

[Report 1923] / Medical Officer of Health, Surrey County Council.

Contributors

Surrey (England). County Council.

Publication/Creation

1923

Persistent URL

<https://wellcomecollection.org/works/kcnfats8>

License and attribution

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

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

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



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

HC 4413
Surrey County Council.

ANNUAL REPORTS

OF THE

COUNTY MEDICAL OFFICER OF HEALTH

AND

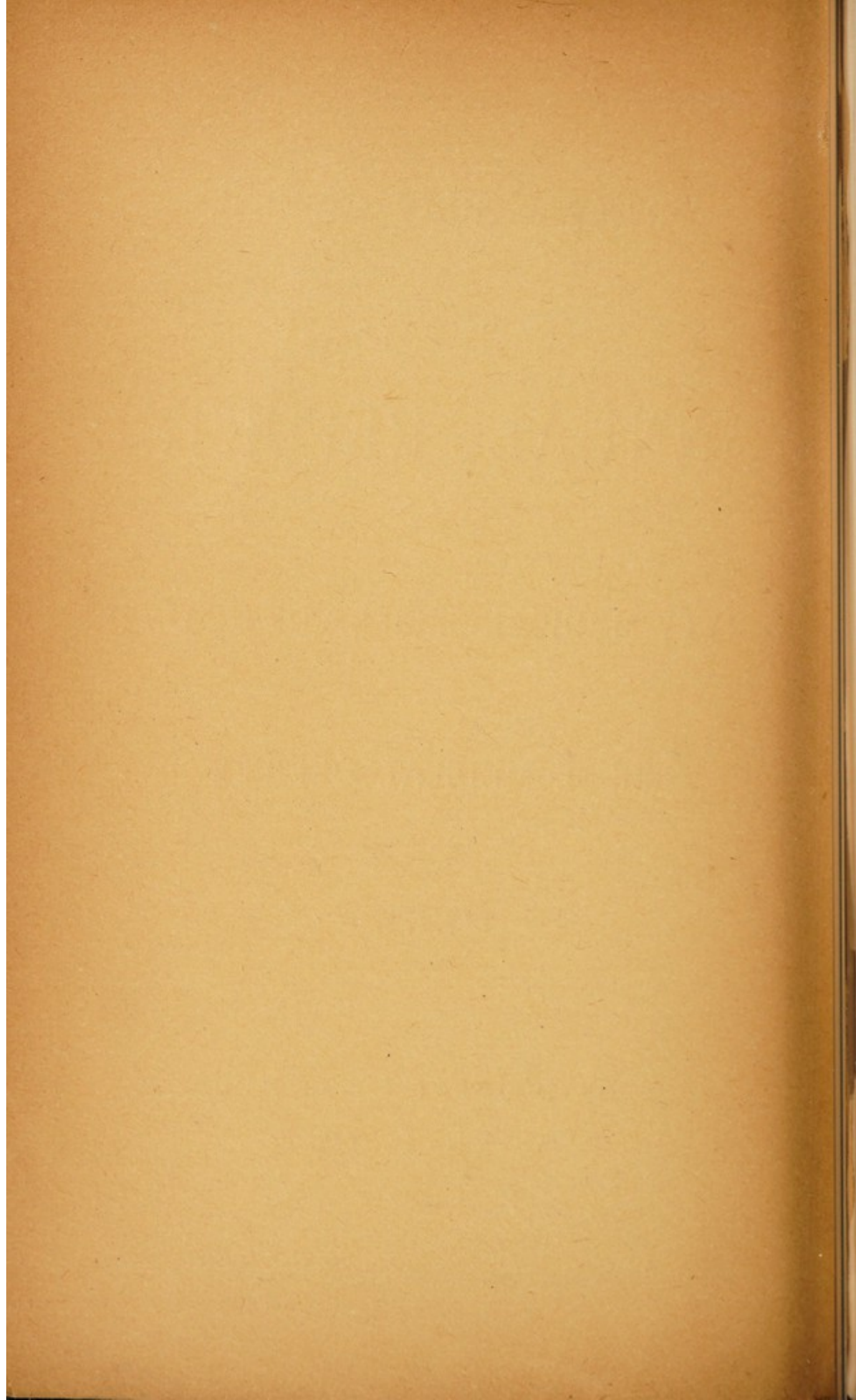
SCHOOL MEDICAL OFFICER

FOR THE YEAR

— 1923, —

By JOSEPH CATES,

M.D., State Medicine, B.S. (Lond.), D.P.H. (Camb.).



Surrey County Council.

ANNUAL REPORT

OF THE

COUNTY MEDICAL OFFICER of HEALTH

For the Year 1923

BY

JOSEPH CATES, M.D., State Medicine, B.S. (Lond.) ; D.P.H. (Camb).

Fellow of the Royal Society of Medicine, of the Society of Medical Officers of Health, and of the Royal Sanitary Institute. Formerly Demonstrator of Public Health at King's College, University of London, Medical Officer of Health of the Borough and Port of Lancaster and of the County Borough of St. Helens.

CONTENTS.

REPORT OF MEDICAL OFFICER OF HEALTH.

	PAGE.
Preface	4
Staff—	
Medical	6
Health Visitors	7
Clerical	7
Medical officers of health of sanitary districts	8
Vital statistics	9
Natural conditions of the county	10
Rivers	10
Population	11
Births	12
Deaths	12
Infant mortality	12
Epidemic diseases—Deaths from seven principal	13
Heart disease, respiratory diseases, tuberculous diseases and cancer—	
Deaths from	13
Infectious diseases	13
Hospitals for infectious diseases—	
Smallpox	14
Other infectious diseases	14
Tuberculosis	14
Dispensaries	15
Sanatorium	15
Shelters	19
Bacteriological work	19
Venereal diseases... ..	19
Maternity and child welfare—	
Midwifery service	20
Stillbirths	21
Abortions and miscarriages	21
Inflammation of the eye and ophthalmia neonatorum	21
Rise of temperature and puerperal fever	21
Training of midwives	21
Training of unmarried mothers... ..	21
Payment of doctors called in to the help of midwives	21
Notification of Births Acts	22

	PAGE.
Maternity and child welfare (continued)—	
Centres	24
„ Routine in force	24
Home visiting	26
Illegal midwifery practice by uncertified women	26
Water Supplies	27
Housing	27
Sale of Food and Drugs Acts... ..	31
Public Health (Milk and Cream) Regulations, 1912	32
Appendix I.—Farnham R.D.C.—Sanitary circumstances and administration	33
II.—Wandle River—Report	53
III.—Statistical Tables—	TABLE
Population—Census, 1901, 1911, 1921	I.
„ individual sanitary districts	II.
Births	III., IV., IV.A.
Deaths	III., V., V.A., VI.
Deaths under one year	III., VII., VII.A.
„ from seven principal epidemic diseases	VIII., VIII.A.
„ „ Heart disease, respiratory diseases, tuberculous diseases and cancer	IX., IX.A., IX.B.
Infectious diseases—notifications of	X., XI.
Isolation Hospitals	XI.A.
Tuberculosis—	
Cases and deaths, 1912–1923	XII.
Notifications classified under certain age periods	XIII.
Dispensaries—List of	XIV.
„ Attendances at	XV.
Primary examinations for diagnosis	XVI.
Patients treated in residential institutions	XVII.
Venereal diseases—attendances at centres	XVIII.
Maternity and child welfare—	
Attendances at centres, births registered and notified	XIX.
Housing—Statement of houses erected	XX.
Food and Drugs Acts—Samples analysed	XXI.

(Index to Report of School Medical Officer—see p. 100).

PREFACE.

For the year 1923 the vital statistics of the county were generally favourable. The death-rate was slightly below that of the preceding year. The decrease was chiefly due to a lessened prevalence of influenza.

The deaths from diabetes show a remarkable reduction. This may possibly be attributed to an increasing use of insulin in treatment. Cancer was responsible for at least a thousand deaths, and disease of the heart was stated to be the cause of about an equal number.

The infant death-rate was 45 per 1,000 births, 10 per cent. below that of the preceding year. Reference to table VIIa. will show how remarkable has been the decline in infant mortality during the last twenty years.

In the report for 1921, attention was called to the following directions in which public health work in the county might usefully be extended.

1. Hospital accommodation for—
 - (a) Advanced cases of pulmonary tuberculosis.
 - (b) Normal and abnormal confinements.
 - (c) Serious cases of measles and whooping cough.
2. The provision of treatment for disease and defects in children under school age.
3. The compulsory notification of measles and whooping cough.
4. Education of the public in the need for early resort to treatment for cancer.

The Council is now making more adequate provision for the institutional treatment of persons suffering from tuberculosis.

Unfortunately the hospitals in Surrey appear reluctant, even when extensions are in contemplation, to provide beds for maternity cases. The safety and comfort to be derived from admission to a well-managed institution for the lying-in period are increasing the demand for this type of accommodation.

The effect of the outlay of public money on national health must generally be judged over long periods, but there is ample evidence that the steps taken to prevent the loss of infant life have been along sound lines, and are now showing a high rate of interest on the money invested in this work.

JOSEPH CATES.

Public Health Department,
5, Grove Crescent,
Kingston-on-Thames.

STAFF.

County Medical Officer of Health.

Joseph Cates, M.D., B.S. (Lond.), D.P.H. (Camb.).

Deputy County Medical Officer of Health.

T. Ruddock-West, M.B., B.S. (Durh.), D.P.H. (Camb.).

Assistant Medical Officers.

WHOLE TIME.			
Archibald, Marian H.	...	...	M.A., M.D., D.P.H.
1 Attlee, C. K.	...	...	M.R.C.S., L.R.C.P.
Cairney, Maud C.	...	...	M.B., Ch.B., D.P.H.
Donaldson, Eric	...	...	M.A., M.B., B.Ch., M.R.C.S., L.R.C.P., D.P.H.
Hayes, A. H.	...	...	F.R.C.P., M.R.C.S., D.P.H.
†Herington, C. E. E.	..	...	M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.
Hodge, Agnes J.	...	...	M.B., D.P.H.
Ironside, A. E., M.C.	...	...	M.R.C.S., L.R.C.P., D.P.H., L.D.S., R.C.S.
Lakin, C. L.	...	...	M.D., B.S., M.R.C.S., L.R.C.P.
2 Livingstone, D. M.	...	...	M.D. B.Sc. (P.H.).
Macmillan, Ada J.	...	...	M.D.
1 Renwick, A. C.	...	...	M.D., D.P.H.
1* Soames, R. M.	...	...	M.B., B.Ch., M.R.C.S., L.R.C.P.
3 Steward, S. J., D.S.O.	...	..	M.D., M.R.C.S., L.R.C.P., D.P.H.
PART TIME.			
Davison, R.	...	...	M.D., M.R.C.S.
* Sloman, S. G.	...	...	M.R.C.S., L.R.C.P.
Habgood, W.	...	...	M.D., M.R.C.S., L.R.C.P., D.P.H.
Wilkes, E. A. Freear	...	...	M.R.C.S., L.R.C.P., D.P.H.

