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Contributors

East Hertfordshire Combined Districts.

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EAST HERTFORDSHIRE COMBINED DISTRICTS.

Hertford (M.B.)

Sawbridgeworth (U.D.)

Hoddesdon (U.D.)

Ware (R.D.)

Bishop's Stortford (U.D.)

Braughing (R.D.)

Ware (U.D.)

Hertford (R.D.)



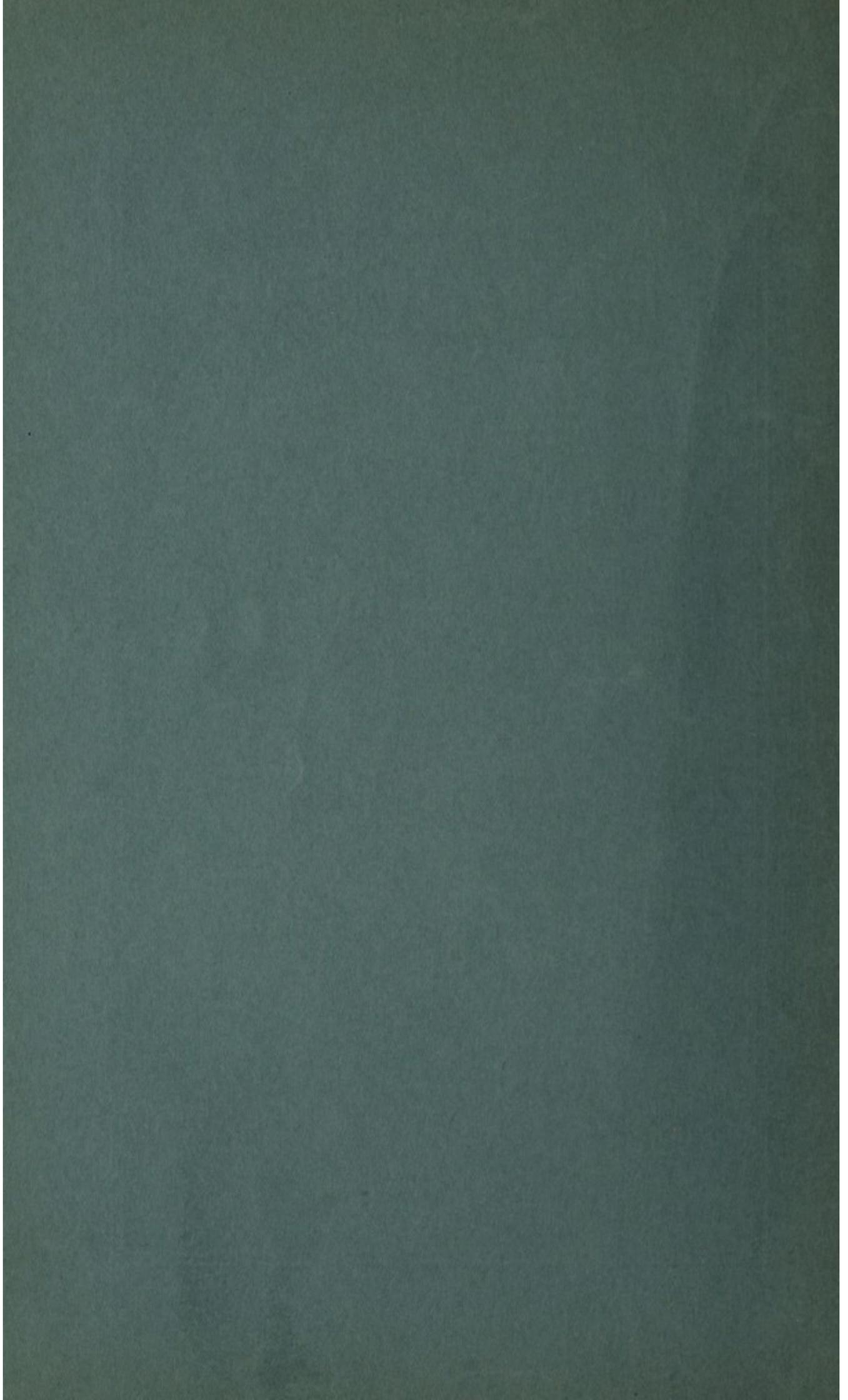
ANNUAL REPORT

OF THE

MEDICAL OFFICER

(Alan D. Whitelaw, M.A., M.D., D.P.H.)

1938.



**EAST HERTFORDSHIRE
COMBINED DISTRICTS.**

Annual Report

OF THE

MEDICAL OFFICER.

1938.

PRINTERS :

CREASEYS, BULL PLAIN, HERTFORD.

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Sanitary Inspectors—

JOHN BARNISH*	-	-	(The Castle) Hertford (M.B.)
WM. NOEL DAVID*	-		(Council Offices) Hoddesdon (U.D.)
JOHN LORD*	-	(4, The Causeway)	Bishop's Stortford (U.D.)
C. J. LUCAS*	-	-	(The Priory) Ware (U.D.)
KENNETH STEENT†	-	(The Forebury)	Sawbridgeworth (U.D.)
LAURENCE J. DALE*†	-	(97, New Road)	Ware (R.D.)
W. N. JARVIS†	}	Braughing (R.D.)	} Until 30th June
ERNEST G. THODY†			
P. H. AUDSLEY†			-	-	After 30th June
W. D. WAINE†	-	(2, The Wash)	Hertford (R.D.)

* Certificated Meat Inspector (Sanitary Inspectors Examination Board).

† Also District Council Surveyor.

PREFACE.

The following Report on the health of the Combined Districts has been drawn up on the lines indicated in the memorandum of the Ministry of Health.

The chief vital statistics for the year 1938 were :—

	Resident Population.	* Birth Rate	* Death Rate	** Infantile Mortality
MUNICIPAL BOROUGH.				
Hertford	12,970	13·8	10·2	67
URBAN DISTRICTS.				
Hoddesdon	11,950	15·6	9·5	27
Bishop's Stortford	10,960	14·0	9·5	33
Ware	7,450	17·0	8·8	16
Sawbridgeworth	3,055	10·5	8·4	0
RURAL DISTRICTS.				
Ware	9,614	14·9	9·4	49
Braughing	8,940	12·2	10·8	37
Hertford	6,991	11·9	8·8	48
East Herts C.D.	71,930	14·1	11·1	38
England and Wales		15·1	11·6	53

* Per 1,000 population.

** Per 1,000 births.

These rates have been calculated on the Registrar-General's estimate of the resident population in 1938.

That part of the Report dealing with the Sanitary Inspection of the Area has been tabulated by the Sanitary Inspectors of the different districts (under Article 27 (18) of the Sanitary Officers Order (Outside London) Regulations, 1935). They have also contributed the particulars on Housing and Food Inspection.

ALAN D. WHITELAW,
Medical Officer of Health.

THE CASTLE,
HERTFORD.

I. General Statistics.

	Area (acres)	Number of inhabited houses (end of 1938, according to Rate Books)	Density (persons per acre)	Density (houses per acre)	Average number of occupants per house	Rateable value	Sum represented by a Penny Rate
						£	£
Hertford (M.B.) ...	3,882	3,540	3·3	0·9	3·7	96,867	379
Hoddesdon ...	4,430	3,561	2·7	0·8	3·4	85,259	317
Bishop's Stortford	3,826	3,237	2·9	0·8	3·4	88,580	343
Ware (U.D.) ...	1,358	2,033	5·4	1·5	3·6	44,317	167
Sawbridgeworth ...	2,678	973	1·1	0·36	3·1	19,149	77
Ware (R.D.) ...	29,102	2,627	0·3	0·09	3·6	59,122	245
Braughing ...	45,570	2,923	0·2	0·06	3·1	40,401	170
Hertford (R.D.) ...	32,664	2,099	0·2	0·06	3·3	36,097	130

	BIRTHS					DEATHS	Natural Increase or Decrease
	Legitimate	Illegitimate Number	Per centage	TOTAL			
				M.	F.		
Hertford (M.B.) ...	172	7	4·1	95	84	139	+40
Hoddesdon ...	176	10	5·7	93	93	121	+65
Bishop's Stortford	149	4	2·7	83	70	123	+30
Ware (U.D.) ...	122	5	4·1	72	55	77	+50
Sawbridgeworth (U.D.)	32	—	—	17	15	31	+1
Ware (R.D.) ...	136	7	5·1	79	64	109	+34
Braughing ...	105	4	3·8	53	56	129	-20
Hertford (R.D.) ...	78	5	6·4	38	45	70	+13
East Herts (C.D.)	970	42	4·3	530	482	799	+213

CAUSES OF DEATH.	Hertford M.B.		Hoddesdon U.D.		Bishop's Stortford		Ware U.D.		Sigworth U.D.		Ware R.D.		Braughing R.D.		Hertford R.D.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ALL CAUSES	64	75	63	58	59	64	48	29	18	13	66	43	69	60	33	37
Typhoid and paratyphoid fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Whooping cough	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis of the respiratory system	3	2	3	1	2	3	6	1	1	3	3	3	1	1	3	2
Other tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Syphilis (including G.P.I., Tabes Dorsalis, &c.)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cancer	8	17	9	14	13	6	8	6	1	3	10	7	11	10	5	6
Diabetes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebral haemorrhage, &c.	4	5	3	4	1	1	3	3	1	2	2	1	2	5	1	2
Heart disease	18	19	16	21	11	16	15	16	3	3	18	12	11	14	9	12
Aneurysm	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other circulatory diseases	5	4	7	1	7	10	2	1	7	3	7	4	17	10	3	3
Bronchitis	4	2	6	3	1	1	3	3	2	2	2	2	2	1	2	...
Pneumonia (all forms)	2	2	3	...	6	5	3	3	3	4	6	4	5	1	1	...
Other respiratory diseases	1	...	1	...	1	...	1	2	1	2	1	1	1	2	1	1
Peptic ulcer	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Appendicitis	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Other liver diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other digestive diseases	1	1	2	2	2	2	1	1	1	1	1	2	2	1	3	2
Acute and chronic nephritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal sepsis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other puerperal causes	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Congenital causes, &c.	5	4	1	1	1	1	1	1	1	1	4	1	1	1	1	1
Senility	1	5	3	1	2	...	...	...	...	...	...	...	...	...	...	...
Suicide	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Other violence	3	1	3	1	1	1	2	2	1	2	2	1	5	...	3	2
Other defined diseases	7	9	3	6	4	7	3	3	3	2	5	3	5	7	1	4
Ill-defined or unknown	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths of infants under 1 year	6	6	3	2	2	3	2	2	1	1	5	2	3	1	2	2
Still births	8	4	3	1	3	3	2	1	1	1	1	2	4	2	2	1

II.—General Provision of Health Services for the Area.

Nursing in the Home.

This is carried out by the Hertfordshire County Nursing Association.

Laboratory Facilities.

The examination of clinical Material (swabs, sputum and blood) is carried out at the County Medical Hospital Laboratory, Hill End, St. Albans, for all districts except Hertford (M.B.) and Hoddesdon, which are served by the Hertford County Hospital Laboratory.

Samples of water are analysed either at St Albans or the Counties Public Health Laboratories, London, E.C., according to facility of transport. Milk analyses are carried out at St. Albans.

Hospitals (Voluntary).

HERTFORD. County Hospital (165 beds).

BISHOP'S STORTFORD. The Hospital (61 beds).

County Institutions (Infirmaries).

BISHOP'S STORTFORD. Haymeads (166 beds ; 75 male, 91 female^{*}).

*including 5 Maternity beds and 4 cots

Ware. Western House (85 beds ; 42 male, 40 female^{*}, 3 children's).

*including 2 Maternity beds.

Ambulance Facilities.

(a) *For infectious cases.* A motor ambulance is kept at each of the Isolation Hospitals at Hertford and Cheshunt.

Tuberculosis cases travel to and from Ware Park Sanatorium in a motor ambulance belonging to the Herts County Council.

(b) *For non-infectious cases.* There are motor ambulances stationed in the following towns :—

- (1) Hertford. (Hertford County Hospital).
- (2) Hoddesdon. (Urban District Council).
- (3) Bishop's Stortford. (Herts County Council).
- (4) Ware. (St. John's Ambulance Association).

Arrangement for the disinfection of infected clothing, &c.

Disinfection of bed linen and blankets is carried out at the Isolation Hospital.

Arrangements for the disinfection of houses and schools.

Fumigation with Formaldehyde is carried out under the supervision of the Sanitary Inspector in all districts

NUMBER OF PREMISES DISINFECTED DURING 1938.

Hertford (M.B.)	...	18	Sawbridgeworth (U.D.)	1
Hoddesdon	... ..	26	Ware (R.D.)	... .. 17
Bishop's Stortford	... ..	29	Braughing	... .. 21
Ware (U.D.)	... ..	6	Hertford (R.D.)	... .. 7

III.—Infectious Diseases.

	Small Pox.	Enteric Fever.	Scarlatina	Diphtheria.	Puerperal Pyrexia.	Pneumonia.	Erysipelas.	Ophthalmia Neonatorum.	Cerebro Spinal Meningitis.	Acute Polio-myelitis.
Hertford (M.B.)	—	—	11	—	1	⁵ 5	1	1	—	—
Hoddesdon ...	—	—	19	2	1	⁴ 14	2	—	—	—
B'p's Stortford	—	¹ 2	20	7	2	⁵ 11	3	—	—	¹ 4
Ware (U.D.) ...	—	1	7	1	—	¹ 1	—	—	—	—
Sawbridgeworth	—	—	—	—	—	—	—	—	—	—
Ware (R.D.) ...	—	—	15	1	1	⁶ 8	1	—	—	—
Braughing ...	—	—	17	—	1	⁴ 9	2	—	—	—
Hertford (R.D.)	—	—	8	—	—	—	3	—	—	2

(Small figures denote deaths).

