- 2. Six pregnancies, no children alive, 3 deaths under 1 year, and 1 stillbirth.
- 3. Twelve pregnancies, 3 alive, and 9 deaths under 1 year.
- 4. Five pregnancies, 1 child alive, all others died under 1 year.
- Last pregnancy—stillbirth—craniotomy.

The pregnancy on all the above five cases full-time living healthy children were born—in the fifth case after caeserion section.

Of the 647 mothers, 217 were married before they reached the age of 20.

The homes of all the expectant mothers were visited by the Health Visitors—several sanitary defects were reported—and the preparations for confinement supervised.

At all the Clinics simple lectures were given on the hygiene of pregnancy and instruction was also given to the mothers about their own clothing.

Many model infant garments were supplied at the Clinics.

## Enquiry into Still Births.

Total number of cases investigated, 300.

	0		
Primipara	 	 	73
Multipara	 	 	227
			300

	duri	Working ng pregn	Not working during pregnance	y
Primipara	 	36	 37	
Multipara	 	58	 169	
		94	206	

		Attended b Doctor	У	Attended by Midwife
Primipara	 	44		29
Multipara	 	87		140
		131		169

PRIMIPARA. There was a history of difficult labour in 25 cases, a history of illness in 12 cases, and shock or accident in 14 cases.

#### Condition of fœtus-

Premature	 	 	37
Full term	 	 	35
Doubtful	 	 	I

MULTIPARA. A history of difficult labour was found in 35 cases, illness in 65 cases, and shock or accident in 42 cases.

#### Condition of fœtus-

Premature	 	 	123
Full term	 	 	102
Doubtful	 	 	2

There was a history of venereal disease in only 8 cases. Some of the cases had very bad histories, one woman had had 23 pregnancies and of these only 2 children survived:—

3 Miscarriages;

II Stillbirths;

9 children born alive (7 of these died under 1 year).

In all these cases the mothers have been advised to attend the Ante-Natal Clinic in their district should pregnancy occur again.

DEATHS FROM ACCIDENTS AND DISEASES OF PREGNANCY. During the year 29 mothers died from the above causes. Of these 24 were multipara and 5 primipara. 10 cases were attended by a Midwife, 11 by a Doctor, and 8 by a Doctor and Midwife. One of the mothers suffered from Pulmonary Tuberculosis; one from Acute Appendicitis and 5 of the mothers were seriously ill during the greater part of their pregnancy.

#### Dr. Balsillie writes that:-

"A consideration of these deaths from pregnancy taken in "conjunction with the histories obtained in many of the enquiries "into stillbirths impresses forcibly on one the need for the Ante-Natal "supervision of an increasing number of pregnant women, and also "for the provision of beds for the mothers who are likely to have "difficulty at the time of parturition. Another factor of great "importance and even more fundamental in its character is the very "early marriage age. Out of 647 mothers who attended the Ante-"Natal Clinics during the year 217 were married by the time they "were 20 years of age. This means that many young women and "girls become mothers before they have reached physical maturity "and very probably before they have been able to realise sufficiently "the responsibility of motherhood. The older girls when leaving "school should receive adequate training in the care of young children "and should receive teaching bearing on the structure of their own "bodies and the value of hygiene."

## Puerperal Fever.

Twenty-nine cases of Puerperal Fever were notified during 1923, 5 proved fatal.

		Doctor in attendance.	Midwife in attendance.	Doctor and Midwife in attendance.	Total.
Tunstall		_	I	-	I
Burslem		4	3	4	ΙI
Hanley		_	4	3	7
Stoke		_	3	1	4
Fenton		_	_	I	I
Longton		_	I	I	2
Smallthorne,	Norte	on,			
Bucknall, e			3	_	3
		_	_	_	
		4	15	10	29

There is no hospital accommodation for the treatment of Puerperal Fever other than the Guardians' Institutions. The question of making such provision has been under consideration. The need for such an institution is urgent.

## Deaths assigned to Pregnancy or Child Birth.

	Puerperal Fever	Other Diseases	Total	Rate per 1,000 Births
1923	 5	24	29	4.2

The rate per 1,000 births in England and Wales was in 1922 3.81.