School Dentists.

WHOLE TIME.			
Griffin, T. H.	...	...	L.D.S., R.C.S.
Hallett, L. R.	...	...	L.D.S., R.C.S.
Rhodes, W. E.	...	...	L.D.S., R.C.S.
Wilson, T. A. M.	...	...	L.D.A., R.C.S., D.M.D. (Harvard)

PART TIME.

Hughes, A. Morgan, M.C.	...	M.R.C.S., L.R.C.P., L.D.S., R.C.S.
-------------------------	-----	------------------------------------

* Resigned 30th September, 1923.

† Appointed 12th November, 1923.

1 Tuberculosis Officer.

2 Ophthalmic Surgeon.

3 Medical Officer for Mental Defect.

Health Visitors.

1, 2, 3, 4, 5 Dinsley, K., Superintendent.

2, 3	Arrowsmith, M.	1, 2, 3	Henniker, C. M.	1, 2,	Payne, M.
2, 3	Barnes, R.	1, 2, 3	Howard, J.	1, 2, 3	Polden, F. M.
1, 2, 3	Batchelder, B.	1, 2, 3	Huffer, M. E.	1, 2, 3	Robb, W.
1, 2	Bennett, E. R.	1, 2, 3	James, E. J.	1, 2, 3	Ross, F.
2	Comper.	1, 2, 3	Larkin, F. E.	2, 3	Sayer, F.
1, 2, 3	Cornock, M. M.	2	Laws, M.	1, 2	Smith, D. A.
1, 2, 3	Cracknell, J. M.	1, 2, 3	Leigh, L. F.	1, 2	Smith, G. E.
1, 2, 3	Darville, E. W.	1, 2	McNish, J.	1, 2, 3	Staniforth, H.
1, 2, 3	Draper, A. E.	1, 2, 3	Mander, E. E. A.	1, 2, 3	Tansell, E. C.
1, 2	Gordon-Aitken, G. V.	1, 2, 3	Miller, G. E.	1, 2, 3	Thorpe, M. E.
1, 2	Gurney, E. G.	1, 2	Mitchell, A. G.	1, 2, 3	Turner, R. E.
1, 2, 3	Harold, E. L.	1, 2, 3	Nickels, E. E.	1, 2, 3	Wailes, M. E. A.
1, 2,	4 Hawkes, M. E.	1, 2	Oates, M. R.		
1, 2, 3	Hebbes, E. M.	1, 2, 3	Parnell, M.		

1 Fully trained nurse.

2 Certificate of the Central Midwives Board.

3 Certificate for Health Visitors (Royal Sanitary Institute).

4 Certificate for Sanitary Inspectors (Royal Sanitary Institute).

5 Certificate for Maternity and Infant Welfare (Royal Sanitary Institute).

H. G. Lunn ...	...	...	...	Barrister-at-Law, Assistant Clerk to the Council attached to the Public Health Department.
4 Menzies, John C. ...	...	...	...	Chief Departmental Clerk.
Whitton, J. E. ...	...	...	...	Staff Clerk.
Tyler, Leonard A. ...	...	...	...	" "
Goodale, E. T. ...	...	...	...	" "
Manester, W. L. ...	...	...	...	Office Clerk.
Ramm, C. W. ...	...	...	...	" "
Russell, H. F. G. ...	...	...	...	" "
Berry, F. ...	...	...	...	" "
Elliot, K. ...	...	...	...	Shorthand Typist.
Rider, F. E. ...	...	...	...	" "
Barrett, H. A. ...	...	...	...	Probationer.
Lambert, L. W. ...	...	...	...	"

MEDICAL OFFICERS OF HEALTH OF SANITARY DISTRICTS.

URBAN DISTRICTS.

1. Barnes	E. A. Freear Wilkes, M.R.C.S., L.R.C.P., D.P.H.
2. Beddington and Wallington	C. M. Fegen, M.R.C.S., D.P.H.
3. Carshalton	J. Williamson, M.D., D.P.H.
4. Caterham	S. Davey, M.D., D.P.H.
5. Chertsey	H. Hanslow Brind, M.R.C.S., D.P.H.
6. Coulsdon and Purley ...	C. M. Fegen, M.R.C.S., D.P.H.
7. Dorking	J. Williamson, M.D., D.P.H.
8. Egham	G. Trew Cattell, M.D., D.P.H.
9. Epsom	J. Williamson, M.D., D.P.H.
10. Esher and The Dittons ...	A. Senior, M.B., D.P.H.
11. Farnham	S. G. Sloman, M.R.C.S., L.R.C.P.
12. Frimley	F. C. Davidson, M.C., M.B., Ch.B., D.P.H.
13. Godalming (M.B.) ...	T. M. Bonar, M.D., C.M., D.P.H.
14. Guildford (M.B.) ...	R. W. C. Pierce, M.D., B.Sc., D.P.H.
15. Ham	C. S. Brebner, D.S.O., M.D., D.P.H.
16. Haslemere	Roger J. Hutchinson, M.R.C.S., L.R.C.P.
17. Kingston - upon - Thames (M.B.)	Edgar Wm. Matthews, M.D., B.S., D.P.H.
18. Leatherhead	J. Williamson, M.D., D.P.H.
19. Maldens and Coombe ...	R. Davison, M.D., M.R.C.S.
20. Merton and Morden ...	P. N. Cave, M.A., M.D., D.P.H.
21. Mitcham	C. M. Fegen, M.R.C.S., D.P.H.
22. Molesey, East and West	J. E. Knox, M.B., C.M.
23. Reigate (M.B.)	A. E. Porter, M.A., M.D., D.P.H.
24. Richmond (M.B.) ...	C. S. Brebner, D.S.O., M.D., D.P.H.
25. Surbiton	N. H. Linzee, M.R.C.S., L.R.C.P.
26. Sutton	W. Habgood, M.D., D.P.H.
27. Walton-on-Thames ...	H. Hanslow Brind, M.R.C.S., D.P.H.
28. Weybridge	H. Hanslow Brind, M.R.C.S., D.P.H.
29. Wimbledon (M.B.) ...	A. Gilmour, M.D., D.P.H.
30. Windlesham	H. Hanslow Brind, M.R.C.S., D.P.H.
31. Woking	R. W. C. Pierce, M.D., B.Sc., D.P.H.

RURAL DISTRICTS.

1. Chertsey	H. Hanslow Brind, M.R.C.S., D.P.H.
2. Dorking	J. Williamson, M.D., D.P.H.
3. Epsom	J. Williamson, M.D., D.P.H.
4. Farnham	C. E. Tanner, M.D., F.R.C.S.
5. Godstone	F. W. Robertson, O.B.E., M.A., M.D.
6. Guildford	R. W. C. Pierce, M.D., B.Sc., D.P.H.
7. Hambledon	T. M. Bonar, M.D., C.M., D.P.H.
8. Reigate	A. E. Porter, M.A., M.D., D.P.H.

VITAL STATISTICS.

In the following table the chief vital statistics of the administrative county and of its urban and rural districts during 1923 are compared with those of England and Wales:—

1923.	Urban Districts.	Rural Districts.	Administrative County.	†England and Wales.
Birth-rate	16.2	15.6	16.0	19.7
Death-rate	9.5	10.1	9.7	11.6
Zymotic death-rate	0.22	0.17	0.21	‡
*Infant mortality-rate.....	44	48	45	69
Smallpox	nil	nil	nil	nil
Enteric fever	0.005	0.02	0.009	0.01
Measles	0.03	0.02	0.03	0.14
Scarlet fever	0.02	0.01	0.02	0.03
Whooping cough	0.05	0.03	0.05	0.10
Diphtheria	0.03	0.03	0.03	0.07
Influenza	0.12	0.27	0.15	0.22
*Diarrhoea and enteritis (under 2 years)	4.4	2.7	4.0	7.7

* Rate per 1,000 births.

† Provisional figures.

‡ Not obtainable.

NATURAL CONDITIONS OF THE COUNTY.

The boundary of the administrative county of Surrey is roughly quadrilateral. The north side is about twenty miles, the south thirty-six, the east and west are each about twenty-four miles. The River Thames forms the greater part of the northern boundary. In the four corners are situated the towns of Mitcham, Lingfield, Haslemere and Egham. Croydon in the north-east is the only county borough.

The municipal boroughs are Godalming, Guildford, Kingston-on-Thames, Reigate, Richmond and Wimbledon.

The area of the county is 452,821 acres, or 707·5 square miles.

A penny rate for general county purposes is estimated to yield £26,245. Only four counties have a higher assessable value, only one has a lower county rate.

The net expenditure on public health services for the year ended 31st March, 1924, was £22,234. The gross expenditure was £53,974.

The county is bisected by a range of chalk hills extending from Tatsfield in the east towards Farnham in the west. This range is broken in two localities, between Dorking and Leatherhead there is a valley in which runs the River Mole, and at Guildford a belt of low land along which passes the Wey. In the south-west extremity of Surrey there are the ridges of Hindhead.

RIVERS.

The more important rivers within the county are:—

1. The Mole is formed by several streams coming from the northern slopes of the forests lying between East Grinstead and Horsham. It traverses Surrey from south to north and enters the Thames near Hampton Court.

2. The Wey arises by two heads, one south-west of Farnham, the other south-east of Cranleigh, flowing from south to north it passes into the Thames near Weybridge.

3. The Bourne has two tributaries, the first draining the eastern side of Chobham Ridges, the second coming from Virginia Water; both flow in an easterly direction and unite as they enter the Thames near Shepperton Lock.

4. The Wandle begins in Croydon, and flowing through the populous areas of Beddington, Morden and Summerstown, goes into the Thames at Wandsworth.

5. The Hogsmill is formed by springs arising from the chalk near Ewell; it flows north-west and enters the Thames at Kingston. A survey of this river appeared in the annual report for 1922.

6. The Eden rises by several heads in the Lingfield district, and after a short course easterly, leaves Surrey near Edenbridge.

7. The Beverley Brook begins near Sutton, and passing north flows into the Thames near Fulham.

8. The Arun: one of the heads of this river begins near Witley, and passing south-east leaves the county near Alfold.

The Thames and the Blackwater form a part of the boundary of the county.