Schemes for the immunisation of school children against Diphtheria are now in operation in the Borough of Hertford, Hoddesdon (U.D.) and Ware (R.D.).

Case Rate.

	Per 1000 population.					Per 1000 births.
	Scarlatina	Diphtheria	Enteric Fever	Erysipelas	Pneumonia	Puerperal Pyrexia
Hertford (M.B.) ...	0·85	0	0	0·08	0·38	5·24
Hoddesdon ...	1·51	0·16	0	0·16	1·11	5·26
Bishop's Stortford ...	1·82	0·64	0·18	0·27	1·00	12·58
Ware (U.D.) ...	0·94	0·13	0·13	0	0·13	0
S'wbr'geworth (U.D.)	0	0	0	0	0	0
Ware (R.D.) ...	1·56	0·10	0	0·10	0·83	6·85
Braughing ...	1·90	0	0	0·22	1·01	8·70
Hertford (R.D.) ...	1·14	0	0	0·42	0	0
East Herts (C.D.) ...	1·35	0·15	0·04	0·17	0·67	5·71
England & Wales ...	2·41	1·58	0·03	0·40	1·10	14·42

Previous Five Years.

	SCARLATINA.					DIPHTHERIA.				
	1933	1934	1935	1936	1937	1933	1934	1935	1936	1937
Hertford (M.B.) ...	*27	21	*37	21	38	2	16	*18	6	7
Hoddesdon ...	11	34	27	24	23	*8	1	*13	2	6
Bishop's Stortford	65	13	1	6	32	1	2	6	2	2
Ware (U.D.) ...	7	13	*23	8	16	2	3	4	1	2
S'wbr'geworth (U.D.)	13	7	4	5	3	—	—	1	—	—
Ware (R.D.) ...	16	25	46	29	13	12	*14	*19	7	—
Braughing ...	16	22	19	9	3	—	2	—	—	3
Hertford (R.D.) ...	5	8	18	22	20	2	1	6	—	1
East Herts (C.D.)	160	143	175	124	148	27	39	67	18	21

* 1 Death.

Isolation Hospitals.

The East Herts Joint Isolation Hospitals are at Gallows Hill, Hertford and at Cheshunt.

Supplies of diphtheria anti-toxin for the use of practitioners in the district are kept at the Isolation Hospital, and at Hertford Castle, Ware Priory and the Council Offices at Hoddesdon, Bishop's Stortford and Sawbridgeworth.

Tuberculosis.

New Cases and Mortality during 1938.

	NEW CASES				TOTAL	DEATHS				Mortality Rate per 1,000 population
	Respiratory		Non-Respiratory			Respiratory		Non-Respiratory		
	M.	F.	M.	F.		M.	F.	M.	F.	
Hertford (M.B.) ...	4	3	—	2	9	4	2	—	1	0·5
Hoddesdon ...	5	2	2	4	13	3	—	—	—	0·2
Bishop's Stortford	2	2	—	—	4	2	3	—	—	0·4
Ware (U.D.) ...	2	1	—	1	4	6	1	—	—	0·9
Sawbridgeworth ...	2	1	—	—	3	—	—	—	—	0·0
Ware (R.D.) ...	1	—	1	1	3	3	3	1	—	0·7
Braughing ...	—	3	1	1	5	—	1	1	—	0·2
Hertford (R.D.) ...	2	—	—	1	3	3	2	—	—	0·7
East Herts (C.D.)	18	12	4	10	44	21	12	2	1	0·5

*Number of cases remaining on the Register
at the end of the year.*

	Respiratory		Non-Respiratory		Total
	M.	F.	M.	F.	
Hertford (M.B.) ...	25	13	13	4	55
Hoddesdon ...	23	17	9	15	64
Bishop's Stortford ...	16	24	3	9	52
Ware (U.D.) ...	18	8	6	9	41
Sawbridgeworth (U.D.)	5	3	—	—	8
Ware (R.D.) ...	13	5	11	8	37
Braughing ...	15	8	6	7	36
Hertford (R.D.) ...	12	6	—	3	21
East Herts (C.D.) ..	127	84	48	55	314

SANITARY INSPECTION OF THE AREA.

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge- worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
Total number of dwelling-houses inspected	155	164	402	251	231	121	215	91
Number of dwelling-houses inspected under the Public Health Acts	63	164	207	108	227	80	48	45
Re-inspections and visits (including interviews with owners)	968	1281	265	647	91	160	98	150
Registered and Licensed Premises inspected	284	279	231	372	97	185	151	130
Visits <i>re</i> cases of Infectious Disease	11	22	92	39		16	21	10
Miscellaneous inspections	189	365	14	159	54	46	20	30
Number of Letters sent	150	440	154		127	286	8	
" " Informal Notices	74	124	80	71	33	82		
" " Statutory Notices	7	2		13	17	2	27	11
" " Prosecutions		3						
Complaints of nuisances received	37	77	63	113	3	43	3	19
Improvements carried out	316		260		251	122	94	157
<i>Drainage and Sanitary Arrangements.</i>								
Drains cleansed of obstructions	22	30	14		6	15	7	10
Drains provided and improved (re-laid or repaired)	26	50	21	21	11	12	54	25
Disconnecting chambers provided or improved	7	35		22	5			
Ventilation pipes repaired or provided	3	10	1	6	4	2	12	
Closets and urinals reconstructed, repaired, etc.	9	63	5	28	9	15	3	52
Water closets and urinals provided	2	4	3	26	3	3	21	
New pans and traps to water closets	13	48	3	3	2	2	5	
Flushing cisterns replaced; supply pipes required	8	22	8	3	46	2	4	
Pail closets provided						18	30	

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge- worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
Nuisances abated from offensive cesspools ...	...	...	...	...	...	...	...	...
Dustbins provided ...	11	44	2	7	3	8	6	10
<i>Dwelling Houses, etc.</i>								
Cleansing and re-decorating ...	12	40	1		3	12	10	20
Windows provided or improved ...	14	78	2	12	8	17	4	16
Walls and ceilings repaired ...	17	50			9	8	6	20
Roofs, gutters and chimney stacks repaired ...	13	75	11	12	27	6	5	12
Dampness remedied (damp-proof course inserted, etc.) ...	43	34	4		3	5	14	17
Floors repaired, re-laid or ventilated... ..	17	67	1	20	3	2	9	18
Cooking ranges and washing coppers repaired or replaced ...		44		2	4	4	9	6
Food Stores provided or improved ...	11	23		2	4		8	13
Paving repaired or relaid ...	13	22	7	3	4			8
Sinks provided or improved ...	13	33	2	6	9	3	9	25
Houses provided with separate taps ...	7	2		1	8		22	6
Water-butts provided ...		3		1			4	12
Wells cleansed and repaired ...						1	2	
Overcrowding abated ...	8	6	9	25		25	2	23
Van dwellings removed ...								
<i>Keeping of Animals, etc.</i>								
Nuisance from animals, fowls, etc., abated ...			1	1	2	2	1	
Offensive accumulations removed ...		11	9	4	1	6	1	1
Miscellaneous ...	25				13	9	1	
Number of houses connected with sewers ...	113	52	97	72	25	5	20	28
Number of houses connected with water mains ...	62	54	95	72	82	10	13	117

1. INSPECTIONS OF FACTORIES.

(*Factory and Workshop Act, 1901, and as from 1st July, 1938
Factories Act, 1937*).

	Hertford M.B.	Hoddesdon (U.D.)	Bishop's Stortford	Ware U.D.	Sawbridgworth U.D.	Ware R.D.	Braughing	Hertford R.D.
<i>Factories with mechanical power :</i>								
Number of Inspections ...	16	27	16	13	3	11	3	6
„ Written Notices ...		6		1		1		
<i>Factories without mechanical power :</i>								
Number of Inspections ...	28	8	29	1	19	14	55	
„ Written Notices ...	3	4	2		1			
<i>Other Premises under the Act (including works of building and engineering construction but not including outworker's premises) :</i>								
Number of Inspections ...		5			1			1
„ Written Notices ...								
Total Number of Inspections	44	40	45	14	23	25	58	7
Total Number of Written Notices	3	10	2	1	1	1		

REGISTERED WORKSHOPS.

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge- worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
Bakehouses	12	10	11	9	5	7	9	5
Batmakers		4						
Bootmakers	1	9		5	4	4	3	
Bottlewashers... ..	1		2					
Builders & Carpenters	10	7	6	2		9	10	4
Cabinet Makers	2	2	2	1				
Cycle Repairers	2	4	4		1	2	2	
Dress Makers and Milliners	6	11	2	2	3	3	2	
Engineers			6	1	1	3	2	
Founders			2	1				
Motor Repairers	1	5	13	1	3	9	7	6
Laundries	1	3	3			2		1
Maltings	5	1	2	26	1	3		
Plumbers	1	8			2	2		
Printers		4		1		1	2	
Stonemasons	1		2	1				
Sadlers and Harness Makers			1	1		1	2	2
Smiths & Wheelwrights	3	6	2	1	3	6	2	12
Suit Cleaners	1	2	1					
Tailors	2	3	6	3	3	1	1	1
Watchmakers... ..	1	2	2	2	2	1	1	
Miscellaneous... ..	4	6	4		9	5	2	1

HOUSING.

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge-worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
1. <i>Inspection of Dwelling-houses during the year:—</i>								
(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	155	164	228	140	231	121	215	91
(b) Number of Inspections made for the purpose	185	164	228	148	322	207	291	241
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	92	22	22	32	48		125	46
(b) Number of inspections made for the purpose	122	22	22	40	63		149	50
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	5	3	31	6			43	11
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	31	40	24	20	41	20	10	39
2. <i>Remedy of Defects during the year without service of formal notices:—</i>								
Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	18	24	18		41	60	10	31

D.—Proceedings under Section 12 of the Housing Act, 1936:

- (1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ...
- (2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ...

4. *Housing Act, 1936—Part IV.—Overcrowding* :—

- (a)—(1) Number of dwellings overcrowded at the end of the year ...
- (2) Number of families dwelling therein ...
- (3) Number of persons dwelling therein ...
- (b)—Number of new cases of overcrowding reported during the year ...
- (c)—(1) Number of cases of overcrowding relieved during the year ...
- (2) Number of persons concerned in such cases ...

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge-worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
(1)	2	2	2	6	4	25	15	
(2)	8	20	18	6	4	25	15	
(3)	60	148	116	51	41	186	119½	
(b)	6	6	4	10	2	2		
(c)—(1)	8	6	7	25	3	23	2	23
(2)	64	37	53	209	25½	140	16	141

Number of Houses built during 1938.

	Hertford (M.B.)	Hoddesdon	Bishop's Stortford	Ware (U.D.)	Sawbridge-worth (U.D.)	Ware (R.D.)	Braughing	Hertford (R.D.)
Without State Assistance—								
By the Local Authority ...	64			38		12		
By other bodies or persons...	47	56	77	25	33	24	22	27
With State Assistance—								
By the Local Authority ...					20	54	22	58
By other bodies or persons...								19
TOTAL ...	111	56	77	63	53	90	44	85
Number of Council houses contemplated or in course of erection ...								
	75		72		10		24	20
Number of houses dealt with under the Housing (Rural Workers') Acts, 1926 ...								
							6	5
Number of Council houses ...	639	346	228	423	101	368	352	266

Borough of Hertford.

Water.

There are four separate pumping stations ; Molewood, Hartham, Port Hill and Wadesmill Road. Most of the town is supplied from the Port Hill Reservoir, which is filled from Molewood and Wadesmill Road. Bengoe, Hertingfordbury, Great Molewood and the higher parts of the town are supplied from the Bengoe Water Tower, which is filled from Hartham and Wadesmill Road. Port Hill pumping station is being kept as a stand-by. The Waterford pumping station is no longer used.

The new pumping station at Wadesmill Road was opened in June, 1938. At this station there are two 24 inch boreholes each driven 450 feet into the chalk and lined for a distance of 100 feet. The pumping plant consists of two complete electrical units, each comprising a 115 h.p. electrical motor and multi-stage bore hole turbine pump with the necessary valves, meters, pressure gauges and level indicators. Each unit discharges water at the rate of 70,000 gallons per hour to the Port Hill Reservoir and 55,000 gallons per hour to the Water Tower.

Drainage and Sewerage.

The method of disposal of the sewerage of the town is by the presedimented activated sludge process, and the resulting effluent is ultimately discharged into the River Lee.

The extension of the Corporation sewer to Hertingfordbury has been completed, the scheme provides a 9 inch sewer and pumping plant for lifting the sewage ; the greater portion of the village is now provided with facilities for drainage and water supply. A house to house survey has been carried out and a report has been presented to the Corporation on the sanitary circumstances. The village is mostly on the conservancy system.

Public Cleansing.

There is a weekly collection, in covered freighters, of refuse which is disposed of by controlled tipping on Hartham.

Moveable ashbins are now in general use. There is still one covered ashpit at Bengoe for a block of 4 cottages.

The number of cesspools in the Borough is 41. These are emptied free quarterly.

Shops Act, 1934.

During the year 13 inspections were made, and as a result improved sanitary accommodation and washing facilities were provided in three shops.

Smoke Abatement.

The only complaint requiring attention arose from the emission of dust from the burning of wood shavings. The nuisance was abated by informal action and the firm installed machinery to convert the wood shavings into sawdust.

Swimming Baths and Pools.

There are none open to the public.

Eradication of Bed Bugs.

No. of Council houses found to be infested	...	...	14
No. of Council houses disinfested	...	...	14

The work was carried out by Corporation employees and the insecticide used was Zaldecide. There is supervision to prevent re-infestation by visits at intervals after cleansing of 2 weeks, 1 month, 3 months and 6 months.