All cases of Puerperal Fever are very carefully enquired into, and precautions taken in the way of disinfecting the midwife and controlling her practice in order to prevent the spread of the disease.

## Ophthalmia Neonatorum.

The total number of cases notified by medical men and midwives in 1923 was 266, as compared with 296 in 1922. In 110 instances the diagnosis was not confirmed by a medical man, though notifications were received from midwives.

Ophthalmia Neonatorum has been compulsorily notifiable throughout the whole area since 1911, 156 notifications were received during 1923 from medical men either as first notifications or confirming midwives' notifications. The total number of notifications received from midwives was 229. The 266 cases notified were distributed as follows:—

Tunstall			19 C	ases	
Burslem			64	,,	
Hanley			93	,,	
Stoke			13	. ,,	
Fenton			28	,,	
Longton			30	,,	
Smallthorne, Norton,	Buck-				
nall, etc			19	"	
Number of cases notified				266	
Number of births registe	red			6,776	
Number of cases per Loc	o birth	S		30.2	2

In 1922 the number of cases notified by midwives and medical men

.6	was a	births	1,000	per				
1.9	,,	"	,,	1)		,,	,,	In 1921
0.3	,,	99	,,,	59		,,	,,	In 1920
7.6	"		,,	"		,,	,,	In 1919
6.6	,,	,,	,,	"		"	,,	In 1918
5.6	,,	,,,	"	,,		,,	,,	In 1917
8.2		,,	"	"	ic.	"	"	In 1916
8.0	,,	,,,	,,	"		,,	,,	In 1915
0.7	,,	,,	,,	"		,,	,,	In 1914
0.2	,,	,,	,,	"		,,	,,	In 1913
2.9	"	,,,	,,	"		,,	,,	In 1912
8 8 0 0	;; ;; ;;	,, ,,	,, ,,	" " "		"	"	In 1916 In 1915 In 1914 In 1913

Year	Number of Births	Number of Cases notified by, or confirmed by medical men.	% of cases per 1,000 births
1914	7,640	171	22.3
1915	6,494	127	19.2
1916	5,728	108	18.8
1917	4.991	123	24.6
1918	5,219	93	17.7
1919	5,635	177	31.4
1920	7,712	217	28.1
1921	7,103	226	31.8
1922	7,115	187	26.5
1923	6,776	156	23.0
Average for 10 years.	6,441	158	24.3

## Results of severe cases of Ophthalmia during the past Ten Years.

Year	Vision Impaired	Total Blindness		
1914	2	I		
1915	4	I		
1916	3	0		
1917	3	0		
1918	4 3 3 3 2	0		
1919	2	1		
1920	4	0		
1921	4 2	0		
1922	1	0		
1923	0	0		
Total	24	3		

In 44 of the cases the birth was attended by a Doctor.

In 222 cases the birth was attended by a midwife.

Nurses were supplied by the Corporation in 134 cases.

The cost of nursing was £531 4s. 3d.

Cases of	Ophthalmia No	conatorum	100	The International	A STATE OF THE PARTY OF THE PAR	
Notified	Treated		Vision Vision unimpaired impaired		Total Blindness	Deaths
Notined	At home	In hospital	100	V-mo-sch	2 tot at	olt's
266	134	6	263	0	0	3

Day and night nurses are supplied in all cases where necessary, and arrangements also made for specialists, who consult with the medical attendant free of charge.

#### Measles.

There were 84 deaths, compared with 99 in 1922, and 1 in 1921.

The death rate from Measles in 1923 was 0.30 per 1,000, compared to 0.15 for the 105 large towns, and 0.14 for England and Wales.

The ages of death were as follows:-

Measles is not now compulsorily notifiable.

No efficient means have yet been discovered for combating the disease and it remains one of the chief causes of death in younger children.

## Whooping Cough.

There were 7 deaths from Whooping Cough during the year, compared with 98 in 1922, 22 in 1921, and 8 in 1920.

The deaths occurred at the following ages:-

Leaflets are distributed through the schools.

This disease was not prevalent during the year but in its relation to Public Health is in the same category as Measles—a formidable disease among younger children.