In an appendix to this report is a survey of the Wandle.

After consideration of the facts revealed by this survey the Public Health Committee decided to hold a conference with representatives of the several local authorities through whose area the river flows, the London County Council, the Port of London Authority, and the River Wandle Protection Association.

POPULATION.

The population of the administrative county, according to the census returns, was 739,402 on June 19th, 1921. The estimated population at the middle of 1923 for the purpose of calculating the birth-rate was 740,800.

The population on which the death-rates are based is 737,754.

BIRTHS.

The number of births registered in the administrative county during the year was 11,883. Of these, 533, or 4·4 per cent., were illegitimate, as compared with 3·8 in 1922. The net birth-rate was 16·0 per 1,000 of the population, a decrease of 0·3 as compared with the rate of the previous year. The birth-rate in England and Wales in 1923 was 19·7 per 1,000 population.

Table IV_A, gives the birth-rate in Surrey since 1889, and table IV. shews the natural increase of the population, the excess of births over deaths.

DEATHS.

The number of deaths of civilians belonging to the county after the allocation of transferable deaths was 7,135. This gives a net death-rate of 9·7 per 1,000 of the civil population as compared with 10·6 in 1922. The death-rate in England and Wales in 1923 was 11·6.

Table V. sets out the net death-rates in the sanitary areas and table VI. the causes of death. Reference to the latter table will show that of the 7,135 deaths, tuberculosis was given as the cause in 7·5 per cent., cancer in 14·1, cerebral hæmorrhage in 6·9, and heart disease in 14·0. In table V_A. is the death-rate in the county since 1889.

INFANT MORTALITY.

The number of deaths belonging to the county of infants under one year of age was 534. The net infant death-rate was 45 per 1,000 births as compared with 69 per 1,000 births in England and Wales. The death-rate among the 533 illegitimate children born during 1923 was 135 per 1,000; thrice as high as the death-rate among infants born in wedlock.

The infant death-rate in the county in previous years is given in table VII_A.

Table VII. shows the infant death-rate in each of the sanitary districts. Rates below 50 per 1,000 births were recorded in 26 districts.

DEATHS—EPIDEMIC DISEASES.

The number of deaths ascribed to the seven so-called principal epidemic diseases, viz.: small-pox, measles, scarlet fever, diphtheria, whooping cough, fever (typhus, enteric and continued), and diarrhœa (of children under two years) in 1923 was 153; and the death-rate was 0·21 per 1,000 civilians, a decrease of 0·08 as compared with last year. The corresponding rate in previous years among the whole population was:—

During five years, 1900-1904	...	...	1·09 per 1,000
During five years, 1905-1909	...	...	0·84 per 1,000
During five years, 1910-1914	...	...	0·70 per 1,000
During five years, 1915-1919	...	...	0·51 per 1,000

The rates in the separate districts are shown in table VIII.; those for previous years in VIIIA.

DEATHS FROM HEART DISEASE, RESPIRATORY DISEASES,
TUBERCULOUS DISEASES, AND CANCER.

The death-rates from these causes during 1923 are given in table IX.; those for previous years in tables IIXA. and IXB.

INFECTIOUS DISEASES.

The amount of infectious disease notified in 1923 is set forth in table X.

Table XI. shows the extent of infectious disease in the local sanitary areas.

Small-pox.—During 1923 the county medical officer of health was called in on nine occasions by district medical officers of health to examine suspected cases of smallpox.

Two instances of the disease occurred in the county, the patients fell ill on September 23rd and were infected from the London outbreak, which was imported from Spain early in August.

The first case, in Carshalton, was removed to Clandon Hospital, the second, in Richmond, was taken to Dockwell Hospital in Middlesex. Both recovered.

Encephalitis Lethargica.—This disease occurred in England in epidemic form in the winter 1920-21. The illness is notifiable. The number of notifications in England and Wales is steadily increasing, and there is reason to think that the disease is more prevalent than the notifications indicate. Encephalitis lethargica has several serious features. The fatality is high, from 10 to 40 per cent. of the patients die. In those who recover there are often serious sequelæ, such as paralysis or mental weakness. Moreover, there is a liability to a relapse, which may occur as long as a year after the primary attack.

The number of notifications in Surrey for the past three years were 33, 11, and 27.

HOSPITALS FOR INFECTIOUS DISEASES.

Small-pox.—The Surrey Small-pox Hospital is situated at Clandon; it is a modern well-equipped brick building, having a nucleus of 21 beds. There are in addition foundations for the erection of temporary accommodation.

Other Infectious Diseases.—The isolation hospitals in the administrative county (together with the approximate accommodation in each), are given in table XIa.

TUBERCULOSIS.

During 1923, 668 notifications of pulmonary tuberculosis were received. As the number of deaths from this disease in the same period was 432, it is obvious that not one-half of the instance of tuberculosis came to the knowledge of the local sanitary authorities. In fact, in some localities the certificate giving the cause of death was the first intimation that a person had suffered from consumption.

The position with regard to non-pulmonary tuberculosis is even more unsatisfactory; there were in the county 96 deaths, but only 152 notifications were made during the year. According to these figures the fatality rate from this form of tuberculosis would be 63 per cent.

Table XI. shows the number of notifications made during 1923, and the case rate per thousand of the population; figures for preceding years are given in table XII. The number of deaths and the death rates are shown in table IX.

Table XIII. gives the age and sex distribution of primary cases notified in Surrey during the year.

The death-rates per 1,000 population from pulmonary tuberculosis at certain ages were as follows:—

Age period.	Pulmonary tuberculosis.	
	Male.	Female.
Under 15 years	0·011	0·009
Over 15 years	0·32	0·24

Dispensaries.—The list of dispensaries is set out in table XIV.

The attendances at the fifteen dispensaries are given in table XV.

Sanatorium.—As long ago as 1912 it was estimated that some 260 beds were required in Surrey for persons suffering from pulmonary tuberculosis, and it was at first thought possible to use one of the three Small-pox Hospitals then in the county for late cases and to build a large sanatorium for the treatment of persons in the early stages of the disease. However, this scheme was found to be impracticable. In 1914 a site for a sanatorium near Milford station was purchased. The price was £8,000, towards which the Ministry of Health made a grant of £4,930. The occurrence of the war prevented for several years any further progress.

In 1918 an agreement was made between the Council and the Croydon Corporation for the treatment of 30 patients primarily ex-service men at the Small-pox Hospital belonging to the Croydon and Districts Joint Small-pox Hospital Board. By arrangement with the Surrey Small-pox Hospital Com-

mittee any cases of small-pox arising in the Croydon district during the currency of the agreement with the Corporation were to be treated at the Clandon Hospital.

The terms of a new agreement with Croydon Town Council, providing for the accommodation of 40 patients at the Cheam Hospital, have just been settled subject to the approval of the Ministry of Health. This agreement can be terminated at six months' notice by either party.

In 1919 the Public Health Committee of the County Council came to the conclusion that the erection of a sanatorium should not longer be delayed, and proceeded to make arrangements with an architect for the preparation of preliminary plans and an estimate for submission to the Ministry of Health.

At the same time the Ministry of Health were pressed for information as to the extent to which they would financially assist in the proposal in view of the increased cost of building and materials.

The Ministry shortly afterwards issued a circular announcing their intention to increase the capital grant in aid of the erection of sanatoria from £90 per bed to £180 per bed (or three-fifths of the total cost, whichever was less) provided plans and particulars were submitted to them by 30th June, 1920, and the work was completed in 2½ years from date of Ministry's approval.

Plans were forthwith prepared and question of water supply investigated.

Plans were sent to the Ministry of Health on 30th June, 1920, together with an approximate estimate of the cost of erecting a sanatorium of 200 beds.

During the latter part of the year 1920 the Committee considered several proposals as alternatives to the erection of a new building:—

- (i) The purchase from the War Office of a large temporary military hospital at Bramshott.
- (ii) The purchase of a large mansion in Surrey with a view to adaptation for use as an administrative

block, with the provision of shelters and other temporary buildings for patients in the surrounding grounds.

- (iii) Negotiations were carried on for some months with the proprietors of an existing sanatorium in the county with a view to its purchase by the Council.
- (iv) A further alternative considered during 1920-1 was the acquisition of one of the Poor Law Infirmaries in Surrey, and its adaptation for advanced cases of tuberculosis. The proposal was investigated, and a deputation from the Committee interviewed the Ministry of Health on the subject. The proposal was revived again in 1923, but conferences with the Guardians in Surrey revealed insuperable obstacles.

After exhausting these proposals the Public Health Committee were compelled to revert to the original scheme of building a sanatorium on the site at Milford.

At the November meeting of the County Council in 1923, a resolution was passed requesting the Public Health Committee to report whether or not there was delay in the admission of patients to institutions, and, if so, to indicate what action could be taken.

The county medical officer of health reported that under the arrangements in force, the Council sent patients into six institutions in Surrey, namely, the Isolation Hospital at Barnes, the Isolation Hospital, Beddington Corner, the Cheam Hospital, the Burrow Hill Sanatorium at Frimley, St. Anthony's Hospital at Cheam, and the Holy Cross Sanatorium at Shottermill. The total number of beds in use at these institutions was 83, but it was anticipated that ten additional beds might shortly be available at the Cheam Hospital. The remainder of the beds authorised by the Council were obtained at institutions in London, Cambridgeshire, Essex, Hampshire, Isle of Wight, Kent, Middlesex, Oxfordshire, Shropshire, and Suffolk.

The more important difficulties arising from this arrangement whereby the greater proportion of the beds are

obtained outside Surrey, are due to the natural reluctance of patients to go for treatment to a locality far from their homes; the amount of travelling imposed on friends of the patients when they desire to visit the institutions, and the expenditure which is incurred by the patients in travelling to and from the institutions. Possibly the most serious difficulty is that the institutions are not under the control of the County Council, and however carefully the cases are selected, there is always a risk of a patient being refused admission, or discharged after a short period of treatment, because the case is not considered suitable for treatment in the institution to which it has been sent.

In the event of a patient becoming so dangerously ill that there is no hope of further improvement, the County Council has to provide for the removal of the patient in an ambulance.

If the County Council had the control of an institution in a convenient situation in the County to which all types of pulmonary tuberculosis could be sent, the difficulties at present experienced would very largely disappear.

The institution would be reasonably near the homes of the patients, no large amount of expenditure would be incurred in visiting, the number and arrangement of beds could be suited to the type of case to be admitted, and the Council would have the control of admission and discharge.