Schools.

All the public elementary schools have main water and drainage.

Cowbridge C.C. School was inspected and a report forwarded to the County Medical Officer on certain unsatisfactory features of the lighting, ventilation and heating of the premises.

Housing.

St. Andrew's Street : Nos. 65, 65a, 65b. These houses closed by agreement with the owners under the Housing Act, 1909, have now been demolished voluntarily.

St. Andrew's Street : Nos. 17 and 63. Closing Orders under the Housing Act, 1936: Section 12 have been made in respect of parts of these buildings.

Maidenhead Street ; No. 6, Dolphin Yard has been represented as being unfit for human habitation.

During the year, 18 houses found to be in certain respects unfit for human habitation have been improved. The defects dealt with were dampness; absence of separate water supply, taps and sinks; inadequate drainage and paving; and general dilapidation. The improvements were carried out informally after the owners had been served with schedules of requirements.

Overcrowding Survey.

Housing Acts, 1935 and 1936.

The following particulars have reference to overcrowding within the Borough, based on the standards of the Housing Acts, 1935 and 1936 and the rules as to measurement and occupation prescribed by the Minister of Health.

Overcrowding.

Number of cases of overcrowding recorded by the survey to the 31st of March, 1936.	24
Number of cases recorded since the 31st March, 1936 ...	12
<i>Number of cases recorded to the 31st of December, 1938</i>	<u>36</u>
An analysis of the extent of overcrowding on the 31st of December, 1938, is as follows:—	
Number of cases of overcrowding abated:	
(a) rehoused by Corporation, 1936	8
rehoused by Corporation, 1937	3
rehoused by Corporation, 1938	4
	<u>15</u>
(b) abated by responsible occupier, 1936	8
abated by responsible occupier, 1937	1
abated by responsible occupier, 1938	4
	<u>13</u>
<i>Number of Cases abated to the 31st December, 1938</i>	<u>28</u>
<i>Number of Cases of overerowing, 31st December, 1938</i>	<u>8</u>

With regard to these 8 cases of overcrowding, applications have been received for houses on the Corporation Estates in respect to ... 1

Of the remainder, 6 are in occupation of Corporation houses awaiting transfer to larger houses ... 6

The Corporation have erected 63 houses at Horns Road to meet the housing needs of the Borough.

Premises controlled by Byelaws or Regulations.

COMMON LODGING HOUSES.

The White House (55, Railway Street) is the only registered Common Lodging House in the Borough, affording nightly accommodation for 35 males. The number of men accommodated during the year was 8,479, nightly average, 23 men.

No case of infectious disease has occurred at the house.

Inspection and Supervision of Food.

(a) *Milk Supply.*

The following samples of milk retailed in the Borough were examined.

ORDINARY MILK.	<i>Bacteria per mil.</i>	<i>Methylene Blue Test.</i>	<i>Coliform Bacillus.</i>
1	—	Satisfied	Absent
2	—	Satisfied	Absent
3	—	Satisfied	Present in 0·1 0·01 Absent in 0·001 ml.
4	—	Satisfied	Absent
5	—	Satisfied	Absent
6	—	Satisfied	Present in 0·1, 0·01, 0·001 ml.
TUBERCULIN TESTED MILK.			
1	600	Satisfied	Absent
2	5,000	Satisfied	Absent
3	300	Satisfied	Absent
4	15,000	Satisfied	Absent

(b) *Meat and other Foods.*

Slaughterhouses and Meat Inspection.

In so far as it is possible, slaughterhouses are visited and carcasses examined at time of slaughter. During the year, the number of visits to slaughterhouses was 122, and to the General Market and Meat Stores, 76.

Food Condemned as unfit for human consumption.

The following were condemned as unfit for human consumption :

Carcase of Sheep (injury, motor car)	...	...	...
Pigs' livers (necrosis)	...	...	...	5
Beast, liver (Tuberculosis)	...	...	...	1
„ spleen „	...	...	...	1
„ pair lungs „	...	...	...	1
„ Mesenterics, stomach, etc. (Tuberculosis)	...	...	...	2
Ham (tinned ham)	...	...	...	14lbs.

Fish.

Meagrims, 14	...	...	...	...	...	11lbs. 6ozs.
Finnan Haddocks (3 boxes)	...	...	...	...	...	42lbs.
Skate Wing	...	...	...	...	...	1lb. 14ozs.

Carcases Inspected and Condemned.

	Cattle, excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)					
Number inspected ...	73	2	11	174	185
All diseases except T.B.					
Whole carcasses condemned				1	
Carcases of which some part or organ was con- demned					5
Percentage of the num- ber inspected affected with disease other than Tuberculosis				1.74%	9.25%
Tuberculosis only					
Whole carcasses condemned					
Carcases of which some part or organ was con- demned.	2				
Percentage of the num- ber inspected affected with Tuberculosis ...	1.46%				

Prevalence of, and Control over, Infectious Disease.
Scarlet Fever.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
All Saint's - -	-	-		1	1	1						1	4
Bengeo - - -	1				1				2				4
St. Andrew's - -	-	1							1	1			3*
Total - - -	1	1		1	2	1			3	1		1	11

*2 of these cases occurred at the County Hospital.

The schools where cases occurred were as follows:—

Bengeo 1, Longmore 1 and All Saints' 2.

Diphtheria.

Immunisation against Diphtheria is available free for all children between 5 and 8 inclusive. Only 12 children received this treatment during the year.

Hoddesdon Urban District.

Water Supply.

The northern part of the district is served by the Metropolitan Water Board. The water is subjected to dual filtration and chlorination. The remainder of the district is served by the Council's water from two deep wells in the chalk, one at Hoddesdon and one at Broxbourne. A new deep well has been dug and it is anticipated that the additional supply thus afforded will be sufficient for the growing needs of the district for many years. Work in connection with this scheme is in progress.

An inspection of the district has been made and it was found that some 100 houses are dependent on private water supplies mostly in the rural and outlying parts of the district. Two existing premises were provided with water from the town supply during the year.

Ten samples of water from private supplies were submitted for Chemical and Bacteriological Examination during the year. Two of this number were taken from factory supplies prior to the granting of a certificate under Section 41 of the Factories Act, 1937. Both supplies were reported as being satisfactory. Three of the samples were in connection with camping grounds, one of which was found not to be satisfactory; the owner of the camping ground concerned subsequently provided an alternative supply from the Council's mains. The remaining five samples were from private houses, three of which were found to be unsatisfactory.

Thirteen samples of water from the Council's supply were submitted during the year, twelve for Bacteriological examination only and one for combined Chemical and Bacteriological Analysis. Except for two instances all were reported as pure and wholesome. The two unsatisfactory samples were taken early in the year and the results were probably due to recent constructional alterations and temporary conditions of pumping. The Council's water supplies are chlorinated.

Drainage and Sewerage.

Work in connection with sewerage the northern part of the district is proceeding. One short length linking up to the recently extended Ware Rural District Council Sewer has been laid and it is anticipated that 20 houses formerly served by cesspools will be connected to this.

The remainder of the district (except for houses in undeveloped and low-lying parts of the area) is sewered. Sewage disposal works consisting of detritus, settling tanks, contact beds and percolating filters serve the old urban district area. Sewage from Broxbourne and Wormley is disposed of by broad irrigation at the sewage farms. Extensive improvements have been carried out at these two farms.

Public Cleansing.

There is a weekly collection of refuse from practically the whole of the district by low-loading—dustless type—S.D. freighters. Refuse is disposed of in a destructor and by controlled tipping.

Shops and Offices.

Shops Act, 1934 ; Section 10, and Public Health Act, 1936.

15 inspections were made during the year and the following improvements secured by informal action :—

Sanitary Accommodation provided	...	...	1
Ventilation improved	...	...	6
Heating apparatus installed	...	...	1
Water supply and sink provided	...	...	1
Other insanitary conditions remedied	...	...	nil

When plans are submitted for the alteration of or addition to any premises intended to be used as shops or offices, representations are made to secure that such premises will be properly lighted, ventilated, and that adequate sanitary accommodation and washing facilities will be available.

Camping Grounds and Moveable Dwellings.

Camping in this district is controlled by Section 93 of the Hertfordshire County Council Act, 1935, and Byelaws were made by the Council under Section 95 of this Act in March, 1937.

There are eleven sites in the district regularly used for camping purposes and the Council gave consent under the Hertfordshire County Council Act for nine of these sites to be used for the placing of moveable dwellings. In addition, the Council gave consent to two owners for the placing of caravans on certain lands in the district. A certain

amount of sporadic and unauthorised camping takes place in the district, particularly during Bank Holiday periods. It is estimated that the maximum number of campers resident in the area at one time during the summer season was not less than 1,250.

Legal proceedings were taken on two occasions against an owner of a camping site for allowing land owned by him to be used for camping purposes without the previous consent of the Council. In the first instance he was fined £2; and in the second instance £5, in respect of the first day on which the offence was committed, and 5s. in respect of each of 43 other days, and ordered to pay £5 5s. costs—a total of £21. This owner was also prosecuted under the Council's Byelaws for failing to keep reasonable watch to secure the proper control and management of his camping ground, and the Bench imposed a fine of £2, and awarded the Council £5 5s. costs.

Proceedings were taken under the Council's Byelaws against two youths for indulging in noisy, indecent and other offensive conduct to the annoyance of residents in or visitors to the district. They were both found guilty of an offence under the Byelaws and were fined £2.

Public Health (Smoke Abatement) Act, 1925.

Complaints were received in respect of one laundry premises. Although several visits were made and observations kept, no smoke nuisance was detected. Representations were made to the proprietor to use coke fuel and a boiler of larger capacity has been installed.

Swimming Baths and Pools.

In July a sample of water was taken from the open-air swimming bath at the Spinning Wheel, Hoddesdon, and submitted for chemical and bacteriological examination. It was reported as being of a satisfactory standard of bacterial purity and suitable and safe for swimming bath purposes.

Eradiction of Bed Bugs.

During the year nine houses were found to be infested. Disinfestation was carried out in each case. No Council houses were found to be infested.

Methods employed :—

The wall paper was stripped off ; skirting boards, architraves and other woodwork removed and treated with a contact insecticide ; all crevices likely to form a harbourage were sprayed with Zaldecide. In some instances the process of spraying was repeated after an interval of eight or nine days.

Fumigation with " Cimex " and " Furmex " blocks has also been employed in addition to the above procedure, where the tenants' effects remained in the rooms.

In order to prevent the Council Houses becoming infested with bugs, the furniture and effects were disinfested before being transferred to Council Houses. Disinfestation was effected in these cases by fumigation in the tenant's dwelling before removal, with one of the above. Tenants of Council Houses are requested to notify immediately any appearance of vermin in their homes, and inspections are made from time to time of Council Houses in cases where bug infestation is likely to be present.

The disinfestation of one private house was carried out by a firm of specialists, on behalf of the owners.

*Housing.**Demolition Orders were made during the year on the following properties :—*

No. 3, Griffin Yard, Hoddesdon	...	...	...	1
No. 6, Ware Road, Hoddesdon	...	...	...	1
Nos. 75 and 77, Lord Street, Hoddesdon	...	...	...	2
				<hr/> 4

The following properties were demolished during the year :—

Nos. 27, 29 and 31, Pauls Lane, Hoddesdon	...	...	...	3
No. 4, Admirals Walk, Hoddesdon	...	...	...	1
Nos. 4, 6, 8, 10, 12 and 14, Ware Road, Hoddesdon	...	...	...	6
Nos. 5, 6, 7 and 8, Griffin Yard, Hoddesdon	...	...	...	4
				<hr/> 14

Housing Act, 1936—Part IV.—Overcrowding.

Number of dwellings overcrowded on 31/12/1937	...	20
Number of dwellings overcrowded on 31/12/1938	...	20
Number of families dwelling therein	...	20
Number of persons dwelling therein	...	148
Number of new cases of overcrowding reported during the year	...	6
Number of cases of overcrowding relieved during the year		6
Number of persons concerned in such cases	...	37
Cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of the overcrowding	...	Nil
Number of Council Houses overcrowded on 31/12/1938		9

Re-visits have been made in all cases where the information obtained through the overcrowding survey disclosed that families had no accommodation in excess of the "permitted number."

*Inspection and Supervision of Food.**Bacteriological Examination of Milk.*

*Reports on Examination of Milk Retailed under the Milk
(Special Designations) Order, 1936.*

<i>Date.</i>	<i>Designation.</i>	<i>Methylene Blue Test.</i>	<i>No. of Bacteria per 1 ml.</i>	<i>Presence of B/Coli.</i>	<i>Report.</i>
24/3/38	Tuberculin Tested	Satisfied	77,000	Absent	Conformed
24/3/38	do.	Satisfied	2,000	Absent	Conformed
24/5/38	do.	Satisfied	13,000	Present in 3 tubes	Unsatis- factory
24/5/38	do.	Satisfied	5,700	Absent	Conformed
17/6/38	do.	Satisfied	4,000	Absent	Conformed
21/7/38	do.	Satisfied	32,000	Absent	Conformed
21/7/38	Pasteurised	—	11,400	Absent	Conformed
5/10/38	Tuberculin Tested	Satisfied	4,000	Absent	Conformed
5/10/38	do.	Satisfied	39,000	Absent	Conformed
5/10/38	do.	Satisfied	6,900	Absent	Conformed
30/11/38	do.	Satisfied	1,600	Absent	Conformed
30/11/38	do.	Satisfied	145,000	Absent	Conformed

Eleven samples of Tuberculin Tested milk were submitted and in one instance Bacillus Coli was found to be present. Further samples of this milk were taken and in each case a satisfactory report was received. One sample of Pasteurised Milk was submitted and this conformed to the required standard. This was also submitted to the Phosphatase Test and found to be satisfactory.