## Acute Anterior Poliomyelitis.

During the year two cases were notified and both died.

## Epidemic Diarrhœa.

The deaths from Epidemic Diarrhœa number 113 under one year of age; 16 from 1-2 years of age; 8 from 2-5 years of age; and 1 over 5 years of age.

The death rate under 2 years of age per 1,000 births was 19.8, as compared with 9.9 for the 105 large towns and 7.7 for England and Wales.

The rate for Stoke-on-Trent was higher than that of any other large town in the Country.

## Isolation Hospitals.

There are two Isolation Hospitals for the treatment of cases of Infectious Diseases in the Borough, viz.:—The Bucknall Isolation Hospital and the Bagnall Small-pox Hospital.

During the year 1923, the following patients from the County Borough were treated in the wards of the Bucknall Hospital:

Scarlet Fever		 	1209
Diphtheria		 	217
Enteric Fever		 	19
Cerebro Spinal	Meningitis	 	2
Erysipelas		 	23
Encephalitis Le	ethargica	 	2
Poliomyelitis		 	I

The Bucknall Hospital is inadequate for the needs of the Borough, and accommodation has to be obtained in hospitals of neighbouring authorities. The capacity of the Institution, allowing 144 sq. ft. per bed, is 170 beds, but there are 260 beds actually provided.

In addition, 13 cases of Scarlet Fever were sent to Bradwell Sanatorium and 5 cases to the Newcastle Infectious Diseases Hospital, by special arrangement with the authorities of those Institutions.

Bagnall Hospital is administered by the North Staffordshire Joint Small-pox Hospital Board, and was built in 1903-4, to accommodate 54 patients.

#### Ambulance Arrangements.

For the removal of Infectious Disease cases ambulance accommodation is provided at the Infectious Diseases Hospital.

For the removal of Non-Infectious and Accident cases two motor ambulances are employed by the Corporation. At least one large private firm provides a private motor ambulance to cope with accidents, etc., at their collieries and steel works.

## Nursing Arrangements in the Borough.

The following Voluntary Associations provide and pay the Nurses as set out:-

The Tunstall Nursing Institution, 1 Nurse.

The Burslem District Nursing Association, 2 Nurses.

The Hanley Nursing Association, 2 Nurses.

The Stoke Parochial Nursing Association, 2 Nurses.

The Fenton Nursing Institution, I Nurse.

Longton District Nursing Association, 2 Nurses.

Norton District Nursing Association, I Nurse.

## Adoptive Acts in force in the Borough.

Infectious Diseases Prevention Act, 1890.

The Public Health Acts Amendment Act, 1890.

The Housing of the Working Classes Act, 1890. (Part 3).

Parts of the Public Health Acts Amendment Act, 1907, as follows:-

Part 2.

Part 3.

Part 4.

Part 5.

Part 6.

Part 7.-Sections 79, 80, 81, 85, 86.

Part 8.

Part 9.

Part 10.

## Stoke-on-Trent Corporation Act 1923.

Under this Act, which became law in August, 1923, the Corporation have been given many new powers in relation to Public Health matters. It brings the Corporation into line with other progressive authorities.

## Sanitary Administration.

The following table shows the number of defects found in connection with the sanitary accommodation of Factories:—

	a r Nutse.		1922	and II		1923	
	SANITARY ACCOMMODATION	Defects	Defects	Out- standing at end of year.	Defects	Defects	Out- standing at end of year
	Insufficient	21	19	2	18	16	2
	Unsuitable	7	7	1	1	au	
1000	Defective	25	25		7	7	
ES	Not separate for sexes	12	12				
NC	Badly lighted						
CONVENIENCES	Badly ventilated Without proper fasten-	5	5	1			
SA	ers on doors	18	18		2	2	
8	Dirty Condition	60	60		14	14	
	Foul or defective urinals						
	Other nuisances	25	25	76.01	II	11	
	Fittings	11	11		17	17	
	Total	184	182	2	69	67	2

## Workshops.

During the year 2,976 inspections have been made of Workshops and Bakehouses.