The question of the erection forthwith of a sanatorium was fully discussed, and the Public Health Committee now recommend:—

- (i) The erection on the Council's site at Milford of hospital and sanatorium buildings affording accommodation for 200 patients.
- (ii) That the buildings should be of permanent construction.
- (iii) That application be made to the Council, through the Finance Committee, for authority to incur a total expenditure not exceeding £80,000 in connection with the proposal.

- (iv) That the architect be instructed to prepare revised plans and estimates.

The total number of patients treated in institutions during 1923 is classified in table XVII.

Shelters.—One hundred and seven shelters provided by the County Council are lent to patients who have had courses of institutional treatment.

Bacteriological Work.—Bacteriological examinations are carried out at the cost of the County Council by a laboratory in London, and 929 specimens were examined during the year.

VENEREAL DISEASES.

The scheme of the Council provides for free daily treatment at centres held at the out-patient departments of the County Hospital, Guildford, and the Royal Hospital, Richmond. These centres are maintained by the County Council. The treatment is carried out by assistant medical officers of health. Persons can also obtain treatment at the out-patient departments of most of the London General Hospitals and of Croydon General Hospital.

No arrangements have been made for in-patient accommodation at Guildford or Richmond.

The attendances at the various clinics are set forth in table XVIII.

Publicity campaigns were undertaken in Caterham, Coulsdon and Purley, Hale, Badshot Lea, Wimbledon, and Woking. Lectures were given at Raynes Park, Richmond, Kingston-on-Thames, Guildford and Churt.

By a joint agreement made on behalf of the county councils of London, Bucks, Essex, Herts, Kent, Middlesex, and Surrey, and the county borough councils of Croydon, East Ham and West Ham, facilities for diagnosis are available in the laboratories of the following hospitals in London. Treatment

is provided in the out-patient departments and in the wards. Arseno-benzol preparations are supplied to medical practitioners from the hospitals.

Albert Dock Hospital.
 Charing Cross Hospital.
 *Hospital for Diseases of the
 Skin, Blackfriars Road.
 *Hospital for Sick Children,
 Great Ormond Street.
 Guy's Hospital.
 King's College Hospital.
 *London Lock Hospital.
 London Hospital.
 Metropolitan Hospital.
 Middlesex Hospital.
 Miller General Hospital,
 Greenwich.
 *Elizabeth Garrett Anderson
 Hospital for Women.

Royal Free Hospital.
 *Royal London Ophthalmic (Moor-
 field's), City Road.
 Royal Northern Hospital.
 St. George's Hospital.
 *St. John's Skin Hospital.
 St. John's Hospital, Lewisham.
 St. Mary's Hospital.
 *St. Paul's Hospital.
 St. Thomas's Hospital.
 Seamen's Hospital, Greenwich.
 *South London Hospital for
 Women.
 University College Hospital.
 West London Hospital.
 Westminster Hospital.

*Special Hospitals. The remainder are General Hospitals.

MATERNITY AND CHILD WELFARE.

Midwifery Service.—The County Council is the Local Supervising Authority under the Midwives Acts for the whole of the administrative county.

The superintendent health visitor is the inspector of midwives, but under an arrangement with the Surrey County Nursing Association midwives in the employ of the Association are inspected by the superintendent of county nurses.

All midwives certified under the Act are required to notify the Council every year of their intention to practise. During 1923 the number notifying was 335, of whom 314 were in permanent and 21 were in temporary practice.

Recognised certificates are held by 315 of the practising midwives.

Under the rules of the Central Midwives Board, midwives are required to summon medical help in certain specified emergencies, and to notify the local supervising authority that they have done so; they are also required to notify certain other conditions.

During 1923 notifications were received from midwives on 1,382 occasions, and investigations were made in 355 instances.

Still-births.—Eighty-two notifications of still-births were made, being 0·70 per cent. of the total births registered in the county.

Abortions and Miscarriages.—Twenty-five notifications of medical help on account of abortions and miscarriages were received.

Inflammation of the Eye and Ophthalmia Neonatorum.—In 86 cases medical help was summoned on account of inflammation of the eyes. The number of cases of ophthalmia neonatorum notified in the county was 62, equal to a case rate per 1,000 births of 5·2.

Rise of Temperature and Puerperal Fever. — In 44 cases medical help was summoned on account of rise of temperature. The number of cases of puerperal fever notified in the county during the year was 23, giving a case rate per 1,000 births of 1·9. Ten deaths were registered, giving a death-rate of 47·8 per cent. of cases notified.

Training of Midwives.—A grant of £400 a year is made by the Education Committee to the County Nursing Association for the training of midwives. During 1923 the number of women who began training was 15. Twenty-three completed the course of training, and 20 obtained the certificate of the Central Midwives' Board. Ten women were in training at the end of the year.

Training of Unmarried Mothers. — The Council maintains 5 beds at Waltham House Hostel at Epsom. During 1923 10 girls were admitted for care and training.

Payment of Doctors called in to the help of Midwives.—In 1923 the amount paid by the County Council was £850; of this sum £192 was afterwards recovered from the patients. The fees were paid in the first instance by the County Council in 669 of the 1,069 cases in which medical help was sum

moned, but in 154 either the whole or part of the fee was subsequently recovered. Of the patients, 37 per cent. paid their accounts directly to the doctors.

Notification of Births Acts, 1907 and 1915. County of Surrey (Notification of Births) Order, 1922.—The above-mentioned Order, which made the County Council the authority directly responsible for the administration of the Notification of Births Acts in the Administrative County of Surrey, excluding the boroughs of Guildford, Kingston, Reigate, Richmond and Wimbledon, and the seven urban districts of Barnes, Beddington and Wallington, Carshalton, Coulsdon and Purley, Merton and Morden, Mitcham, and Sutton, came into effect on the 1st January, 1923.

The provisions of the Order were brought by letter to the notice of each medical practitioner and midwife known to be practising in Surrey; and the attention of the public was also directed to the requirements of the Acts and Order by advertisements in newspapers.

The arrangements made with the district registrars for the detection of unnotified births have worked well, and during the past year letters have been written to the doctors, nurses and parents who have failed to comply with the Acts.

The successful result of the centralisation is now manifest. During the early months of the year there was not any appreciable increase in the proportion of notifications received, but a considerable improvement has taken place in the latter part of the year.

In the area to which the Order applies, 5,293 births were notified and 6,013 births were registered during twelve months, compared with 5,289 notifications and 6,278 registrations during 1922. Thus the approximate number of cases of default occurring in those two years has fallen from 989 to 720. The number failing to comply with the Notification of Births Act during December was the lowest recorded.

The percentage of notified to registered births for the year 1923 was 87·9, which, compared with 84 per cent. for 1922, represents an increase of nearly 4 per cent.

Under the Acts the obligation to notify the birth is placed upon:—

- (i) The father of the child if he is actually residing in the house where the birth takes place at the time of its occurrence; and
- (ii) Upon any person in attendance upon the mother at the time of or within six hours after the birth;

and it is provided that a person shall not be liable to a penalty under the Acts if he satisfies the Court that he had reasonable grounds to believe that notice had been duly given by some other person.

Notifications are comparatively rarely made by the father, but nearly always by one of the persons in attendance at the birth, *i.e.*, either by the doctor or by the midwife.

The doctor or nurse should regard notification as a necessary part of the routine of each case. Further, both doctors and certified midwives are entitled under the Act to be furnished on request with stamped addressed postcards for the purposes of the Act. About 10,000 such cards were distributed during the past year.

The reasons offered for failing to notify are chiefly:—

- (i) Ignorance of the law (invariably the plea of the father); or
- (ii) Belief that the birth had been or would be notified by some other person.

As to (i) the word “notification” is ordinarily regarded as synonymous with registration, the laws relating to which have been in existence for nearly a century.

With regard to (ii), in more than 75 per cent. of the cases either the doctor will blame the nurse or the nurse will blame the doctor, or both will urge that “each thought the other had “notified.” This is the consequence of the dual responsibility under the statute, whereby the obligation to notify is placed not only upon the father but also upon any person in attendance at the birth. It is an illustration of the truth of the maxim that “what is everybody’s business is nobody’s business.”

In all cases of this kind it is pointed out to the doctor and the nurse that each is personally responsible for seeing that the birth is notified, and that in future care should be taken to avoid similar misunderstandings.

In order to exempt a person from liability under the Acts the "belief" that the notification has been made by some other person must be based on reasonable grounds. Too frequently it rests upon grounds which are not of this description. The fact is that in a large number of cases neither the doctor nor the nurse has taken the trouble to enquire if the other has notified or intends to notify the birth.

Representations to doctors and nurses have not been made in vain, and have generally been followed by a marked improvement in notification. There are cases, however, where indifference to the requirements of the Acts is still maintained. On the whole there is reason to be satisfied with the improvement that has taken place in administration, and it is anticipated that the statistics for the ensuing year will indicate further progress.

Centres.—The centre at Cranleigh was closed owing to the small attendance. New centres were opened at Holmwood, Ripley, and Shalford.

The centres arranged in order of sanitary districts are named in table XIX., together with information as to attendances.

Routine of Centres.—The following routine for the conduct and management of the centres was approved by the Council during 1923 and came into operation at the end of the year:—

ANTE-NATAL CONSULTATIONS.

Provision shall be made for—

- (a) Routine testing of urine.
- (b) Subsequent examinations.

Women who are found to require treatment should be referred to—

- (a) A private medical practitioner, or
- (b) Hospital.

INFANT CONSULTATIONS.

All babies brought to the centre for the first time shall be completely undressed and shall be examined by the medical officer.

- (a) Healthy, normal infants: Mothers to be advised on infant care and management.
- (b) Abnormal infants: Advice to be given and, if further treatment is needed, to be referred to the agencies mentioned above.

Certain minor ailments may be treated at the centre, if early treatment will prevent more serious developments, and the parents are unable or unlikely to obtain this from a private doctor.

Infants shall be undressed before being weighed, and examined at least monthly, in the first year; every other month in the second year; and subsequently quarterly or half-yearly.

The primary duties of medical officers at welfare centres are, by means of medical consultations, advice and lectures, to prevent defects, and to educate parents in the early detection of them.

When conditions are found adversely affecting either the nursing mother or the infant, which apparently are due to mismanagement, neglect or ill-advice, the county medical officer shall be immediately informed, and his attention must also be drawn to unsatisfactory conditions in the home.

The success of a maternity and child welfare centre depends largely upon the experience and personality of the assistant medical officer, who shall be responsible for all medical arrangements and the general supervision of the work of the centre. The health visitor shall act under his direction as superintendent of the centre. The judicious development of the social side of the centre should be encouraged, and use should be made in this sphere of any voluntary workers who may desire to assist.