*Reports on Examination of Milk other than that retailed under
The Milk (Special Designations) Order, 1936.*

<i>Date.</i>	<i>Designation.</i>	<i>No. of Bacteria per 1 ml.</i>	<i>Presence of B/Coli.</i>	<i>Report.</i>
24/3/38	Ordinary	2,000	Absent	Conformed
24/3/38	Mixed	23,000	Present in 1/10th	Unsatisfactory
24/3/38	Ordinary	8,200	Absent	Conformed
26/4/38	do.	1,900	Absent	Conformed
26/4/38	do.	12,000	Absent	Conformed
26/4/38	do.	2,600	Absent	Conformed
26/4/38	do.	24,000	Absent	Conformed
24/5/38	Mixed	70,000	Absent	Conformed
24/5/38	Mixed	4,800	Present in 1/10th	Unsatisfactory
24/5/38	Ordinary	13,000	Absent	Conformed
17/6/38	do.	5,700	Absent	Conformed
17/6/38	do.	1,200	Absent	Conformed
17/6/38	do.	39,000	Absent	Conformed
21/7/38	do.	1,000	Absent	Conformed
21/7/38	do.	690,000	Present in 1/10th	Unsatisfactory
24/8/38	do.	36,000	Absent	Conformed
24/8/38	do.	97,000	Absent	Conformed
24/8/38	do.	62,000	Absent	Conformed
24/8/38	Sterilized	Sterile	Absent	Conformed
30/11/38	Ordinary	37,000	Present in 1/10th	Unsatisfactory
30/11/38	do.	20,000	Absent	Conformed

Twenty-one samples of ungraded milk were submitted, of these seven were from milk produced outside the County, one sample of which was of sterilized milk. In four instances Bacillus Coli was found to be present, being accompanied by a rather high Bacterial count in one of these cases. Where unsatisfactory reports were received, visits were paid to the premises and advice given. Further samples were taken and the matter followed up until reports showed better results.

*Biological examination of Milk.**Reports on samples of Milk submitted for Biological Examination.*

Date Sampled.	Guinea Pig Number.	Date of Inoculation.	Killed.	Post Mortem Appearances.	Exam. of Film from Guinea Pig.	Conclusions.
9/2/38	991	10/2/38	10/3/38	No Lesions	No T.B.	Negative
24/5/38	1446	25/5/38	22/6/38	No Lesions	No T.B.	Negative
24/5/38	1447	25/5/38	22/6/38	No Lesions	No T.B.	Negative
30/11/38	1975	1/12/38	29/12/38	No Lesions	No T.B.	Negative
30/11/38	1974	1/12/38	29/12/38	Inguinal Glands show areas of tuberculous caseation. Lumbar Gland enlarged.	T.B. present.	Positive

Five samples of milk were submitted for the biological test for the presence of tuberculosis. Negative results were recorded in four instances and one test was positive. The County Medical Officer was informed in the latter case, and further samples were taken from the herd involved by the Divisional Inspector of the Ministry of Agriculture and Fisheries, and were found to be non-tuberculous.

Slaughterhouses and Meat Inspection.

Number of registered slaughterhouses	...	...	...	3
Number of licensed slaughterhouses	...	...	...	1

During the year 330 visits were made, and the following carcasses were examined :—

Beasts	...	...	92	Calves	...	...	...	25
Sheep	...	...	100	Pigs	...	...	...	507

With the exception of sheep and lambs, practically all the carcasses of animals slaughtered in the district are examined.

The following unsound food was surrendered :—

Animal.	Details.	No.	Approx. Weight.	Disease.
Beast	Rump & Loin Beef	1	136lbs.	Tuberculosis
"	Head & Tongue	4	64 "	Tuberculosis
"	Livers	3	30 "	Tuberculosis
"	Do.	1	9 "	Abscesses
"	Do.	1	11 "	Distomatosis
"	Pair Lungs	8	36 "	Tuberculosis
"	Mesenteries	3	20 "	Tuberculosis
Pig	Fore-quarters & Offal	1	74 "	Tuberculosis
"	Heads	23	141 "	Tuberculosis
"	Pair Lungs	7	24 "	Tuberculosis
"	Mesenteries	43	49 "	Tuberculosis
"	Livers	8	36 "	Tuberculosis
"	Do.	1	7 "	Cirrhosis
Sheep	One Hindquarter	1	42 "	Dropsy

Total weight of unsound food—679lbs.

Carcases Inspected and Condemned.

	Cattle, excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)	110		25	not known	550
Number inspected ...	92		25	100	507
All diseases except T.B.					
Whole carcases condemned					
Carcases of which some part or organ was con- demned	2			1	1
Percentage of the num- ber inspected affected with disease other than Tuberculosis	2'17			1	'197
Tuberculosis only					
Whole carcases condemned					
Carcases of which some part or organ was con- demned.	14				50
Percentage of the num- ber inspected affected with Tuberculosis ...	15'217				9'86

Other Food Premises :

Number of inspections 45

The stalls retailing foodstuffs in the weekly market are regularly inspected.

Prevalence of, and Control over, Infectious Disease.
Scarlet Fever.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Rye Park - -	-	-	1	2	1	2		1					7
Hoddesdon - -	-	-		1		1	1			1	1	1	6
Broxbourne - -	-	-	1	3									4
Wormley - -	-	-	1	1									2
Total - -	-	-	1	3	6	1	3	1	1	1	1	1	19

Diphtheria.

Immunisation against this disease is offered free to children (aged 1-13 inclusive) whose homes are in the Urban District and whose parents give their consent. Treatment is carried out by the family doctor.

The following children have received treatment :—

	1936.	1937.	1938.
Rye Park - - -	19	16	35
Broxbourne - -	16	8	5
Hoddesdon - - -	5	6	6
Wormley - - -	13	2	6

NOTIFIABLE DISEASES.

	At all ages	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years & over	Removed to Hospital	Treated in School Sanatorium	Nursed at Home	Died
Small-pox ...	0	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...
Diphtheria...	2	...	...	...	...	...	...	...	2	...	...	...	...	2	...	...	0
Scarlet Fever	19	...	1	...	1	8	...	2	6	...	...	...	...	19	...	...	0
Enteric Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	0
Pneumonia ...	14	...	...	1	1	...	1	2	1	1	4	2	1	2	...	12	4
Ophthalmia Neonatorum...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	2	...	...	...	...	...	...	...	...	...	1	1	...	...	...	2	0
Dysentery ...	2	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2	0
Acute Polio-myelitis	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis	7	...	...	...	...	...	1	...	1	1	2	...	...	4	...	...	1
Other Tuberculosis	6	1	..	...	...	...	2	...	1	1	1	...	...	2	...	...	0

Bishop's Stortford.

Water.

There is a piped supply for most of the Urban District from the pumping station near the western boundary. The new high level reservoir is now in use. There are still a few wells on the outskirts.

Drainage and Sewerage.

There is a public sewerage system for the town. The sewage gravitates to tanks at the sewage farm in the parish of Hallingbury (Dunmow Rural District), where it is screened and then pumped on to the high level. After chlorination it is treated by broad irrigation, with final treatment through longitudinal gravel filters before the effluent passes into the River Stort. There are a number of cesspools and pail closets on the outskirts.

Public Cleansing.

Housing and trade refuse is collected by motor lorry and in horse-drawn covered dust carts, and disposed of by controlled tipping on land adjoining the Castle grounds.

Swimming Baths.

The public open-air swimming bath adjoins the Council House. Purification is effected by filtration (8-hourly turnover) and the administration of chlorine and ammonia to the water.

Eradication of Bed Bugs.

Five premises were disinfested; four were treated with Zaldecide and the other with a Sanitas Formigator—both apparently successfully.

Housing.

Dwellinghouses demolished in pursuance of Demolition Orders.

126, South Street.	2, King Street.
Castle Farm Cottages (4 houses).	25, 27, New Path.
1, 3, Castle Street.	6, 8, New Path.
28, 30, 32, 34, 36, Hockerill Street.	20, 22, Chapel Row.
Total - 19 houses.	

The following houses were re-conditioned by the owners after acceptance by the Council of undertakings to render them fit for human habitation.

7 & 7a, Dane Street.	11, Castle Street.
1 & 3, North Terrace.	75, 77, 79, Newtown Road.
7 & 8, Cannonsmill Lane.	7 & 9, Church Street.
Old Isolation Cottage, Haymeads Lane.	34, 36, 38, 40, 42, Middle Row.
58 & 60, Rye Street.	61, Apton Road.
97, Nursery Road.	71, Elm Road.
189, Rye Street.	46, 48, Nursery Road.

*Houses in respect of which Demolition
Orders were made.*

7, 9, 11, 13, Rye Street.	2, 4, Chapel Row.
24, Castle Street.	11, 13, 15, 17, Chapel Row.
16, 18, 20, 22, 26, Castle Street.	26, 28, 30, 32, Middle Row.
4, Bells Hill.	103, London Road.
99, London Road.	76, 78, 80, Dunmow Road.
33, 35, 37, 39, Dane Street.	19 & 21, Chapel Row.
40, 44, Windhill.	87, Hadham Road.
3, 5, 7, Hadham Road.	231, 233, Rye Street.

Re-housing.

The following 72 houses have been built on the Hallingbury Road site to re-house tenants displaced from houses subject to demolition orders and to abate overcrowding in the district:—

9 pairs 4 bedroom houses—Parlour.
9 „ large 3 bedroom houses—Non-parlour.
6 „ small 3 bedroom houses—Non-parlour.
12 „ 2 bedroom houses—Non-parlour.

Inspection and Supervision of Food.

(a) Milk Supply.

The following samples of milk retailed in the Urban District were examined:—

	Place of Production.	Bacterial count per ml.	Bacillus Coli.	Tubercle Bacillus.
1	Braughing R.D. ...	44,000	Absent in 0·01 ml.	Absent
2	B'p's Stortford U D.	48,000	„ „ 0·1 „	„
3	Essex	90,000	„ „ 0·1 „	„
4	Essex	7,200	„ „ 0·001 „	„
5	Essex	25,000	„ „ 0·001 „	„
6	Braughing R.D. ...	2,200	„ „ 0·001 „	„
7	Braughing R.D. ...	2,800	„ „ 0·1 „	„

(b) Meat and Other Foods.

There are four private slaughter-houses in the district, two registered situate in South Street, one licenced in Stansted Road, and one in Castle Street. Frequent inspections of the slaughter-houses have been made, and the requirements of the byelaws with respect to the cleansing of the premises, removal of offal, etc., have been satisfactorily carried out.

Carcases Inspected and Condemned.

	Cattle, excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)	108		19	783	262
Number inspected ...	108		19	783	262
All diseases except T.B. Whole carcases condemned	1 Anthrax				
Carcases of which some part or organ was con- demned	8				2
Percentage of the num- ber inspected affected with disease other than Tuberculosis					
Tuberculosis only Whole carcases condemned					
Carcases of which some part or organ was con- demned.					
Percentage of the num- ber inspected affected with Tuberculosis ...					

The following were found to be unfit for human food and were destroyed :—

Beef, $12\frac{1}{2}$ lbs., and 1 bullock anthrax ; ham, $98\frac{1}{2}$ lbs. ; teal, 3 ; pears, 240 lbs. ; bullocks' livers, 6 ; bullock's lungs, 1 ; bullock's heart, 1 ; pigs' plucks, 2.

One Bullock was found in a slaughterhouse suffering from Anthrax, and was dealt with by the Officer under the Contagious Diseases Animals Act.

The principal diseases affecting the organs, etc., necessitating their destruction have been :—cysts, abscesses, inflammation, congestion, strongylosis, necrosis and tuberculosis.

It was not necessary in any instance to obtain a Magistrate's Order for the destruction of diseased or unsound food, as the articles were all surrendered on request.

NOTIFIABLE DISEASES.

	At all ages	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years & over	Removed to Hospital	Treated in School Sanatorium	Nursed at Home	Died
Small-pox ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria...	7	...	...	...	...	...	4	1	1	1	...	...	...	5	...	2	0
Scarlet Fever	20	...	...	2	1	2	7	3	...	5	...	...	...	18	...	2	0
Enteric Fever	2	...	...	...	...	...	...	1	1	...	...	1	...	2	...	0	1
Puerperal Pyrexia	2	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	0
Pneumonia ...	11	2	...	...	...	...	2	...	...	...	...	3	11	7	4	5	5
Ophthalmia Neonatorum...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	3	...	...	1	...	...	...	...	...	...	...	1	1	3	...	0	0
Dysentery ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
*Acute Polio-myelitis	4	...	...	...	...	...	1	2	1	...	...	...	...	4	...	0	1
Pulmonary Tuberculosis ...	4	...	...	...	...	...	...	...	...	3	...	1	...	4	...	...	3
Other Tuberculosis	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

* 3 of these cases occurred at a Boarding School for Boys.

Ware Urban District.

Water.

The supply, which is publicly owned, has always been satisfactory in quality and quantity. There are two deep wells sunk in the chalk :—

1. Upper Waterworks (136 ft.) at Musley.
2. Lower Waterworks (101 ft.) at Musley Lane.

Storage is provided for by means of a Water Tower of 200,000 gallons, and a Reservoir of 240,000 gallons capacity. Considerable improvements have been made in recent years by the division of the Town into High and Low Level Zones. The water is chlorinated before distribution.

Drainage and Sewerage.

Practically the whole district is sewered. The sewage gravitates to the pumping station at Stanstead Abbots, in the Ware Rural District.

From here it is lifted to the Sewage Farm near Rye House (131 acres) and distributed by broad irrigation.

Public Cleansing.