Sanitary Defects found in Workshops

	100	1922	SHORT	1923		
DEFECTS	Defects found	Defects remedied	Defects Out- standing at end of year	Defects found	Defects remedied	Defects Out- standing at end of year
Want of Cleanliness	256	260	8	290	294	4
Want of Ventilation .	. 9	9		15	15	
	. 2	2		I	I	
Other Nuisances	26	25	2	31	30	3
SANITARY CONVENIENCES:				olonous.	DE 278	To the same
Insufficient	16	16		6	6	
Unsuitable	6	6		14	13	I
Defective	. 25	25	I	21	21	I
Not separate for sexes		4		. 8	8	
Badly lighted				2	2	
Badly ventilated	. 4	4		3	3	
No fasteners on doors o		1 100				
Female W.C's	. 4	4		2	2	
Dirty condition	-	16		14	14	
Fittings	. 8	8		21	20	I
Intervening spaces						
provided	1	I		3	3	
Total	377	380	11	431	432	10

### Bakehouses.

There are on the register 120 Bakehouses, as compared with 118 in the previous year. During the year 1,185 visits were paid, as compared with 756 in 1922. No notices were served.

#### Outworkers.

The total number of lists received was 186, as compared with 196 in the previous year.

			1922	1923
List of Outworkers received			196	186
Number of names on lists			271	230
Warning Notices sent re Lists			209	199
No. of visits paid to Outworkers	during	g the		
year			298	304

## I.-INSPECTION OF FACTORIES, WORKSHOPS, AND WORKPLACES.

INCLUDING INSPECTIONS MADE BY DISTRICT SANITARY INSPECTORS.

		Number of				
Premises	Inspections	Written Notices	Prosecutions			
Factories (including Factory Laundries)	78	17				
Workshops (including Workshop Laundries	1791	42				
Workplaces (other than Outworkers' premises included in Part 3 of this Report)	22					
Total	1891	59				

# 2.—Defects found in Factories, Workshops and Workplaces.

Table Company of	Number of Defects						
Pa	Found	Remedied					
Nuisances under the I							
Want of Cleanlin	ess					304	308
Want of Ventilati	ion					15	15
Overcrowding						I	1
Want of Drainag	e of F	loors					
Other Nuisances						86	85
	insuf	fficient				24	22
Sanitary accommodation	unsu	itable	or de	fective	-	14	13
	not s	separa	te for	sexes		8	8
Offences under the Fac	tory a	nd W	orksho	ps Acts			
Breach of special Bakehouses (				nents f	or		
		Т	otal			452	452

# 3.-Home Work.

	Outworker's List						Notices served Outwork		ork in
NATURE OF WORK	List received from Employers sending twice in the year		Sending once			Occupi- ers as to keeping	Unwholesome Premises		
	Lists	Con- tractors	Work- men	Lists	Con- tractors	Work- men	or sending list	In- stances	Notices served
Wearing Apparel—									
Making, &c	184	92	229	2	2	3	199		
Furniture and Up-									100000
holstry									
Umbrellas									
Basket Making	2	I	I						
Stuffed Toys									
Total	186	93	230	2	2	3	199		

# 4.—REGISTERED WORKSHOPS.

Worksu	ops on the	Register (s	s. 151) at ti	ne end of th	ie year	Number
Dressmaking a	nd Millir	nery				 419
Bootmaking and	d Repair	ing				 360
Blacksmiths and	d Wheel	wrights				72
Tailoring						 112
Baking						 120
Cratemaking	100,00					 46
Engraving						 23
Joiners						 66
Plumbers						 52
Others	***					 422
Т	OTAL NU	MBER OF	Worksh	OPS ON R	EGISTER	 1692

# 5.—OTHER MATTERS.

Class							
Matters notified to H.M. Inspector of Factories:— Failure to affix Abstract of the Factory and Workshops Act (s. 133, 1901)	18						
Action taken in matters referred by H. M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshops Act, (s. 5, 1901).  Notified by H. M. Inspector Reports (of action taken) sent to H. M. Inspector.							
Other	55						
Underground Bakehouses (s. 101):— In use at the end of the year	0						