The health visitor shall act as superintendent of each welfare centre in her area, and shall be directly responsible to the county medical officer of health.

All infants attending for the first time must be examined by the assistant medical officer.

Any treatment ordered by the assistant medical officer must be entered on the record card.

The health visitor shall be responsible for the proper weighing and entering the weights on the record card and on the weight card.

The health visitor should give short talks to mothers on health subjects.

The register, which is to be kept by the health visitor, must be checked with the record cards at the completion of the session.

The centre is free to any mother, and no fee shall be charged for attendance, nor is there to be any system whereby mothers must apply for membership or enrolment.

Each attendance must be entered on the record card and in the register.

Mothers who desire to obtain articles at the centre must secure a voucher from the assistant medical officer.

The weighing room must be reserved for the use of the health visitor, so that mothers may seek and receive advice privately.

Dried milk and other articles sold at cost price should be displayed with a list of prices clearly exhibited.

Tea at a reasonable price should be available in the waiting room.

Home visiting.

Health visitors paid the following visits to mothers and young children during the year:—

	<i>First Visits.</i>	<i>Total Visits.</i>
Visits to expectant mothers ...	669	1,588
Visits to children under 1 year	5,281	17,724
Visits to children 1 to 5 years ...	800	17,239

Illegal midwifery practice by uncertified women.

During 1923 the County Council began to take systematic steps to check in Surrey the practice of handywomen. The attendance of these unqualified women at births is a source of danger both to the mother and the child. The women are

usually old, illiterate and dirty in their habits, unable correctly to read a thermometer or take a pulse, and therefore unlikely to have sufficient knowledge to call for medical assistance should an emergency occur.

This illegal practice would have ceased long ago but for the fact that certain medical practitioners knowingly render handywomen assistance by notifying births, signing certificates and, generally, by shouldering the responsibilities for the disasters which occur from time to time.

The General Medical Council regards such "covering" of handywomen by a doctor as infamous conduct in a professional respect.

As information respecting these offences comes to the knowledge of the County Council, the facts, after investigation, are reported to the General Medical Council.

During the year the conduct of a medical man practising in Surrey was reported to the General Medical Council, who, at a public hearing of the case, found the charges proved and suspended judgment for one year.

WATER SUPPLIES.

It has not been found possible to give a detailed account of the water supply of the county, but the supplies for the rural districts of Hambledon and Farnham will be found referred to in the respective special reports.

HOUSING.

Enquiries have again been made among the health visitors working in all parts of the County respecting the housing conditions of the districts in which they carry out their duties.

Broadly speaking, there is no evidence that the overcrowding which existed in Surrey in the year 1922 has appreciably diminished.

Urban districts.

Beddington and Wallington.—In Hackbridge the housing conditions are still unsatisfactory. In many instances two and sometimes three families occupy a small house containing only four rooms.

Caterham.—In Caterham overcrowding is prevalent. Many four-roomed cottages are occupied by two families.

Dorking. — In Dorking there is considerable shortage of houses.

Egham.—In Egham the shortage of houses with the consequent overcrowding persists. Many of the cottages are in an insanitary condition.

Epsom.—In the Epsom district the need for new houses is pressing. Many of the old cottages are hovels which should have been condemned years ago. At the back of Epsom High Street there are a few cottages in which it is impossible to stand upright.

Esher and the Dittons.—In Esher and the Dittons there has been no noticeable reduction in the demand for new houses. Sub-letting of houses is largely carried on, even in property insufficient to accommodate one family.

Farnham. — In Farnham Urban District there are many small insanitary cottages in a bad state of repair which should be closed, but the absence of alternative accommodation prevents the Council from taking the necessary action.

Godalming.—In Godalming there continues to be a considerable dearth of new houses, and overcrowding is prevalent. There are two and sometimes more families in many of the cottages, and in some instances parents with two or three children live and sleep in one room.

Kingston-on-Thames.—In Kingston there is pressing need for a considerable number of new houses. In Hudson Road there are several six-roomed houses containing as many as twenty occupants.

Leatherhead.—In Leatherhead and the surrounding neighbourhood there is much overcrowding, particularly in the Fairfield and Kingston Road districts. Many of the houses

are in a serious state of dis-repair, but the tenants are afraid to complain lest they should be told to quit. In one or two instances families who have been ejected have had to enter the workhouse.

Maldens and Coombe.—In this district overcrowding appears to be increasing.

Merton and Morden.—Overcrowding in this district appears to be on the increase.

Mitcham.—In Mitcham housing conditions are bad. The Council houses are too expensive for the poor. Failure to provide sufficient new houses prevents action being taken to close insanitary property.

Molesey, East and West.—There has been no noticeable reduction in the demand for new houses in this district, and sub-letting of property already overcrowded is largely carried on.

Surbiton.—In Surbiton many of the cottages are occupied by more than one family. Occupants of Council houses are forced to sub-let rooms or take in lodgers. In the neighbourhood of Alpha Road there is much overcrowding, and many of the cottages are dirty and dilapidated.

Sutton.—In Sutton overcrowding continues. The new Council houses in Clensham Lane are overcrowded, because most of the tenants are forced to take in lodgers to help to pay the rent. Candidates for new houses have had their names on a waiting list for as many as three and four years.

There is a serious shortage of cottages, and much overcrowding at Belmont, most of the four and six-roomed cottages being occupied by two families. Many of the houses are in urgent need of repairs.

Walton-on-Thames.—In Walton and Hersham there continues to be great need for houses for the working classes.

Weybridge.—New houses are urgently needed in this district.

Windlesham.—In Windlesham and Frimley there is little improvement on the conditions existing in 1922.

Woking.—In Woking and the neighbourhood a number of houses containing only three small bedrooms are occupied by more than one family. In many instances people have been trying for years to get more suitable accommodation.

Rural districts.

Chertsey. — In Chertsey and Addlestone new houses are greatly needed.

In Chobham most of the cottages are occupied by more than one family. In some cases every room in the house is sub-let.

Dorking.—In Capel and Ockley some of the cottages are very old and in a bad state of repair. Most of the new Council houses are occupied by two families. A number of cottages have been condemned during the past year, but as there is no accommodation for the dispossessed tenants, they are allowed to remain in the houses which have been condemned.

Epsom.—At Tadworth and Cheam there is a serious shortage of cottages, and much overcrowding. Many of the houses are urgently in need of repairs. Most of the four and six-roomed cottages are occupied by two families.

Godstone. — In Godstone Rural District the shortage of houses persists, the more overcrowded areas being Needles Bank and The Alley, Godstone.

In Whyteleafe overcrowding is common. Two families are living in the majority of the five-roomed houses.

Guildford.—In Worplesdon, Burpham and Pirbright new houses are greatly needed. There are a number of instances of a man and his wife and a child living and sleeping in one room.

Reigate.—In South Nutfield, Horley and surrounding areas cottages are urgently needed. It is practically impossible for newly-married persons to obtain a house or even lodgings. In Horley particularly, overcrowding is rife. Two and sometimes three families are living in almost all the small cottages.

SALE OF FOOD AND DRUGS ACTS.

The Superintendent of the Weights & Measures department reports that the administration of the Acts and Regulations dealing with the adulteration of food, and the provision of a clean milk supply has disclosed no evidence of any material change in the conditions prevailing in the County.

Preservatives continue to be added to a variety of articles of food; the most common appear to be boric acid, salicylic acid and sulphur di-oxide, though formalin is sometimes met with. Milk is now seldom found to contain a preservative, but cream, butter, potted meats, and the many different varieties of temperance beverages are very frequently preserved.

Attention has been called by the County Analyst to the practice of adding "improvers" to flour. There would appear to be good reason for believing that this practice has assumed very large dimensions, and that it is still increasing. The principal effect of the use of an "improver" would seem to be that it enables more loaves to be made from a sack of flour, in other words, it enables the baker to bake a loaf containing a higher proportion of water. This, in itself, is of no benefit to the public, but there is a more serious aspect, arising from the fact that "improvers" are frequently powerful chemical bodies, some gasses, some liquids, some solids, the effect of which upon the consumer is unknown to the miller.

In the present state of the law, it is impossible to afford adequate protection to the public in regard to either preservatives or "improvers," and it is to be hoped that the outcome of the present Departmental Committee, which is considering the question of the use of preservatives in food, will be the initiation of legislation regulating, and in some cases prohibiting, the addition of such bodies to articles of food.

It has been found possible to make arrangements, whereby an increased number of samples of milk are taken during the year, and the milk supply of the County is now subject to a reasonably thorough test. The results of the examination of milk samples would seem to show that there has

been no appreciable change in the general quality of the milk sold in the County, which continues to be satisfactory. There are, however, indications that the quality of the supply in the urban districts on the borders of London is improving.

It is unfortunate that more advantage has not been taken of the provisions of the Milk and Dairies Act, 1922, whereby producers of milk attaining a certain standard of cleanliness, may sell such milk under the designation "Grade A."

Only one producer has been licensed by the County Council, though it is clear that the standard required is attainable by any farmer who produces his milk under proper hygienic conditions. The main obstacle to an increase in the number of producers of "Grade A" milk would appear to be the want of interest shown in the matter by the consuming public, with a consequent lack of demand for this grade of milk, and the prejudices of the old type of cowman. It is a question if the time has not come to consider whether the sale of milk falling below the standard of "Grade A" should any longer be permitted.

PUBLIC HEALTH (MILK AND CREAM) REGULATIONS, 1912.

All samples of milk and cream were procured under the powers conferred by the Sale of Food and Drugs Acts, but the analyst had regard to the above-mentioned regulations when making his analyses.

APPENDIX I.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH ON THE SANITARY CIRCUMSTANCES AND ADMINISTRATION OF THE FARNHAM RURAL DISTRICT.

The Rural District of Farnham in the extreme west of Surrey contains five parishes, *i.e.*, Ash, Farnham Rural, Frensham, Shottermill and Seale.

Its outline is irregular. It is bounded on the north by Frimley Urban District; on the east by Guildford and Hambledon Rural Districts; on the south by West Sussex; and on the west by Hampshire and by the Urban District of Farnham.

The area of the district is 26,149 acres; the length from north to south is about 14 miles, and the breadth at the widest point is approximately 6 miles. The greatest distance from Farnham to the boundary of the Farnham Rural District is 8 miles.

A part of the district is on the Lower Greensands and the remainder is on the chalk.