Refuse is collected weekly in two covered mechanical conveyances and is disposed of by controlled tipping ; land in the valley between the Railway and the River is being lifted 5 ft. by this means.

There are 30 houses with cesspools and these are emptied free by the Council.

There are still 25 houses with pail closets and one with a chemical closet, and these are also emptied weekly by the Council.

Shops Act, 1934. Section 10.

Twenty-seven inspections were made during the year and all shops were found to comply in regard to the requirements of sub-sections 1 (a) and 2 governing the ventilation of shops and the provision of suitable and sufficient sanitary conveniences.

With regard to sub-section 1 (b) governing the heating requirements, twelve shops were without heating facilities, and as ten of these had shop parlours or similar rooms with heating facilities adjacent, no action was taken. An assistant was employed in only one of these shops. In two butcher shops heating facilities were provided for the clerk in the cash desk, but not for the shop.

Smoke Abatement.

Nine observations, in the aggregate occupying 278 mins., resulted in black smoke for a period of 145 seconds. In an endeavour to reduce smoke emission from a Cochrane boiler installed at a laundry, forced draught introduced by means of steam jets under the fire bars was found to be unsatisfactory by reason of the emission of grit and the jets were consequently removed. In this instance, grit was a greater nuisance than the nuisance from the smoke, which had been eliminated by the forced draught. The laundry owner found coke unsuitable as the evaporative power obtained was not sufficient and steam coal is used at the boiler manufacturer's recommendation.

Swimming Baths and Pools.

The public open-air swimming bath in the Priory grounds is supplied from the town mains. Purification is effected by filtration, chlorination and aeration. Complete circulation of the water is effected—the turnover occupying 4 hours.

Eradication of Bed-Bugs.

Number of inspections of Council houses—vermin found	-	-	-	-	14
“ “ “ “ Private houses—	“	“	-	-	5
“ “ “ “ Private houses (being prospective Council tenants)—vermin found	-	-	-	-	20
Number of inspections of Council houses—vermin not found	-	-	-	-	42
“ “ “ “ Private houses—	“	“	“	-	Nil
“ “ “ “ Private houses (being prospective Council tenants)—vermin not found	-	-	-	-	30
Number of re-inspections of Council houses	-	-	-	-	23
“ “ “ “ Private houses	-	-	-	-	17
“ “ “ “ Private houses (being prospective Council tenants)	-	-	-	-	29
Number of Council houses fumigated	-	-	-	-	9
“ “ Private “ “	-	-	-	-	5

Number of van fumigations with Hydrogen Cyanide.

Slum clearance families	-	-	-	-	-	10
Road widening removals (families)	-	-	-	-	-	2
Ordinary applicants for Council houses	-	-	-	-	-	3
Overcrowded families	-	-	-	-	-	9
Number of loads of bedding steam disinfested	-	-	-	-	-	71

Schools.

All three public elementary schools are on the main water supply and connected to the sewer. Trough closets are still in use.

*Housing.**Individual Unfit Houses.*

During the year the Council considered making Demolition Orders in respect of the 5 houses tabulated below.

13, Amwell End.	Action deferred awaiting plans from owner.
15, Amwell End.	„ „ „ „ „ „
8, The Bourne.	„ „ „ „ „ „
2, The Bourne.	Undertaking not to relet accepted.
17, West Street.	„ „ „ „ „ „

Undertakings not to relet were also given in respect of the following houses.

24, Crib Street.	Voluntarily closed.
4, East Street.	Owner gave undertaking instead of executing works under Section 9. Housing Act, 1936.
5, East Street.	

*Clearance Areas.**Representations.*

One area comprising three houses was represented by the Medical Officer of Health. The houses concerned are Nos. 30, 31 and 32, Church Street, and have been declared by the Council to be Clearance Area No. 18. Two adjacent houses, Nos. 28 and 29, Church Street, are to be acquired by the Council for the satisfactory development of the cleared area.

Demolition of houses in Clearance Areas, and Individual Unfit Houses.

The following houses have been demolished during the year :—

Clearance Area No. 13.

Chapel Yard, Nos. 1-6 inc., 9 and 10, 12-14 inc., and 3 sheds.
Riverside, Nos. 1 and 2. (Whole area not yet cleared).

Clearance Area No. 14.

Sams Yard, Nos. 3, 4, 5 and 14.
Horn Court, No. 2.

Clearance Areas Nos. 15, 16, and 17.

Church Street, Nos. 38, 38a, 39-43 inc., 47 and 48. (One house remains to be cleared).

Individual Houses Demolished.

London Road, Nos. 10-13 inc.

Sams Yard, Nos. 1 and 2. The owner voluntarily demolished these houses which he previously agreed not to relet.

Watton Road, Nos. 41-49. Odd Nos. These houses were purchased for road widening purposes. Nos. 41 and 43 were definitely unfit for human habitation and were not capable of being made fit at a reasonable cost, and the remaining three houses whilst superior in structure were in many respects unfit for human habitation.

Tenants re-housed from Unfit houses, etc.

47, Church Street.	2 persons.	Clearance Area.	
6, Amwell End.	3 "	" "	
2, Chapel Yard.	1 "	" "	
14, Amwell End.	11 "	" "	
42, Church Street.	2 "	" "	
32, Crib Street.	5 persons.	Udertaking not to relet.	
4/5, Eagle Yard (one house).	6 "	" "	
1, Eagle Yard.	2 "	" "	
32, Church Street.	7 "	" "	
17, West Street.	4 "	" "	
5, Star Street.	8 persons	Road widening purposes.	
7, Star Street.	2 "	" "	
43, Watton Road.	1 "	" "	
45, Watton Road.	3 "	" "	
47, Watton Road.	3 "	" "	
49, Watton Road.	4 "	" "	
41, Kibes Lane.	5 persons	Car Park	} Excluded from Clearance Area 12 by Minister of Health.
43, Kibes Lane.	4 "	" "	
45, Kibes Lane.	7 "	" "	

*Inspection and Supervision of Food.**Milk & Dairies Order, 1926.*

The requirement of Article 21 of the Order that utensils shall be cleansed and scalded with boiling water or steam is not observed by any of the cowkeepers or retail dairymen in the district, with the exception of one retailer who has a steam cabinet and stool for churns. Even this retailer does not sterilise his bottles. This cannot be considered entirely satisfactory in view of the legal requirement; and from both the consumers' and tradesmen's points of view there are many reasons why bottles and other utensils should be as nearly sterile as possible.

With regard to the requirement that dairymen shall cause all vessels to be kept at all times in a state of thorough cleanliness, a circular addressed to all dairymen suggested that they should point out to their customers the hygienic advantage obtained by rinsing bottles thoroughly in cold water immediately they are emptied.

A circular further to that sent out during the previous year was also addressed to all persons retailing milk in the district, informing them that information had been received that the practice of filling milk bottles in the streets continues; and that a report would be made to the Council of any retailer found to be doing so again.

In fairness to all producers it may be said that every effort is made to guard against contamination of the milk, and the interior of the cowsheds and dairies are maintained in a clean condition. All producers have been requested to remove the milk from the cowshed immediately each cow is milked and cool forthwith; and this procedure is to the best of my knowledge now faithfully carried out.

*Milk Samples.**Pasteurised Milk.*

	<i>Processed in U.D.</i>	<i>Processed out- side U.D.</i>
Number of samples	2	3
Passed plate count and coli tests	2	2
Failed plate count and coli tests	—	1

The four samples of Pasteurised milk which passed both the plate count and Coliform tests, also satisfied the Phosphatase test; but the one sample of milk, processed outside the district which failed both plate count and Coliform tests were unfortunately never subjected to the Phosphatase test.

Ungraded Milk.

	<i>Produced in U.D.</i>	<i>Produced out- side U.D.</i>
Number of samples	17	4
Passed Methylene Blue and coli tests	9	2
Passed Methylene Blue only	5	1
Passed coli only	2	—
Failed Methylene Blue and coli tests	1	1

The above results indicate that the ungraded milk sold in the district is generally of a very good quality, as the presence of the ubiquitous bacillus coli cannot necessarily be held to be harmful to the consumer; and in the samples considered above it must also be borne in mind that 82·2% of the samples produced in the district passed the Methylene Blue test. Two tuberculous samples were reported to the County Council, being the only positive results from 8 inoculations.

*Meat and Other Foods.**Slaughterhouses and Butcher shops.*

Number of visits to slaughterhouses	177
Number of slaughterhouses	3
(Only two slaughterhouses are used; one has not been used during the past 2 years).	
Number of visits to butcher shops	119
Number of butcher shops	8

There is no doubt that a very high grade of meat is sold in the town. The average age of bovines killed in the district is about 2/3 years. No meat is unnecessarily condemned, and the use of diseased meat for cats and dogs is permitted under the written guarantee of the butchers that the meat will not be used for human consumption.

Carcases inspected and condemned.

	<i>Cattle excluding Cows.</i>		<i>Sheep and Lambs.</i>		<i>Pigs.</i>
	<i>Cows.</i>	<i>Calves.</i>	<i>Lambs.</i>		
Number inspected	77	7	161		132

All diseases except Tuberculosis.

Carcases of which some part or organ was condemned	7	—	5	—
% number inspected diseased	9.09	—	3'1	—

Tuberculosis only.

Carcases of which some part or organ was condemned	12	—	—	15
% number inspected diseased	15'58	—	—	11'36

Particulars of diseased meat condemned as unfit for human consumption.

FROM SLAUGHTERHOUSES.

Tuberculosis.

Bovines.

4 heads.
1 liver.
10 mesenteries.
4 stomachs.
4 lungs.
2 thick skirts.

Porcines.

13 heads.
7 mesenteries.

Other diseases and conditions.

Bovines.

7 livers—Pyogenic abscesses.
2 livers—Distomatosis.
1 kidney and fat—Pyogenic abscesses.
1 lung—Pleurisy.

Ovines.

5 livers—Strongylosis.

FROM BUTCHER SHOPS.

Tuberculosis.

Bovines.

1 mesentery.
1 liver.
1 lung.

Porcines.

1 head.

Other diseases and conditions.

Bovines.

1 liver—Distomatosis.
1 liver—Pyogenic abscesses.

Ovines.

1 liver—Strongylosis.

Particulars of other food condemned, as being unfit for human consumption.

16 cases and 20lb. raspberries.
2 boxes of kippers.

Other food premises visited.

Number of visits to bakehouses	-	-	-	-	6
Number of visits to fried fish shops	-	-	-	-	2
Number of visits to wet fish shops and poulterers	-	-	-	-	11
Number of visits to provision shops, etc.	-	-	-	-	10

Canal Boats.

- | | | | | |
|---|---|---|---|-----|
| (1) Total number of canal boats inspected | - | - | - | 2 |
| (2) Defects dealt with during the year | - | - | - | Nil |

There is very little sleeping on the boats and the registrations cover one or two persons per boat. In addition to the registered boats there are some boats in use which are not used for sleeping purposes, and are accordingly unregistered.

The owners of the boats plying on the River Lea have informed me that as trade has been very poor there has been very little traffic on the river during the year.

Sawbridgeworth Urban District.

Water.

The town is adequately supplied by the Herts and Essex Waterworks situated in Redrick Lane. The hamlet of Spellbrook depends on a spring; the water is hand pumped from a collecting chamber in Spellbrook Lane.

Drainage and Sewerage.

The district is well sewered with the exception of Spellbrook. The sewage gravitates to the farm, situated in the south-east. After screening, it passes through a settling tank and a dosing chamber on its way to the contact beds. The effluent enters a small stream which discharges into the River Stort.

During the past year the quantity of storm water has increased considerably. Ditches have been cut in the land between the works and the river to intercept any possibility of overflow into the river. It will be advisable to enlarge the present storm water land at some time in the near future to cope with any excess quantity of storm water. There is sufficient land adjoining the works in the ownership of the Council for this purpose.

A new sewerage and sewage disposal scheme for approximately 85 houses in the south of the Urban District is now before the Ministry of Health for approval. If and when this scheme is finally completed the whole of the Urban area, with the exception of Spellbrook, will be on the main sewer.

Public Cleansing.

House refuse is collected weekly in a horse-drawn covered dust cart, and disposed of by controlled tipping near the sewage disposal works.

Prevalence of Infectious Disease.

No case of notifiable infectious disease was reported during the year.

The Public Mortuary.

Improvements to the Public Mortuary have been completed. Two slate slabs have been provided on brick piers, and an electric fan installed. Post mortems are carried out on a lead covered table. Electric lighting, hot and cold water has been made available.

Meat and Food Inspections.

Periodical visits have been made to the slaughterhouse and food shops in the district.

Two ovine carcasses and 2lbs. of cod fish have been condemned as being food unfit for human consumption.

Carcases Inspected and Condemned.

	Cattle, excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)					
Number inspected ...	15	2		42	17
All diseases except T.B. Whole carcasses condemned				2	
Carcases of which some part or organ was con- demned					
Percentage of the num- ber inspected affected with disease other than Tuberculosis					
Tuberculosis only Whole carcasses condemned					
Carcases of which some part or organ was con- demned.					
Percentage of the num- ber inspected affected with Tuberculosis ...					

Housing.

Twenty houses, comprising nineteen 3-bedroom non-parlour type, one 4-bedroom non-parlour type, have been completed for occupation by persons displaced from individual unfit houses dealt with under Section 11 of the Housing Act, 1936.

The unfit houses are as follows:—

Spellbrook Crossing—four back-to-back type houses.

Spellbrook, Main Road—

West side—terrace of three two-storey houses.

East side—terrace of six two-storey houses.

Spellbrook Lane—Detached Cottage.

Sawbridgeworth—

Nos. 2 and 4, West Road—two back-to-back types.

No. 10, Church Street—two-storey terrace cottage.