## Disinfecting Motor Vans, 1923.

mail of a self at	* Napier Disinfecting Van (In use from	Two Guy Motors (In use from 22nd August, 1923, to 31st December, 1923)				
	1st January, 1923 to 11th April, 1923)	Van for Infected Articles	Van for Disinfected Articles			
Mileage	2641	2158	1956			
Consumption	285 galls. Benzol	158 galls. Petrol	134 galls. Petrol			
Miles per Gallon	9.3	13.7	14.24			
Average number of Miles per week	196	117	106			
Average Consumption per week	21'1 galls.	8.6 galls.	7'2 galls.			
Highest Mileage per week	232 miles on 22 galls. Benzol	166 miles on 12 galls. Petrol	153 miles on 10 galls. Petrol			
Motor Hire necessary for	20 weeks	Nil days	Nil days			

<sup>\*</sup> This Van has been in use for ten years-it has since been sold.

## Housing.

## NUMBER OF HOUSES.

There are approximately 55,000 houses in the County Borough, Of this number probably about 95 per cent. are below a rental of £26 per annum. About 62 per cent. of the houses consist of four rooms or less. Two hundred and twenty-four new houses were completed during the year.

### POPULATION.

The population of the area is estimated to be 276,100.

#### APPENDICES.

## Housing Conditions.

## Statistics Year ended 31st of December. 1923.

## I.-GENERAL.

	I.—GENERAL.
Ι.	Estimated Population 276,100
2.	General Death Rate 12.7
3.	Death Rate from Tuberculosis 1.20
4.	Infantile Mortality 93
5.	Number of dwelling-houses of all classes 55,224
6.	Number of working-class dwelling-houses 48,000
7.	Number of new working-class houses erected 224
	2.—UNFIT DWELLING HOUSES.
Ι.	Inspection.
	<ol> <li>Total number of houses inspected for housing defects (under Public Health or Housing Acts) 264</li> </ol>
	2. Number of dwelling-houses which were inspected and recorded under the Housing (Inspection of District) Regulations. 1910 246
	3. Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation 191
	4. Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human
	habitation 73
2.	REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES:—
	Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers Nil.

## 3. ACTION UNDER STATUTORY POWERS:-

A. Proceedings under section 28 of the Housing, Town Planning, &c., Act, 1919 and 1923:—	
Number of dwelling-houses in respect of which notices were served requiring repairs	Nil.
2. Number of dwelling-houses which were rendered fit:—	
(a) by Owners (b) by Local Authority in default of	Nil.
owners	Nil.
3. Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of	
intention to close	Nil.
B. Proceedings under Public Health Acts:-	
Number of dwelling-houses in respect of which notices were served requiring defects	
to be remedied	18
2. Number of dwelling-houses in which defects	

were remedied:—

(a) by Owners ... ... 91
(b) by Local Authority in default of owners ... ... Nil.

The greater part of the defects remedied were from notices served during the previous year.

During the year a systematic house to house inspection has been made in the following unhealthy area:—

Sutherland Road Area, Longton ... No. of Houses Inspected. ... 239

Twenty-five dwelling-houses have also been inspected and reported upon in other parts of the Borough.

Seven hundred and seventy-six defects were reported and dealt with under various Public Health Acts, the majority of which have been remedied.

The number of visits made in connection with the houses reported was 4,694. Visits for other causes numbered 936, and 62 appointments were kept.

Summary of the defects dealt w	ith du	ring 192	23:-	
Houses cleansed or decorated				63
Damp remedied				65
Spouting provided or repaired				40
Roofs repaired				39
Plaster repaired				184
Floors repaired				36
Ventilation improved				23
Dilapidations repaired				212
Drainage repaired				16
Sinks repaired or replaced				.5
Closet structures repaired				25
W.C. fittings repaired and pedes	tals re	placed		17
Water supplied to W.C.'s				3
Ashbins provided or replaced				8
Outbuilding structures repaired				- 5
Yard paving repaired				17
Unpaved surfaces paved				6
Water supply provided to houses		The second		4
Accumulations removed				8
		Tr.		-65
		Tot	al	776

In addition, a large amount of work was carried out under the Public Health Acts by the Sanitary Inspectors.