The population at census periods was:—

1891	...	...	...	...	...	18,447
1901	...	...	...	...	...	16,951
1911	...	...	...	...	...	20,260
1921	...	...	...	...	...	18,332

Under the County of Surrey (Farnham Extension) Confirmation Order, 1914, part of the civil parish of Farnham Rural, *i.e.*, 2,107 acres with a population of, approximately, 4,500 persons, was transferred to the Urban District.

The villages in the Farnham Rural District are:—

Ash Vale.	Ridgeway Road and Wrecclesham
Ash Street.	Street.
Boundstone and Rowledge.	Seale.
Churt.	Shottermill.
Hindhead and Beacon Hill.	Tilford.
Millbridge.	The Bournes.
	Tongham.

Vital Statistics.

The more important vital statistics of the district since 1901 are:—

Year.		Birth Rate.	Death Rate.	*Infant Death Rate.	Zymotic Diseases Death Rate.
1901-1910	...	25·0	12·0	91	0·81
1911-1920	...	20·8	11·6	71	0·79
1921	...	18·1	9·3	49	0·16
1922	...	21·2	11·8	52	0·49

* Per 1,000 births registered.

SANITARY CIRCUMSTANCES.

1. WATER SUPPLY.

The Rural District is generally well supplied with water from public sources.

The following table shews the villages having a public supply of water; in most of these, a large number of houses have been connected to the mains:—

Village.	Company.	Approximate number of houses supplied.
Ash Vale	Frimley and Farnborough Water Company	75 per cent.
Ash Street		90 per cent.
Boundstone		Almost all.
Bournes		ditto.
Churt		ditto.
Hindhead and Beacon Hill ...	Wey Valley Water Company	ditto.
Millbridge		90 per cent.
Rowledge		Almost all.
Ridgeway Road		ditto.
Wrecclesham Street		ditto.
Seale		ditto.
Shottermill		ditto.
Tilford	Aldershot Water Company	ditto.
Tongham		90 per cent.

Houses not connected with the mains obtain water, as a rule, from shallow wells.

PROCEDURE TO DETECT UNWHOLESOME WATER SUPPLY.

Sampling is generally carried out by a sanitary inspector on the complaint of a tenant, but there is no systematic house-to-house testing. Samples are sent to Dr. Brown, Alfred Road, Farnham; 14 were submitted in 1922. He is paid a retaining fee of £5 5s. 0s., and from 10s. 6d. to £1 1s. 0d. per sample. No bacteriological examinations of water are made.

If new houses are built remote from a main, the Rural District Council requires an underground rain water tank of about 3,000 gallons capacity, with a sand filter, but it is rare for a house now to be built distant from a public supply.

SEWERAGE SYSTEM.

The Rural District of Farnham is very deficient in sewerage. The only part of the district in which there is a public sewer is Shottermill Parish, but this sewer does not drain Hazel Grove and Portsmouth Road. About 16 houses at Hindhead (in Frensham Parish) are connected to Shottermill sewer. The sewage flows to Shottermill, where it is run over contact beds in High Pitfold Lane, and the effluent is discharged into the Wey.

Pail closets are in general use. In some of these earth is employed. A few of the large houses have private sewage disposal installations, but there are some privies still in use. Liquid refuse, slop water and sink waste are thrown on the gardens or the roads by the occupiers of the houses. Pails have to be placed under the sink waste pipes, except in the few houses where there are drains. The down spouts from the roofs discharge on to the ground, but in some instances there are water tubs or underground tanks.

DISPOSAL AND REMOVAL OF EXCREMENT AND REFUSE.

Pail closets have to be emptied by the tenants. In Tongham the Rural District Council has arranged with a contractor for twice weekly removal of the contents of pail closets and house refuse. The refuse is taken to Pratts Farm, at Ash, and used as manure, or it is dumped. Throughout the rural district empty bottles and tins are thrown on to common land or stealthily deposited in out of way places. House refuse is stored in heaps on the premises or dug into the gardens. Sanitary bins are rarely used except at the large houses.

The Council houses recently erected at Tongham, Lower Bourne, Green Lane, Lodge Hill, Boundstone, Moons Hill, Parkhurst, Beacon Hill and Critchmere are not supplied with receptacles for ashes.

HOUSING.

Systematic inspection of houses was carried out before the war at Tongham, Wrecclesham Street, Rowledge, Boundstone, part of Ash Vale and Ash Street, and notices were served as a consequence to remedy the defects discovered. Since 1915 no systematic inspection under the Housing Acts has been carried out, except that Mr. Kinge has done inspection at Beacon Hill and part of Hindhead for the purpose of an inquiry relating to the possibility of establishing a sewerage system.

Building by-laws are in force in the whole of the district; new by-laws are now awaiting the approval of the Ministry of Health. The Council has built ninety houses for working classes in the following localities:—

Farnham Rural Parish—

Lodge Hill Road	...	...	...	...	20
Green Lane	...	...	...	...	4
Boundstone Hill	...	...	...	...	12

Frensham—

Moons Hill	...	...	...	...	6
Parkhurst	...	...	...	...	10
Beacon Hill	...	...	...	...	8
Shottermill	...	...	...	...	12

Seale—

Hatch End	...	...	...	...	10
Poyle Lane	...	...	...	...	8

The construction of these houses in several instances leaves much to be desired. For instance, in Poyle Lane the pail closets are built as part of the houses and are directly adjacent to the back doors, the closets are insufficiently ventilated, and the small outlet for effluvia is situated under the bedroom windows.

The main occupations of the population are agriculture and market gardening. In Ash Street, Ash Vale and Tongham there are skilled workmen employed at Aldershot and Farnborough.

DAIRIES, COWSHEDS AND MILK SHOPS.

There are 84 names on the register: of this number 57 are cowkeepers. Dairy Cowshed and Milk Shops Regulations are in force in the district. The cowsheds are visited twice a year as a routine but Mr. Kinge pays visits at more frequent intervals. The standard of cleanliness is low.

SLAUGHTER-HOUSES.

Until March, 1923, there was no registration or licensing of slaughter-houses in the district, but the Council has now adopted by-laws and is requiring occupiers of premises to make application for licence. There are at least seven premises where slaughtering is carried on:—

Situation of slaughterhouse.	Occupier.
Shottermill	Miles.
Hindhead	Grinstead.
Rowledge	Cox.
Shawfields	Hawkins.
Tongham	Sturt.
Ash Vale	Hamley.
Inner Quadrant, Ash.....	Taylor.

Some of the butchers in the rural district slaughter in Farnham Urban District. Generally speaking, the butchers do not call in a Sanitary Inspector to give an opinion on carcasses suspected to be diseased, and the amount of routine and special inspection is totally inadequate. For example, at one slaughter-house in the Ash district about 8 pigs are slaughtered each week, but the occupier has never sought the advice of a Sanitary Inspector. Recently pigs slaughtered there were discovered, in Aldershot, diseased and condemned as unfit for food. In Mr. Kinge's district more frequent visits are made to slaughter-houses, and one butcher seeks the assistance of the Inspector from time to time. The slaughter-houses at Shottermill and Hindhead are well built and are kept reasonably clean, but certain of the other slaughter-houses are unsuitable for slaughtering animals for the food of man. Efficient inspection is difficult in a wide rural district unless there is some system whereby butchers notify the public health department of their intention to slaughter and the Sanitary Inspector has means of quick transit.

BAKEHOUSES.

There are sixteen in the district. The sanitary condition of several of the premises is unsatisfactory. Although on two occasions recently instances of intolerable filth were discovered, no legal proceedings were instituted.

WORKSHOPS.

There are no workshops on the register, but the potteries at Wrecclesham Hill seem to come within the category of workshop.

COMMON LODGING HOUSES AND HOUSES LET AS LODGINGS.

There is none registered.

INSTITUTIONS.

The more important institutions in the district are Holy Cross Sanatorium at Shottermill, with 80 beds; Crooksbury Sanatorium, with 50 beds; in both cases there is no water carriage system of sewage disposal. Tilford Convalescent Home for children has about 30 beds.

INFECTIOUS DISEASE.

The Rural District Council and the Urban District Council of Farnham are joint owners of an Isolation Hospital at Wrecclesham Road, Farnham. There are 52 beds in 4 wards. Admission is limited to cases of scarlet fever, diphtheria, enteric fever and cerebro-spinal fever; 48 patients were treated in 1922. Dr. Ealand, a medical practitioner in Farnham, is Medical Superintendent of the Hospital. There is a steam

disinfector at the institution, and a horse-drawn ambulance. The procedure with respect to the removal of persons to hospital suffering from infectious disease is that on receipt of a notification the medical officer of health telephones particulars to the house of the Sanitary Inspector (Mr. Patrick), the latter telephones to Dr. Ealand, who telephones to the Matron. The Matron telephones to the horse-keeper to send horses for the ambulance, which is kept at the hospital. The Sanitary Inspector visits the premises after the case has been removed to hospital or at the termination of the illness, when the patient is nursed at home, and carries out disinfection by a formalin lamp. When the patient lives in Mr. Kinge's district, Mr. Patrick writes to Mr. Kinge as soon as disinfection is to be carried out.

There is no removal of bedding for steam disinfection, nor does there appear to be any systematic or efficient inquiry in every case into the source of infection. No schedule of enquiry is used, nor are any leaflets of instruction left at the house. Notifications of puerperal fever, ophthalmia neonatorum and tuberculosis are not followed up by the Sanitary Inspector. There is rarely any disinfection of rooms in which persons suffering from tuberculosis have lived, but in certain instances bedding is burned.

The decision with respect to removal to hospital of persons suffering from infectious disease should rest with the medical officer of health.

NUISANCES.

The total number of nuisances which came to the notice of the Sanitary Inspectors during the year 1922 was 453.

Mr. Patrick has kindly supplied me with the following information as to work carried out:—

Nuisances Discovered.	First Notices.	Work Done.	Statutory Notices.	Work Done.	Legal Proceedings.
359	234	211	125	107	Nil

PUBLIC HEALTH STAFF.

1. Dr. Tanner has been Medical Officer of Health for about 21 years. He is in private practice. He has had considerable experience in the work in the district, but does not hold any public health qualification. The salary is £150 a year, but there is no repayment of travelling expenses incurred on official duties. Neither office accommodation nor clerical assistance is provided by the Council. The net personal salary

must be less than £50 a year. On the basis of a net salary of £800 per annum for a whole-time medical officer, the Rural District Council can only expect to receive one-sixteenth of the time of the present medical officer. This amount is obviously inadequate for the requirements of the district.