No. 94, London Road—detached cottage.

Nos. 3 and 4, Taylor's Yard—two semi-detached cottages.

Nos. 5 and 6, Bell Yard—two semi-detached cottages.

Harlow Road, Rowney Farm—two semi-detached cottages (these were occupied as one tenancy and were demolished voluntarily by the owner; two new cottages in substitution are being erected on the site.

Ten houses were nearing completion at the end of the year, 6 for general needs and 4 for overcrowding.

The 4 overcrowding cases which will be abated are as follows:—

No. 29, Knight Street 10 persons.

No. 10, West Road 13 persons.

No. 106, Cambridge Road 9 persons.

No. 8, Bull Fields 9 persons.

The accommodation provided for these 4 families consists of 4 bedrooms, 1 large living room and 1 parlour which can be used as a 5th bedroom.

Thirty-three houses have been erected and completed by private enterprise during the year.

Provision for Further Houses.

Sufficient land is available on the Bull Fields estate for a further 44 houses which will be built as the need arises.

Shops Act, 1934.

Thirty-eight shops were inspected and the following improvements were carried out:—

Three urinals with water supply for flushing.

One new drainage system.

One new water closet.

Ware Rural District.

Water.

Most of the District now has a piped water supply. The water is obtained from two boreholes, 450 feet in the chalk, at the Puckeridge Pumping Station, and distributed from a water tower at Old Hall Green. The pumps are electrically driven and all water is chlorinated before delivery.

Drainage and Sewerage.

Comprehensive schemes for the parishes of Great Amwell, Standon, St. Margarets and Thundridge have now been completed. New sewers have been laid in Great Amwell and St. Margarets, draining to the pumping station recently erected near the Gas Works in the former parish. The Stanstead Abbots pumping station has been remodelled and the flow from the two stations is pumped through cast iron pumping mains to the Ware U.D.C. station at Stanstead Abbots from which the sewage is lifted to the Ware Urban District Council's sewage farm at Rye Meads for disposal.

High Cross and Wadesmill are now drained to the new pumping station in the latter village from which the sewage is raised into the head of a gravitating sewer which has been laid from the Sow and Pigs Inn, Thundridge, to join the Ware U.D. sewer at the north end of the town of Ware.

Standon and Puckeridge are drained to the pumping station in Paper Mill Lane, Standon, from which the sewage is raised to the disposal works which have been constructed south of the village. At the disposal works the sewage is treated in sedimentation tanks followed by percolating filters and the effluent disposed of on an area of land set apart for the purpose.

The parishes of Eastwick, Gilston and The Mundens have no systems of sewerage or sewage disposal and in each case the houses are too scattered to need it.

The consideration of schemes for the parishes of Hunsdon, Widford and Ware Rural have again been deferred.

Part of the village of Hertford Heath is in Great Amwell parish and is sewered to disposal works in Hertford Rural District. This small drainage scheme is controlled by the Great and Little Amwell Sewage Farm Committee.

Public Cleansing.

Cesspools are emptied free on request. Pails are emptied twice weekly from cottages not connected to a sewer. House refuse is collected weekly in a covered conveyance and disposed of by tipping at Standon and St. Margarets.

Council Houses.

Eastwick	4	St. Margarets	8	Gilston	
Standon	106	Great Amwell	12	Stanstead Abbots	64
Great Munden	26	Thundridge	26	Hunsdon	34
Ware Rural	44	Little Munden	28	Widford	

Carcases Inspected and Condemned.

	Cattle, excluding Cows.	Cows.	Calves.	Sheep and Lambs.	Pigs.
Number killed (if known)					
Number inspected ...	160			301	397
All diseases except T.B. Whole carcases condemned					
Carcases of which some part or organ was con- demned	2				
Percentage of the num- ber inspected affected with disease other than Tuberculosis	1.25%				
Tuberculosis only Whole carcases condemned					
Carcases of which some part or organ was con- demned.					4
Percentage of the num- ber inspected affected with Tuberculosis ...					1.07

Prevalence and Control of Infectious Diseases.
Scarlet Fever.

	January	February	March	April	May	June	July	August	September	October	November	December	Total
Great Amwell -					1	3							
Standon - - -						1		2					
Stanstead Abbots -	2		1	2									
Boarding Schools -			3										

Diphtheria Immunisation.

This is still being carried out at the schools by Dr. Alan Wigfield and myself.

The number of children immunised at the various schools is as follows:—

	1935.	1936.	1937.	1938.
Eastwick - -	22	—	2	—
Gilston - -	14	—	2	3
Great Amwell -	27	3	3	1
Great Munden -	12	5	—	1
Hertford Heath -	3	—	—	2
High Cross -	11	7	3	1
Hunsdon -	9	—	1	1
Little Munden -	39	8	8	3
Puckeridge (C.E.) -	28	14	4	6
„ (R.C.) -	32	4	4	5
Standon - -	64	10	13	11
Stanstead Abbots -	20	17	5	12
Thundridge -	23	5	6	3
Wareside -	18	1	—	2
Widford - -	21	2	1	6
Other - - -	10	2	3	4
	353	78	55	61

	At all ages	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years & over	Removed to Hospital	Treated in Sanatorium	Nursed at Home	Died
Small-pox ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria...	1	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	0
Scarlet Fever	15	...	1	1	...	...	3	3	2	4	...	1	...	10	3	2	0
Enteric Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	0
Pneumonia	8	1	1	...	...	...	...	...	...	...	...	2	3	3	...	...	6
Ophthalmia Neonatorum...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	0
Dysentery ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Polio-myelitis	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	0
Other Tuberculosis	2	...	...	...	...	...	1	...	1	1	...	...	...	1	...	...	1

The Diphtheria case was a pre-school child who had not been immunised against the disease.

Braughing Rural District.

Water.

During the year the comprehensive water schemes were completed. The northern part of the district is now supplied from 2 deep boreholes at Chipping, from which water is pumped to a water tower at Throcking and to a reservoir at Buntingford; while the southern part of the district is supplied from Much Hadham, augmented by a supply from the Ware Rural District which is pumped to a water tower at Albury to serve the parishes of Braughing, Albury and the higher parts of Little and Much Hadham. The full benefit of the schemes have yet to be obtained, as various private connections remain to be completed.

The scheme for the parish of Wyddial is nearing completion—the borehole having been completed from which a satisfactory test pumping has been made.

Drainage and Sewerage.

Buntingford sewers drain by gravitation through a 15in. outfall (relaid during the year to replace the 9in. pipe, which was proving inadequate owing to the increased volume of sewage and consequent flooding) to sewage disposal works situated at the south end of the parish near Aspenden Bridge, where the sewage is dealt with by broad irrigation.

Cottered: The sewerage flows by gravitation to sedimentation tanks and disposed of by broad irrigation at a site a little to the north of the village.

Much Hadham town is drained by a 12in. outfall sewer to disposal works situated alongside the river at the south end of the parish, and dealt with by broad irrigation.

High Wych village has sewers which drain to a small but adequate disposal works consisting of a sprinkler and bacteria beds with final treatment on land.

Braughing village has a short length of sewer running from the Axe and Compass Inn to Hill Green, where there is a small broad irrigation area for the disposal of slop water.

Buckland parish has no proper system of sewerage or sewage disposal, though a few houses in the village of Chipping are drained to a small tank on the west side of the road.

The parishes of Albury, Anstey, Ardeley, Broadfield, Hormead, Meesden, the Pelhams, Throcking and Wyddial have no system of sewerage and sewage disposal and in each case the houses are too scattered to need it.

The parishes of Aspenden, Little Hadham, Thorley and Westmill are, at present, without sewerage systems, but increasing developments will necessitate them especially when the new piped water supply is available.

Council Houses.

	Parlour and 3 Bedrooms	Non- Parlour & 3 Bedrooms	Non- Parlour & 2 Bedrooms	Non- Parlour & 4 Bedrooms
Albury	10	2	2	2
Anstey	6	—	—	—
Allens Green	2	2	—	—
Braughing	8	12	2	2
Buntingford, Sunny Hill	24	20	—	—
" Baldock Road	—	18	—	—
Aspenden	—	8	4	2
Buckland	4	12	—	—
Cottered	18	24	—	—
Chipping	6	12	—	—
Hare Street	—	18	—	—
Great Hormead	—	12	—	—
Little Hormead	6	—	—	—
Meesden	6	4	—	—
Much Hadham, Oundle Lane	—	10	—	—
" Widford Road	—	10	—	—
" Perry Green	8	—	—	—
" Green Tye	—	6	—	2
Brent Pelham	2	—	—	—
Furneaux Pelham	—	6	1	1
Stocking Pelham	4	—	—	—
Thorley	2	2	—	—
Westmill	6	—	—	—
Yardley	6	8	—	—
Little Hadham	4	4	—	—
High Wych	6	8	2	2
	132	198	11	11

Prevalence and Control of Infectious Diseases.*Scarlet Fever.*

	January	February	March	April	May	June	July	August	September	October	November	December
Braughing	1	1		1			1		1			
Much Hadham										1	5	6

NOTIFIABLE DISEASES.

	At all ages	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years & over	Removed to Hospital	Treated in School Sanatorium	Nursed at Home	Died
Small-pox ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	17	...	...	...	1	...	9	4	1	2	...	...	...	14	...	3	0
Enteric Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	0
Pneumonia ...	9	1	1	1	...	...	...	2	...	1	2	...	1	3	...	...	4
Ophthalmia Neonatorum...	0	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Erysipelas ...	2	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	0
Dysentery ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-myelitis	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	3	...	...	...	...	...	...	...	...	2	...	1	...	3	...	...	1
Other Tuberculosis	2	...	...	...	...	...	...	...	...	1	...	1	...	2	...	...	1

Hertford Rural District.

Water.

A piped supply serves the parishes of Aston, Benington, Walkern Watton, Stapleford, Sacombe, and part of Bengo Rural. The water is obtained from two boreholes, 312 feet in the chalk, at the Aston Pumping Station, and distributed from water towers at Benington and Aston.

The new 310 feet deep boreholes at Little Berkhamstead have been brought into use and are supplying the parishes of Bayford, Brickendon, Hertingfordbury and Little Berkhamstead. The supply is proving ample in quantity and the monthly samples which have been taken for chemical and bacteriological examination have proved, excellent in quality.

The parishes of Tewin, Datchworth and Bramfield are supplied from the Welwyn R.D.C. reservoir at Burnham Green, the water being obtained in bulk from Welwyn Garden City Waterworks.

Waterford village (in Stapleford Parish) is supplied from a shallow brick well (11 feet) situated between two courses of the River Beane, and the water is pumped by a wheel actuated by the river.

The Metropolitan Water Board serves Hertford Heath (Little Amwell).

Drainage and Sewerage.

ASTON. The northern portion of the village is drained by a 9in. outfall, gravitating to sewage disposal works situated in the valley east of Aston Dene. The south-western portion of the village is drained to a pumping station near Stringer's Lane, from which the sewage is raised through a cast iron pumping main into the head of the gravitating outfall. At the disposal works the sewage is passed through sedimentation tanks, the effluent from which is irrigated on land.

BENGEO RURAL. The village of Waterford is sewered to a small pumping station, from which the sewage is raised and disposed of on an area of land. Tonwell drains to a small irrigation area to the south of the village.

BENINGTON. A portion of the village is drained by gravitation to a small irrigation area west of Garrat's Farm.

HERTINGFORDBURY. There is a small scheme at Birch Green, the sewage being dealt with by broad irrigation on an area of land.

LITTLE AMWELL. There is a joint scheme in conjunction with the Ware R.D.C. for Hertford Heath, which is sewered to disposal works (open tanks, filters and broad irrigation) south-west of the village.

LITTLE BERKHAMPSTEAD is drained by an outfall sewer running from the school northwards up the road and down Breach Lane to the disposal works at the north end of the lane. The sewage passes through screening tanks into two sedimentation tanks with a total capacity of 7,500 gallons. The tank effluent is distributed to a percolating filter with a capacity of 230 cubic yards and finally distributed over the land.

TEWIN. A portion of the village is sewered to an irrigation area south of the Rectory. A small sewer extension at Tewin enabled the conversion to w.c.'s of pails for which no adequate emptying facilities were available.

WALKERN. There is no proper system of sewers in the village, most of the houses having cesspools or pail closets. At the southern end of the village slop water is discharged to an old drain (which also takes the discharge from premises where cider is manufactured) running southwards down the road to near Walkern Mill, and thence through the fields to the existing sewage disposal works south-west of Walkern Croft. At the disposal works the sewage passes through a small catch pit and thereafter is dealt with on the land by broad irrigation.

WATTON. The sewage from that portion of the village north of the Bull Inn is drained by gravitation to the site south of the Corn Mill, where it is dealt with on land by broad irrigation. The southern portion of the village gravitates southwards down the main road to a cesspool near the War Memorial, the overflow discharging on to land on the east side of the road.

The parishes of BAYFORD, BRAMFIELD, BRICKENDON LIBERTY, SACOMBE and STAPLEFORD have no systems of sewerage and sewage disposal and in each case the houses are scattered to need it.

DATCHWORTH is another parish at present without any sewerage system, but requiring one on account of the development taking place.

Public Cleansing.

Cesspools are emptied on request free twice a year.

Council Houses.

Aston	13	Little Amwell	41	Bayford	8
Little Berkhamstead	15	Benington	21	Sacombe	4
Bengeo Rural	18	Stapleford	8	Bramfield	10
Tewin	26	Brickendon Liberty	4	Walkern	22
Datchworth	42	Watton	16	Hertingfordbury	18

NOTIFIABLE DISEASES.