C. Proceedings under sections 17 and 18 of the Housing, Town Planning, etc., Act, 1909.

Ι.	Number of representations made with a view to the making of Closing Orders	Nil.
2.	Number of dwelling-houses in respect of which Closing Orders were made	Nil.
3.	Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	Nil.
4.	Number of dwelling-houses in respect of which Demolition Orders were made	Nil.
5.	Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil.

## Housing of the Working Classes Acts 1890 and 1919. Massey Square Improvement Scheme.

An enquiry was held by the Ministry of Health during the year in reference to this area (the Representation had been submitted in September of the previous year). An Order was made by the Ministry and is being carried out, though at the present rate some years must elapse before the area is cleared.

The area is 3.573 acres in extent and is occupied by 84 dwelling-houses, with a population of 477.

The Vital Statistics of this area in 1921 were: Birth rate, 37.7; Death rate, 31.4; Infantile Mortality, 500; compared to rates of 29.0, 14.8 and 134 for the whole Borough. The properties were old and every form of sanitary defect existed.

It is the intention of the Corporation to erect about 90 houses to replace the dwellings to be demolished.

A Representation has been made with respect to another area, viz.:—The John Street area in Longton, and all the properties have been inspected in detail in preparation for the enquiry.

## Increase of Rent and Mortgage Interest (Restrictions) Act, 1920. Sec. 2, sub-sec. 2.

During the year 18 applications for certificates under this Act were received, and in all cases, a certificate was granted. A statutory notice was served upon the owner in each case to remedy the defects found.

# REGISTER OF RAINFALL IN 1923. KEPT AT THE MEIR, LONGTON.

(By the courtesy of Mr. R. C. Frain).

	Total Dep (inches)		Greates 24	No. of days or which '01 inch	
		(inches)	Inches Date		or more fell
January		2.77	.48	5th	26
February		5.21	.46	17th	26
March		1.82	.30	3rd	19
April		2'41	1.22	12th	18
May		3.22	1.01	22nd	23
June		.81	.25	5th	16
July		3.87	53	23rd & 27th	20
August		3'39	.78	29th	26
September		3.30	.26	20th	20
October		3.55	.38	10th	27
November		2.33	:96	13th	19
December	•••	5.13	.85	30th	27
Totals		38.11			267

In 1922 the total rainfall was 32.52 inches.

## Rainfall Recorded at Tunstall Sewage Works. For Year 1923,

			Total for Mont Inches.	h.				
January			2'355	No.	of	Rainy	Days	23
February			5.615		11	11	11	25
March			1.785		11	11		11
April			2.600	. 11	11	"	11	15
May			3'379		11	11	"	21
June			0.600	11	11	11	"	14
July			2.660	"	"	"	11	16
August			3.100		11	"	11	19
September			3.420	11	- 11			16
October			3,000	"	11			27
November		*	2.255	"	11		11	20
December			5 280	"	**	"	11	24
Total for Y	ear	1923	36.139	Inches.			Total	231

#### WATER SUPPLY.

The water supply of the Borough is in the hands of a private company, the Staffordshire Potteries Water Works Company. The Corporation, together with neighbouring Authorities, are promoting a Bill in Parliament for the acquisition of the undertaking by a Joint Water Board.

The supply is derived in the greater proportion from deep wells situated at Hatton, Mill Meece, Meir and Stockton Brook. A considerable though lesser quantity is got from springs at Wall Grange. There is an abundant supply, and that from the deep wells is of excellent quality.

The supply from Wall Grange is chlorinated before distribution, this was begun in the Autumn of 1922 when the quality was found to be unsatisfactory.

#### POLLUTION OF THE ATMOSPHERE.

An automatic air filter and a standard gauge for measuring the suspended matter in the air have been set up during the year and the results are being recorded and forwarded regularly to the Air Ministry. When a sufficient number of records have been made it will be possible to make some comparison with the conditions in some other towns. By the one instrument air is filtered automatically each hour through a sheet of filter paper and the tint of the deposit compared with fixed tints on a scale, the darker the deposit the greater the pollution of the air. By the second instrument the rainwater is collected and the undissolved and dissolved matter ascertained by filtration and analysis.