2. The Sanitary Inspector is Mr. A. Ross Patrick; he is 63 years of age. During the last two years his health has given cause for anxiety. Although he is now somewhat better, it is dangerous for him to undertake a sudden exertion. He was appointed Sanitary Inspector of the Parish of Farnham in 1886, and in 1887 he was made Sanitary Inspector of Farnham Rural District. Mr. Patrick holds the certificate for sanitary inspectors granted by the Royal Sanitary Institute. He is also building inspector and sanitary surveyor for the construction of sewers. He gives approximately half his time to the work of a sanitary inspector. The salary is £275 a year, inclusive of travelling expenses. He has to provide his own office accommodation and he has no clerical assistance. The Council provides a telephone to his residence, one room of which he uses as an office. Mr. Patrick is not strong enough to cycle, and his travelling is largely restricted to the motor omnibus service of the locality. He keeps a diary, nuisance register, a register of dairies, cowsheds and milkshops, and statutory notice books.

In 1897 the Council appointed an assistant sanitary inspector: the present holder of this office is Mr. Kinge. He is sanitary inspector for the Parish of Shottermill and part of the Parish of Frensham. He works independently of Mr. Patrick, who does not supervise him, but he refers to Mr. Patrick when he needs advice. Mr. Kinge is 48 years of age. Owing to injuries received in the war he is unable to bicycle or to use a motor cycle. He obtained the Certificate of the Sanitary Inspectors Examination Board in 1919. He was appointed in 1904; previously he completed 12 years' army service. He does not hold any office except that of Sanitary Inspector, nor does he carry out any other duties. The salary is £170, inclusive of travelling expenses; he has no office and no clerical assistance; he is not on the telephone. He has a theoretical share of the office at Mr. Patrick's private house in Farnham, but, in fact, he very rarely visits Mr. Patrick's house: the last time was three or four months ago. Mr. Kinge keeps at his house in Hindhead statutory notice books, a letter book and a diary. He sees Dr. Tanner once a month at the Council meeting, and in addition about three or four times a month by appointment.

NEEDS OF THE DISTRICT.

The need is urgent for a sewerage scheme for the various villages in the district; in almost every direction there is evidence of nuisances

arising from the absence of drains and sewers. In bakehouses there are no facilities for washing the hands; if a pail is used the contents are thrown on the ground near the door. At slaughter-houses the water used for swilling the floors collects in cesspools close to the premises and overflows directly into an open ditch. In cottage property slops, sink waste water and soap suds from washing have to be carried to the gardens, which are often small and sometimes contain a well from which drinking water is drawn.

There is also need for a regular system of removal of house refuse. Experience shows that it is useless to expect occupiers to bury refuse in the gardens and allotments; even if this method of disposal were desirable many of the gardens are quite inadequate for the purpose.

It is evident that under the present arrangements the Sanitary Inspectors are unable to cope with the requirements of the district. Systematic house to house inspection is essential. Unless this is regularly carried out nuisances will remain undetected for long periods, because the inhabitants do not appear to realise that unremedied sanitary defects should be promptly reported to the public health department.

The inspection of food premises—slaughter-houses, bakehouses, dairies and milkshops is only nominal: one butcher during some ten years has never seen a carcase inspected. Since 1886 no magisterial proceedings have been taken under the Unsound Food sections of the Public Health Act, 1875, and this reluctance of the Council to institute proceedings is certain to hamper the work of the public health department.

The Rural District Council should carefully consider whether it is in the interests of public health that—

1. Only one-sixteenth of the whole time of a medical officer of health should be given to a district of 26,149 acres, with a population of 18,332 persons.
2. That the Medical Officer of Health and Sanitary Inspector should have to bear the expense incurred in travelling in the district.
3. The district should be almost without sewerage.
4. Occupiers should be expected to empty pail closets, privies and ash pits.

RECOMMENDATIONS.

I recommend that—

- A. (1) Every instance of notifiable infectious disease should be visited, and a report made on an inquiry schedule after a careful investigation has been carried out. The investigation should include a sanitary survey of the premises.

- (2) Arrangements should be made for the removal and disinfection of clothing and bedding by steam.
- (3) Cards or leaflets of instruction should be left at each house in which infectious disease occurs.
- B. The attention of the public should be drawn by notice in the press and otherwise that unremedied nuisances should be reported to the public health department of the Rural District Council.
- C. (1) The occupiers of private slaughter-houses should be required to notify the public health department of their intention to slaughter, and stamped post-cards should be provided for this purpose.
- (2) Steps should be taken at an early date to secure efficient sanitary supervision and inspection of the district.
- D. In the villages in which there is a public water supply systematic sampling of wells should be carried out.
- E. Arrangements should be made so that persons suffering from any notifiable infectious disease can be admitted to an isolation hospital.

JOSEPH CATES,

County Medical Officer.

PUBLIC HEALTH DEPARTMENT,
5, GROVE CRESCENT,
KINGSTON-ON-THAMES.

30th September, 1923.

THE OBSERVATIONS OF THE FARNHAM RURAL DISTRICT COUNCIL.

Before dealing with the Report seriatim the Council cannot refrain from contrasting the procedure adopted in the case of the Hambledon Rural District, where the Report on that District and the Council's reply were published both together. The method adopted is one which has caused the Council difficulty, which might have been avoided if, when the Report reached the County Council and the public Press, it had been accompanied by the reply, showing the difficulties which have

confronted the Council, and their suggestions for dealing with the sanitary defects, and the reasons which have delayed their carrying them out.

Dealing with the Report itself, the vital statistics show that there is little to complain of in the health of the district, and that it is an increasingly favourite residential one is borne out by the fact that it has increased at a greater rate than any Rural District in Surrey, other than Guildford, having a 15 per cent. increase, as against a County increase of 9 per cent. since the 1911 census.

It must also be specially remembered that during the last ten years the Council have always had before them the endeavour of the Farnham Urban District Council to acquire a very large part of the District, and that the County Council, in the year 1914, found a *prima facie* case for an enquiry, which was in fact commenced, and adjourned without any conclusion being come to. The knowledge that this was pending, and would be resumed, has naturally hampered the proceedings of the Council, who felt that so long as they were threatened with the loss of over a quarter of their area, of nearly one-third of their population, and about two-sevenths of their assessable value, it was injudicious to embark on any fresh schemes involving heavy expenditure.

The Council do not claim that their administration could not be improved if they acted regardless of expense and of the consequent increase of rates, but they do not admit many of the inferences which might be drawn from the Report by persons unacquainted with the facts.

Dealing with the Report seriatim:—

DISTRICT.

The District contains six, and not five Parishes only as stated, Dockenfield having been omitted.

1. WATER SUPPLY.

The Council are glad to note the very favourable remarks as to the water supply. They take credit for the fact that the Wey Valley Water Company, which supplies the bulk of the District, was established at their instigation, after obtaining an Engineer's Report upon the possibilities of the Council providing their own supply, which they found could only be done at heavy financial loss. As will be gathered from the high percentage of houses connected (90 per cent.), the Council

are most particular to follow up any cases of suspicious water supply, and secure the connection of premises with the public mains if pollution is shown, or take such other steps as are open to them for the improvement of the supply where no mains are available. Happily, partly by reason of guarantees given by the Council, the mains are available in every parish of the Council's area, and the question of the water supply is very rarely a source of difficulty. Where the water for a newly-erected house is obtained from a well it is always analysed before a certificate is given.

2. SEWERAGE.

The Council agree that the District is "very deficient in sewerage," only part of Shottermill and a few houses in Frensham being sewered to very efficient sewage works. The Council have not been neglectful of this question. They obtained from Messrs. Wilcocks and Raikes, the Sanitary Engineers, who were responsible for the Shottermill Works, a report which comprised in one scheme portions of Ash and Tongham, and in a second scheme a large portion of Farnham Rural and Frensham, including Hindhead and Churt.

The cost, calculated at pre-war prices, of the Ash and Tongham Scheme was £29,300, and that without taking into account any sum for easements or purchase of sites, engineers' commission, etc. The total present-day cost might possibly be put at double. The assessable value of the whole Parishes of Ash and Seale is together less than £30,000, and when it is recognised that no portion of Normandy, Wanborough, etc., in Ash, nor of Seale proper to the south of the Hog's Back, is proposed to be drained, it will be seen that a heavy burden would be thrown on large portions of these parishes without corresponding advantages. Apart from this, and the cost of dealing with the sewage, there is the cost of connection with the sewers, an exceedingly heavy charge upon the owners of property, which is very largely of a small class, and which may be estimated at an average cost of some £25 to £30 per connection.

The other scheme, for Farnham Rural, Frensham, Hindhead and Churt, was in similar manner estimated to cost pre-war £55,400, without including any sum for easements or purchase of sites, commission, etc. The Council roughly estimate that the total cost might now be double this sum. The Medical Officer of Health, on the Council's instructions, made a detailed Inspection and Report upon Hindhead, and having regard to all the circumstances recorded his opinion as stated in his Annual Report for 1922: "That the provision of a drainage system was not a matter of immediate necessity," and it was postponed

for a time. It must be remembered also that instructions were sent by the Ministry that no large capital expenditure was to be incurred which was not urgently necessary, and that in the face of the threatened application of the Farnham Urban Council to transfer the whole of Farnham Rural from the Council's district to their own it would have been useless to have taken any further steps.

While dealing with the sewerage of Hindhead, it may be mentioned that the Council have been approached on behalf of Grayshott to consider a joint drainage scheme, and they have intimated their willingness to do this.

While the Report directs attention to the question of sewerage, and the Council are asked to consider whether it is in the interests of public health that the district should be almost without sewerage, it is presumed that the reason the County Medical Officer does not include in his report a recommendation that sewerage should be provided is that he concurs in the Council's opinion that, taking all things into consideration, including the burden that would be imposed on the district, a sewerage scheme is not yet imperatively necessary, and certainly until the Urban application is decided no further steps will be taken to this end.

The statement that a few of the large houses have private sewage disposal installations is an under-statement. Practically all the large houses have these. There are very few privies still in use, and nearly all these in outlying country places, where no sewerage would be available. "Liquid refuse, slop water and sink waste are thrown on the gardens or the roads by the occupiers of the houses." From the general wording of this statement, it might be inferred that this is the common practice of occupiers of houses in the district. Where there is no sewerage scheme the liquid refuse, etc., has to be disposed of on the premises, and if any occupier is found throwing this on the road a stop is put to it. "Pails have to be used under the sink waste pipes except where there are drains." This is no doubt the case with the smaller properties, but there are a large number of houses where this does not arise.