	At all ages	Under 1 year	1-2 years	2-3 years	3-4 years	4-5 years	5-10 years	10-15 years	15-20 years	20-35 years	35-45 years	45-65 years	65 years & over	Removed to Hospital	Treated in School Sanatorium	Nursed at Home	Died
Small-pox ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	8	...	...	...	2	1	3	...	1	...	...	...	...	7	...	1	0
Enteric Fever	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Puerperal Pyrexia	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas ...	3	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	0
Dysentery ...	0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-myelitis	2	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	0
Pulmonary Tuberculosis ...	2	...	...	...	...	...	...	...	...	...	1	1	...	2	...	...	0
Other Tuberculosis	1	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	0

Cases of Scarlet Fever occurred in the following parishes :

Datchworth 3

Little Amwell 1

Stapleford 2

Walkern 1

Bengeo Rural 1

WARE (U.D.)

Lower Waterworks.

Chemical Results in parts per 100,000.

Appearance	...	...	...	...	Clear and bright.
Colour	...	...	...	...	Normal.
Odour	...	...	...	...	Nil.
Reaction pH	...	...	...	...	Neutral: 7.0.
Free Carbonic Acid	...	...	...	...	4.4.
Electric conductivity at 20° C.	...	...	...	...	610.
Total solids dried at 180° C.	...	...	...	...	41.0.
Chlorine in chlorides	...	...	...	...	2.2.
Alkalinity as Calcium Carbonate...	...	...	...	...	26.0.
Hardness: Total	...	...	...	...	32.0.
Temporary	...	...	...	...	24.0.
Permanent	...	...	...	...	8.0.
Nitrogen in Nitrates	...	...	...	...	0.56.
Nitrites	...	...	...	...	Absent.
Free Ammonia	...	...	...	...	0.0024.
Albuminoid Ammonia	...	...	...	...	0.0000.
Oxygen absorbed in 4 hours at 80° F.	...	...	...	...	0.005.
Metals	...	...	...	...	Absent.

Report :—Pure and wholesome.

BACTERIOLOGICAL RESULTS.

	Watton Road, Public supply from tower, March.	The Priory, Public supply from reservoir, May.	Tap from well at Lower Waterworks, June.	Reservoir at top waterworks, June.	Lower water-works from tower, September.	Water Inspector's shop from reservoir, September.	Water Inspector's house from reservoir, November.	Myddleton Road, Booster, November.
No. of bacteria per c.c.—								
On Agar in 3 days at 20° C.	...	13	4	1	0	1	0	0
" " 1 day at 37° C.	...	1	15	35	2	4	2	3
" " 2 days at 37° C.	...	4	980	1200	2	6	4	5
Smallest quantity of water producing acid and gas in Bile Salt Lactose Broth after 2 days incubation at 37° C.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.
Bacillus Coli	...	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.
Bacillus Welchii	...	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.
Report	...	Pure and wholesome.	Whole-some.	Whole-some.	Whole-some.	Whole-some.	Pure and wholesome.	Pure and wholesome.

HERTFORD (M.B.)—Water Analyses. CHEMICAL RESULTS IN PARTS PER 100,000.

	Low Level Supply February.	High Level Supply February.	Bengeo Tower May.	Wadesmill I. May.	Low Level Supply July.	High Level Supply July.	Westmill July.	Port Hill July.	Hartham July.	Waterford July.	Low Level Supply August.	Sewage Works August.
Appearance ...	Clear and Bright	Clear and Bright	Bright—slight white deposit of chalk	Bright—very slight deposit of chalk particles	Bright—very few particles of mineral debris	Clear and Bright	Clear and Bright					
Colour ...	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal
Odour ...	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Reaction pH ...	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Free Carbonic Acid ...	7.3	7.3	7.7	7.1	7.0	7.4	6.9	7.0	7.1	7.2	7.0	7.3
Electric Conductivity ...	2.6	3.1	1.0	3.3	3.3	2.0	4.0	2.8	3.1	2.6	3.5	1.8
Total Solids dried 180° C. ...	495	515	525	525	530	525	525	480	495	490	510	490.0
Chlorine in Chlorides ...	33.0	34.0	35.0	35.0	35.5	35.0	35.0	32.0	33.0	32.5	34.0	33.0
Hardness: Temporary ...	1.5	1.8	1.6	1.6	1.5	1.5	1.5	1.5	1.9	1.5	1.6	1.4
Permanent ...	22.0	22.5	23.0	23.0	23.0	23.0	23.0	22.0	22.5	23.0	22.0	22.0
Total ...	4.0	5.5	6.0	6.0	6.0	6.0	6.0	5.0	5.5	5.0	6.0	6.0
Nitrogen in Nitrates ...	26.0	28.0	29.0	29.0	29.0	29.0	29.0	27.0	28.0	28.0	28.0	28.0
" Nitrites ...	0.24	0.24	0.40	0.40	0.46	0.46	0.46	0.32	0.32	0.46	0.32	0.26
Free Ammonia ...	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Albuminoid Ammonia ...	0.0000	0.0008	0.0064	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Oxygen absorbed in 4 hours at 80° F. ...	0.0000	0.0005	0.010	0.000	0.000	0.005	0.000	0.000	0.000	0.000	0.005	0.005
Metals ...	Absent	Absent	Absent	Absent	Iron 0.005	Iron 0.005	Iron 0.005	Iron 0.020	Iron 0.010	Iron 0.005	Absent	Iron, etc. absent
					Zinc	Zinc	Zinc					Zinc trace

BACTERIOLOGICAL RESULTS.

	Low Level Supply February.	High Level Supply February.	Bengeo Tower May.	Wadesmill I. May.	Low Level Supply July.	High Level Supply July.	Westmill July.	Port Hill July.	Hartham July.	Waterford July.	Low Level Supply August.	Sewage Works August.
No. of Bacteria growing on Agar per c.c. or m.l. in 1 day at 37° C. ...	0	0	5	3	3	1	1	5	7	2	0	8
2 days at 37° C. ...	2	3	90	3	33	20	12	12	34	7	2	18
3 days at 20° C. ...	70	95	130	18	180	160	150	190	140	180	3	140
Bacillus Coli ...	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Bacillus Welchii ...	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.
Report ...	Pure and whole-some	Pure and whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some	Whole-some

*The water is of the highest degree of organic quality and shows no chemical evidence of undesirable contamination. Bacteriologically, it contains a considerable number of bacteria and excretal bacilli, such as the Bacillus Coli, though absent in 20 c.c., are present in 50 c.c., indicative of high bacterial contamination. Whilst there is no reason to regard the water as unwholesome, a higher standard of bacterial purity is desirable.

Bacteriological Samples.

HERTFORD (M.B.)—Water Analyses

Where taken.	Month sample was taken.	No. of Bacteria growing on Agar per c. c. or m. 1 in.			Smallest quantity of water producing Acid and Gas in Bile Salt Lactose Broth after 2 days incubation at 37° C. (Presumptive B. Coli Test).	Bacillus Coli.	Bacillus Welchii.	Report.
		1 day at 37° C.	2 days at 37° C.	3 days at 20° C.				
1 End of New Main	February	1	4	130	Absent in 100 c.c.	Absent in 100 c.c.	Pure and wholesome	
2 Old Main...	February	0	1	190	"	"	"	
3 End of New Main	February	0	1	210	50 c.c.	"	"	
4 Old Main...	February	6	7	120	Absent in 100 c.c.	"	"	
7 Port Hill...	May	1	3	9	"	"	"	
8 Hartham...	May	0	1	3	"	"	"	
9 Molewood	May	4	4	5	"	"	"	
10 Waterford	May	3	3	14	"	"	"	
11 Wadesmill (2)	May	1	4	42	"	"	Wholesome	
14 Port Hill...	May	1	2	12	"	"	Pure and wholesome	
15 Hartham...	May	4	4	30	100 c.c.	"	Wholesome	
16 Molewood	May	2	4	7	Absent in 100 c.c.	"	Pure and wholesome	
17 Waterford	May	1	1	4	"	"	Wholesome	
18 Port Hill...	June	2	7	8	"	"	Pure and wholesome	
19 Hartham	June	0	0	3	"	"	"	
20 Molewood	June	1	1	2	"	"	"	
21 Waterford	June	0	2	12	"	"	"	
30 Wadesmill	October	2	5	90	"	"	"	
31 Port Hill...	October	6	12	130	"	"	"	
32 Hartham...	October	2	7	52	"	"	"	
33 Molewood	October	1	2	3	"	"	"	
34 Waterford	October	0	1	26	"	"	"	
35 Wadesmill	November	0	0	7	"	"	"	
36 Port Hill...	November	2	2	8	"	"	"	
37 Hartham...	November	5	7	—	{ Present in 50 c.c. Absent in 20 c.c. Absent in 100 c.c.	"	Wholesome	
38 Molewood	November	0	1	2	"	"	Pure and wholesome	
39 Waterford	November	2	3	10	"	"	"	
40 Wadesmill	December	1	4	7	"	"	"	
41 Port Hill...	December	0	5	14	"	"	"	
42 Hartham	December	1	3	5	"	"	"	
43 Molewood	December	0	0	1	"	"	"	
44 Waterford	December	0	5	12	"	"	"	

The water is of the highest degree of organic quality and shows no chemical evidence of undesirable contamination. Bacteriologically, it contains a considerable number of bacteria and excretal bacilli, such as the Bacillus Coli, though absent in 20 c.c. are present in 50 c.c., indicative of slight bacterial contamination. Whilst there is no reason to regard the water as unwholesome, a higher standard of bacterial purity is desirable.

HODDESDON URBAN DISTRICT.

Analyses of Samples of Water taken from Council's Main Supply during 1938.

	DATE SAMPLE TAKEN.					
	21/4/1938	21/4/1938	26/5/1938	26/5/1938	26/10/1938	26/10/1938
Bacteriological Results :						
No. of Colonies per C.C. or MI. on Agar in 3 days at 20° C.	46	21	3	2	7	1
No. of Colonies per C.C. or MI. on Agar in 1 day at 37° C.	1	7	6	15	10	4
No. of Colonies per C.C. or MI. on Agar in 2 days at 37° C.	34	18	8	21	18	4
Acid and Gas in Bille-Salt Lactose Broth after 2 days at 37° C. ...	Absent in 100 c.c.	Present in 100 c.c. Absent in 50 c.c.	Absent in 100 c.c.			
Bacillus Coli—Present in ...	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.
B. Welchii—Present in ...	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.
Chemical Results :						
(Parts per 100,000).						
Appearance ...						
Colour ...						
Odour ...						
Reaction pH. ...						
Free Carbonic Acid ...						
Electric Conductivity at 20° C.						
Total Solids, 180° C. ...						
Chlorine in Chlorides...						
Nitrogen in Nitrates ...						
Nitrites ...						
Hardness—Permanent						
Temporary						
Total ...						
Metals ...						
Free Ammonia ...						
Ammoniacal Nitrogen						
Albuminoid Ammonia						
Albuminoid Nitrogen ...						
Oxygen absorbed in 4 hrs. at 80° F. ...						
Analysts Report ...	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

HODDESDON URBAN DISTRICT.

Analyses of Samples of Water taken from Council's Main Supply during 1938.

DATE SAMPLE TAKEN.

	5/1/1938	13/1/1938	8/2/1938	21/2/1938	25/2/1938	2/3/1938	2/3/1938
Bacteriological Results :							
No. of Colonies per C.C. or Ml. on Agar in 3 days at 20° C.	90	3	14	230	9	13	1
No. of Colonies per C.C. or Ml. on Agar in 1 day at 37° C.	8	1	2	2	0	1	0
No. of Colonies per C.C. or Ml. on Agar in 2 days at 37° C.	58	3	3	3	2	1	1
Acid and Gas in Bile-Salt Lactose Broth after 2 days at 37° C. ...	Present in 10 c.c.	Absent in 100 c.c.	Absent in 100 c.c.		Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.
Bacillus Coli—Present in ...	10 c.c.			100 c.c.			
Absent in ...	10 c.c.	100 c.c.	100 c.c.	50 c.c.	100 c.c.	100 c.c.	100 c.c.
B. Welchii—Present in ...	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.	100 c.c.
Absent in ...							
Chemical Results :							
(Parts per 100,000).							
Appearance ...				Clear & Bright Normal			
Colour ...				Nil			
Odour ...				Neutral 7.7			
Reaction pH. ...				1.5			
Free Carbonic Acid ...				585			
Electric Conductivity at 20° C.				39.0			
Total Solids, 180° C. ...				2.6			
Chlorine in Chlorides...				0.46			
Nitrogen in Nitrates ...				Absent			
Nitrites ...				10.0			
Hardness—Permanent				20.0			
Temporary				30.0			
Total ...				Absent			
Metals ...				0.0024			
Free Ammonia ...				0.0016			
Ammoniacal Nitrogen							
Albuminoid Ammonia							
Albuminoid Nitrogen ...							
Oxygen absorbed in 4 hrs. at 80° F. ...							
Analysts Report ...	Unsatisfactory	Satisfactory	Satisfactory	Unsatisfactory	Satisfactory	Satisfactory	Satisfactory

HERTFORD RURAL DISTRICT—Water Analyses.

ASTON.

	Chemical Results in parts per 100,000.								
	March	April	May	June	July	Sept.	Oct.	Nov.	Dec.
Appearance...	Clear and Bright Normal None Neutral 7.1	Clear and Bright Normal None Neutral 7.4	Clear and Bright Normal None Neutral 7.1	Clear and Bright Normal None Neutral 7.2	Clear and Bright Normal None Neutral 7.1	Clear and Bright Normal None Neutral 7.1	Clear and Bright Normal None Neutral 7.2	Clear and Bright Normal None Neutral 7.1	Clear and Bright Normal None Neutral 7.1
Colour ...	505	505	495	500	500	500	495	505	490
Odour ...	33.5	33.5	33.0	33.5	33.0	33.0	33.0	34.0	32.5
Reaction pH.	1.4	1.5	1.4	1.4	1.4	1.4	1.4	0.9	1.4
Free Carbonic Acid	0.24	0.26	0.20	0.30	0.20	0.26	0.22	0.24	0.20
Electric conductivity at 20° C. ...	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Total solids, 180° C. ...	3.5	6.5	5.5	5.5	3.5	5.5	5.5	6.0	6.0
Chlorine in Chlorides	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.0	22.0
Nitrogen in Nitrates	26.0	29.0	28.0	28.0	26.0	28.0	28.0	28.0	28.0
Nitrites ...	Iron 0.005	Absent	Iron 0.005	Absent	Iron 0.015	Absent	Iron 0.003	Iron 0.015	Iron 0.003
Hardness: Permanent	0.0016	Absent	Absent	Absent	Absent	Absent	Absent	Absent	0.0016
Temporary	0.0020	Absent	Absent	Absent	0.0012	0.0008	0.0004	0.0020	0.0024
Total ...	0.0020	0.005	0.005	0.005	0.010	0.015	None	0.010	0.005
Metals ...									
Free Ammonia ...									
Albuminoid Ammonia									
Oxygen absorbed in 4 hours at 80° F. ...									

Bacteriological Results.

No. of Bacteria per c.c.:									
On Agar in 3 days at 20° C. ...	160	9	2	85	30	46	18	25	8
Do. 1 day at 37° C. ...	9	1	1	2	5	17	9	2	2
Do. 2 days at 37° C. ...	38	2	1	77	26	38	12	18	4
The Bacillus Coli ...	Absent in 100 c.c.								
Report ...	Pure and wholesome								

HERTFORD RURAL DISTRICT—Water Analyses.

	Bayford			Tewin
	March	June	April	
Chemical Results in parts per 100,000.				
Appearance	...	...	...	Bright, very faint brown film deposit of mineral particles
Colour	Normal	Normal	Normal	Normal
Odour	None	None	None	None
Reaction pH	Neutral 7.4	Neutral 7.4	Neutral 7.3	Neutral 7.2
Free Carbonic Acid	5.30	1.7	5.20	3.0
Electric conductivity at 20° C.	35.0	5.20	35.0	5.15
Total solids, 180° C.	1.9	35.0	2.0	34.0
Chlorine in Chlorides	0.40	2.0	0.34	1.4
Nitrogen in Nitrates	Absent	0.36	Absent	0.40
Nitrites	6.0	8.5	4.5	Absent
Hardness: Permanent	20.0	20.5	23.5	6.0
Temporary	26.0	29.0	28.0	22.0
Total	Trace of zinc	Trace of zinc	Iron 0.005	28.0
Metals	0.0024	0.0004	Absent	Absent
Free Ammonia	0.0040	Absent	0.0020	Absent
Albuminoid Ammonia	0.030	0.005	0.015	Absent
Oxygen absorbed in 4 hours at 80° F.	Bacteriological Results.			
No. of Bacteria per c.c.—	96	160	300	120
On Agar in 3 days at 20° C.	6	1	1	1
" " 1 " 37° C.	16	15	2	6
" " 2 " 37° C.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.	Absent in 100 c.c.
The Bacillus Coli	Pure and wholesome	Pure and wholesome	Pure and wholesome	Pure and wholesome
Report	wholesome	wholesome	wholesome	wholesome

BISHOP'S STORTFORD—Water Analyses.

	MARCH.	JUNE.	SEPTEMBER.	DECEMBER.
CHEMICAL RESULTS IN PARTS PER 100,000.				
Appearance	...	Clear, bright	Clear, bright	Clear, bright
Colour	...	Very faint opalescence, slight film of mineral deposit	Normal	Normal
Odour	...	Normal	Nil	Nil
Reaction pH	...	Neutral 7.3	Neutral 7.0	Neutral 7.1
Free Carbonic Acid	...	2.0	3.5	4.4
Electric Conductivity at 20° C.	...	520	535	525
Total Solids, dried at 180° C.	...	35.0	36.0	35.0
Chlorine in Chlorides	...	1.5	1.4	1.5
Alkalinity as Calcium Carbonate	...	26.5	26.5	26.0
Hardness—Total	...	30.0	30.0	30.0
Temporary	...	24.5	24.5	24.0
Permanent	...	4.5	5.5	6.0
Nitrogen in Nitrates	...	0.16	0.22	0.24
Nitrites	...	Absent	Absent	Absent
Free Ammonia	...	0.0000	0.0004	0.0000
Ammoniacal Nitrogen	...	0.0000	0.0000	0.0000
Albuminoid Ammonia	...	0.0000	0.0004	0.0000
Nitrogen	...	0.010	0.010	0.000
Oxygen absorbed in 4 hrs. at 80° F.	...	0.02	Absent	Absent
Iron	...	Marked trace	Absent	Absent
Zinc	...			
BACTERIOLOGICAL RESULTS.				
Number of Bacteria growing on Agar per c.c. or m.l.				
in 1 day at 37° C.	0	9	2	3
" 2 days at 37° C.	0	12	4	12
" 3 " " 20° C.	5	16	7	35
The Bacillus Coli—Present in	100 c.c.	100 c.c.	100 c.c.	100 c.c.
Absent in				
Bacillus Welchii (B. Enderitidis Sporogenes)—				
Present in	100 c.c.	100 c.c.	100 c.c.	100 c.c.
Absent in				
Report	Pure & Wholesome	Pure & Wholesome	Pure & Wholesome	Pure & Wholesome

BRAUGHING (R.D.)—Water Analyses.

	Buntingford Waterworks (January)	Ardeley Public Well (March)	Hornead Public Well (June)	Anstey Public Well (June)	Meesden Public Well (June)
CHEMICAL RESULTS IN PARTS PER 100,000.					
Colour and turbidity	...	Brownish, very turbid	Clear, no turbidity	Clear, no turbidity	Clear, no turbidity
Odour	...	Slightly earthy	None	None	None
Reaction	...	Alkaline	Alkaline	Alkaline	Alkaline
Residue	...	Pale fawn. No charring on ignition. Bright brown residue on centrifuging due to iron	White, no charring	White, no charring	White, no charring
Chlorides	...	3	2.25	2.25	3.5
Free Ammonia	...	None	None	None	0.005
Nitrates	...	0.16	0.2	0.15	0.075
Nitrites	...	None	None	None	None
Oxygen absorbed in 15 minutes at 80° C.	...	0.075	0.075	0.05	0.1
Metallic impurities:—					
Lead, zinc, copper...	...	None	None	None	None
Iron	...	0.028%	Faint trace	Faint trace	Faint trace
Hardness:—Total	...	48	27.5	24.5	60
Permanent	...	10	4.5	3.5	23
Temporary	...	38	23	21	37
BACTERIOLOGICAL RESULTS.					
No. of organisms per c.c. of water—					
On Agar at 37° C. in 1 day	1				
" " " 20° C. " 2 days	1	5			
" " " 20° C. " 3 days	4	251			
Bacillus Coli	Absent in 100 c.c.	Absent in 100 c.c.			
" Welchii	"				
Report	Pure and Wholesome	Pure, excessive amount of iron	Pure and wholesome	Pure and wholesome	Satisfactory

Ware (R.D.)—Water Analyses.

	WARESIDE.		LITTLE MUNDEN.		HUNSDON.		WIDFORD.		STANDON.	
	Helham Green Well. March.	Nasty Well. March.	Green End Well. March.	Haultwick Well. March.	Acorn Street Well. March.	High Street Well. March.	Nether Street Well. March.	Station Road Crescent No. 2 Well. February.	High Cross Public Well. March.	Wadesmill Public Well. March.
Appearance	Clear and bright	Bright	Bright	Clear and bright	Opal-escence due to iron oxide and zinc carbonate	Clear and bright	Clear and bright	Clear and bright	Clear and bright	Clear and bright
Colour	Normal	Normal	Normal	Normal	Grey	Normal	Normal	Normal	Normal	Normal
Reaction pH	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral
Free Carbonic Acid	7.3	7.3	7	6.8	7.2	7	7	7	7	7
Electric Conductivity at 20° C.	2.2	2.8	4	3.5	3.1	4.4	4.4	4.4	4.4	4.4
Total Solids, 180° C.	545	760	540	765	650	795	1000	705	705	615
Chlorine in Chlorides	36.5	51	36	51	43.5	53	66.5	47	47	41
Nitrogen in Nitrates	1.8	3	1.6	3.7	2.6	3	4.2	3.7	3.7	2.1
Hardness—Permanent	0.24	1.2	0.52	1.5	None	1.2	1.6	0.83	0.83	0.36
Temporary	7.5	8.5	5.5	7	7	17.5	18.5	7	7	8
Total	22.5	25.5	24.5	25	29	26.5	26.5	27	27	26
Metals	30	34	30	32	36	44	45	34	34	34
	Absent	Iron 0.015 Zinc trace	Iron 0.005 Zinc trace	Trace of Zinc	Iron 0.13 Distinct trace of Zinc	Absent	Iron 0.005	Absent	Absent	Absent
Free Ammonia	None	None	0.0004	None	Zinc	None	None	None	None	None
Albuminoid Ammonia	None	0.0004	0.0004	None	0.0136	None	0.001	None	None	None
Oxygen absorbed in 4 hrs. at 80° F.	None	0.015	0.015	0.005	0.025	0.075	0.015	0.005	0.005	0.005

CHEMICAL RESULTS IN PARTS PER 100,000.

BACTERIOLOGICAL RESULTS.

No. of Bacteria per c.c. on Agar in 3 days at 20° C.	6	Absent in 20 c.c.	6	6	Satisfactory	6	Absent in 20 c.c.	6	Absent in 20 c.c.	Wholesome
1 day at 37° C.	2	2	2	2	Excess of suspended matter	2	2	2	2	Wholesome
2 days at 37° C.	2	2	2	2	Derivatively polluted sub soil	2	2	2	2	Wholesome
The Bacillus Coli	2	2	2	2	Derivatively polluted sub soil	2	2	2	2	Wholesome
Report	Wholesome, suitable for drinking and domestic purposes	Excess of suspended matter	Wholesome, suitable for drinking and domestic purposes	Wholesome						

HERTFORD (M.B.)—Sewage Effluents.

Results expressed in parts per 100,000.

	January.	March.	April.	May	June	August	October.	December.
Appearance	Bright, very slight humus deposit	Bright, slight humus deposit	Flocculent humus deposit	Bright, very slight humus deposit	Bright, very slight deposit of brown humus	Bright, very slight deposit of brown humus	Bright, very slight flocculent brown humus deposit	Bright, slight flocculent brown humus deposit
Colour	Slight yellow	Faint yellow	Slight yellow	Slight yellow	Slight yellow	Slight yellow	Slight yellow	Yellow
Odour	Slight earthy	Slight earthy	Earthy	Earthy	Faint earthy	Earthy	Earthy	Slight earthy
Suspended Matter, Total	Under 1.0	Under 1.0	1.4	Under 1.0	Under 1.0	Under 1.0	Under 1.0	1.6
" " Volatile	Under 1.0	Under 1.0	1.1	Under 1.0	Under 1.0	Under 1.0	Under 1.0	1.1
Chlorine	3.8	3.5	2.9	3.6	3.8	6.0	4.8	4.6
Nitrites	M. trace	D. Trace	D. Trace	D. Trace	Trace	Distinct Trace	Distinct trace	Trace
Nitrogen in Nitrates ...	0.28	0.36	0.28	0.32	0.34	0.40	0.42	0.48
Albuminoid Ammonia ...	0.575	0.425	0.575	0.650	0.440	0.475	0.775	0.650
Free Ammonia	0.060	0.042	0.036	0.040	0.035	0.027	0.040	0.070
Oxygen absorbed 4 hrs. at 80° F.	0.460	0.240	0.30	0.240	0.23	0.25	0.28	0.44
" " 3 minutes at 80° F.	—	—	—	—	—	—	—	—
Impurity figure	5.3	3.3	3.3	3.2	2.9	2.6	3.4	5.7
Biological oxygen demand	1.08	0.30	0.30	0.70	0.60	0.60	0.45	0.40
Report	Satisfactory	Good	Good	Very Satisfactory	Very Satisfactory	Complies	Satisfactory	Very Satisfactory

HODDESDON URBAN DISTRICT.

Analyses of Sewage Effluents taken from Hoddesdon Sewage Farm for the year 1938.

Parts per 100,000.

	February	April	June	September	November
Total Dissolved Matter ...	67'000	97'50	94'30	104'0	91'50
Dissolved Organic Matter ...	5'00	6'50	5'00	4'0	6'00
Chlorine in Chlorides ...	9'50	12'00	13'29	13'14	13'00
Equal to Sodium Chloride ...	15'65	19'77	21'90	21'65	21'42
Nitrogen in Nitrates ...	3'30	4'24	5'78	4'83	5'89
Equal to Nitric Acid ...	12'73	16'36	22'30	18'63	22'73
Free (Actual or Saline) Ammonia ...	'31	'70	0'46	'040	'41
Albuminoid (Organic) Ammonia ...	'095	0'06	0'8	'080	'10
Oxygen absorbed by oxidisable organic matter, etc., from a solution of potassium permanganate at a temperature of 80° Fahr.—					
In 15 minutes	'36	'48	'46	'31	'36
In 4 hours ...	'77	'80	'80	'53	'63
Dissolved Atmospheric Oxygen absorbed in five days, after complete initial saturation with air of the effluent including its sedimentary and suspended matter ...	1'5	1'5	'7	1'3	1'3
Total Suspended Matter ...	'6	'7	1'0	'6	'6
Report of Analyst ...	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Satisfactory