3. DISPOSAL AND REMOVAL OF EXCREMENT AND REFUSE.

The question of scavenging admittedly requires consideration, and will be taken up when the Urban enquiry is disposed of. The point, however, is not an easy one, and expense again has a bearing upon the subject. In a parish, for instance, like Frensham, Hindhead Ward may require scavenging, Frensham Ward not, yet Frensham (six or

seven miles away from Hindhead) has to bear the expense equally with Hindhead, and the Council hesitate to impose the expense of scavenging on a large portion of the Parish which is of a more rural nature. The obligation of scavenging, once incurred, is difficult to get rid of, and the Ministry will not allow the portions of the Parishes benefited to be charged with the expense to the relief of other parts not scavenged.

4. HOUSING.

A house-to-house inspection of the greater part of the district was undertaken before the war. It must not be inferred that inspection does not take place now, but it is not "house-to-house." The Medical Officer of Health and Sanitary Inspectors are always about the district, and as they visit each place they make inspections where they think them necessary.

Bye-laws have been in force in the district for over thirty years, and have been twice revised and brought up to date, and new Bye-laws have again recently been confirmed. Plans for new houses, additions, drainage, etc., have for a long time been examined by a special Committee, which recently have been meeting twice a month.

The Council built 90 houses, as stated, and they are not in the least proud of them. They cost a large sum of money, and their construction in many cases left a great deal to be desired. The plans and specifications were frequently returned by the superior authorities to be cut down or to have alterations made, so that the Council must not be held responsible.

The Poyle Lane houses referred to were constructed upon plans and specifications prepared by the Ministry of Health, and imposed upon the Council after the Ministry refused to pass the Architect's plans, on the ground of expense, and the closets are constructed as provided for in the plans. The Council were in the dilemma of either having the houses built according to these plans or going without. They built the houses, and possibly came to the wrong conclusion, but they do not consider they are to blame in following the directions of the responsible public department.

5. DAIRIES, COWSHEDS AND MILKSHOPS.

"The standard of cleanliness is low." This is admittedly so in some cases, though not for want of repeated monitions and instructions from the Medical Officer of Health, whose Annual Reports have laid stress

upon the point. Inspections are made twice a year as a routine, and more often where necessary, and notices are served to cleanse.

A short time ago, in addition to their usual staff, the Council retained for some months a fully-qualified Sanitary Inspector specially to report on the cowsheds of the district, and many improvements were effected, and it is believed that the standard as a whole is higher than in most rural districts.

6. SLAUGHTERHOUSES.

Generally speaking the butchers call in the Sanitary Inspector when necessary, but the Council agree that the procedure could be improved, and will take the matter into consideration. In a wide rural district inspection is not an easy matter, but as butchers usually slaughter weekly, though not all upon the same days the Inspectors are able to make frequent inspections when slaughter is being carried out. Bye-laws have recently been obtained dealing with the whole district, and containing provisions as to humane slaughtering.

7. BAKEHOUSES.

These are inspected regularly, and it is not agreed the sanitary condition of several is unsatisfactory. The two instances mentioned by the County Medical Officer were bakehouses which had been disused for some time and re-opened without the knowledge of the Sanitary Inspector. Directly he discovered this, steps were taken to close them. The whole matter is detailed in Dr. Tanner's Report for 1922.

8. WORKSHOPS.

"There are no workshops on the register." A register has always been kept, and there are many entries upon it, including the Wrecclesham Potteries.

9. INSTITUTIONS.

The Report is not correct in saying that the Holy Cross Sanatorium, at Shottermill, with 30 beds, has no water carriage system of sewage disposal. The Sanatorium is, and has always been, connected with the Shottermill sewers. It is believed that the Crooksbury Sanatorium has been under the control of the County Council, and if there is anything wrong with the sewage arrangements this would no doubt have been discovered. There is a water carriage system of sewage disposal of a

large portion, earth closets being used for the remainder. The Council understand that sanitary arrangements of the "Training Block" were completed by H.M. Office of Works, at a cost of some £2,000.

10. INFECTIOUS DISEASE.

The Council claim credit for the Infectious Hospital which belongs to them and the Farnham Urban District, and which is a well-equipped, up-to-date building. This is made use of, not only by the Farnham Rural and Urban Districts, but also regularly by the Haslemere Urban District. Patients are also received from Frimley (who pay an annual retaining fee) and other districts in the neighbourhood in times of pressure, and in the past the Hambledon Rural District Council made extensive use of it, until they sent their cases to Guildford Joint Isolation Hospital, as being more convenient of access.

It is not correct to say that no systematic or efficient enquiry is made in every case as to the source of infection. This is done as a matter of course.

"No schedule of enquiry is used, nor are any leaflets of instructions left at the house." This statement, so far as the scheduled of enquiry is concerned, is not correct, but it is correct that no leaflets of instructions are left. Perhaps the County Medical Officer would suggest one to be used, and the Council will see to this, though they do not regard it as essential, as their Inspectors always give verbal instruction of steps to be taken.

There has not been any case of puerperal fever notified for many years. The Medical Officer of Health has, in the past, always given very particular attention to this disease when it has arisen. Ophthalmia is visited by the Medical Officer of Health when necessary, but when there is a competent doctor in attendance on the case this is not considered essential.

Diphtheria antitoxin is supplied free to all Medical Practitioners requiring it for use in the district.

11. NUISANCES.

The Council think that the number of nuisances dealt with (359) show that supervision is effective. The Council do not encourage legal proceedings, unless they find it absolutely necessary, preferring to get nuisances remedied by less drastic means.

PUBLIC HEALTH STAFF.

MEDICAL OFFICER OF HEALTH.

The extent of Dr. Tanner's services is not regulated by the amount of his salary. The Council agree that the amount paid him is inadequate. Apparently it is suggested that a salary of £800 a year, with travelling expenses, office accommodation, and clerical assistance is a proper provision. The Council consider this more than their District can afford. The Council have always felt that a whole-time Medical Officer appointed for the public health services of Farnham and Farnham Rural would be the ideal scheme, and Dr. Tanner has frequently intimated that this was his opinion, and his readiness to fall in with any such arrangement if it could be made. Pending the Urban enquiry, the Council are not prepared to make any alteration.

THE SANITARY INSPECTOR.

He is an old and valued servant of the Council; were he to retire there is no superannuation fund available for him. His salary was raised to £300 a year, to include ordinary travelling expenses, before the appearance of the Special Report. Until recently he always used a bicycle, but latterly he has been unable to do this, and the Council gave definite instructions nine years ago that he was at liberty to hire a car when he requires one, and he occasionally does so. Office accommodation is provided at the Council's Offices in South Street, but they do not like to insist on his using this against his preference for his own house in Farnham, as he finds that many people come to see him from the country after office hours, which is a convenience to him as well as to them. A telephone is provided for him at his house. The District is well served by motor omnibus and rail, and there are only a few out-of-the-way places to which he cannot go either by one or the other. Of the villages enumerated in the first page of the County Medical Officer's Report, Seale Village and Boundstone are the only places not so served, though motor buses come within half a mile of both these places.

NEEDS OF THE DISTRICT.

The question of sewerage has already been dealt with. It must be obvious that in a large Rural District there must be places which no sewerage scheme would ever touch, and it is also obvious that nuisances will from time to time be found which no system of sewage disposal would remedy. As has been shown, the question of removal of house refuse is one of great difficulty in Rural Districts. It is to some extent met by voluntary effort, but it is not claimed that this is a satisfactory

solution. The Council only know of two alternative courses available—(1) The provision of destructors, of which in a large Rural District there would have to be several to be effective. The Council consider this to be impracticable. (2) Disposal of the refuse by tipping, which has been stated by the County M.O.H. to be “a method of disposal which usually gives rise to a nuisance.” The Medical Officer of Health’s Report for 1922 shewed the large amount of work done by the Inspectors last year and the nature of it. The Council do not consider that the present time is an opportune one to add to their staff, but when their position is assured they will take this into consideration.

RECOMMENDATIONS.

That every case of notifiable disease should be visited and a report made after careful investigation, including a sanitary survey.

This is done.

Arrangements should be made for removal and disinfection of clothing and bedding by steam.

This is done in a few cases. In the large majority of cases disinfection is done by formalin, and in others by sulphur at the residence. The expense of removing all bedding, etc., to the Isolation Hospital from so large a District, owing to the cost of transport, would be very heavy, and in the opinion of the Council is unnecessary.

Instructions should be left at each house where there is infectious disease.

Verbal instructions are always given. If desired these can be supplemented by written, but the Council do not consider it necessary.

That attention should be called in the Press to the fact that unremedied nuisances should be reported to the Council.

This will doubtless be done by publication of this reply. It is not found by experience that there is any hesitation on the part of the public to call attention to these, and the Council are always glad when they do so. The Parish Councils frequently call attention to matters which their members have noticed. The Council hoped that instructions might be given to the Health Visitors working in their District to notify any sanitary defects which come to their notice to the Sanitary Inspectors direct, and thus secure the earliest remedy. On this request being made, however, it was refused. It is difficult to reconcile this refusal with the fact that in the Farnham Urban District the Health Visitor in fact reports direct to that Council, who are thus able to investigate the matters complained of at the earliest possible moment.

It is also difficult to see why what is permitted in the self-contained Urban District should be refused in the scattered parishes of the Rural, and there does not appear to be any reason why, when a nuisance is discovered it should not be brought to the Council's notice, when it could be immediately dealt with.

Occupiers of slaughterhouses should notify their intention to slaughter, and stamped postcards be provided.

The Council have no objection to doing this, but is there any power to compel the occupiers to notify, either by postcards or otherwise?

Steps to be taken to secure efficient sanitary supervision and inspection of the District.

It is claimed that reasonably efficient supervision and inspection are already carried out.

Where there is a public water supply sampling of wells should be carried out.

This is already done, where there is the slightest reason to suspect the source of supply.

Arrangements should be made so that persons suffering from "any notifiable infectious disease" can be admitted to an Isolation Hospital.

This is not quite understood.

Small-pox is dealt with by the County.

Scarlet fever, diphtheria, enteric fever and cerebro-spinal fever at the Isolation Hospital, where there is also a special Observation Block, which provides for doubtful cases. Is it suggested that the Council should provide for puerperal fever, ophthalmia neonatorum, tuberculosis, and chicken-pox at their Hospital. The Council at the request of Dr. Jones, the previous County Medical Officer, were willing to consider favourably the treatment on the large hospital grounds of tuberculosis as part of a County scheme, but their partners, the Farnham Urban District Council, strongly objected, and the matter fell through.

COLDHAM C. KNIGHT,

Chairman.

February, 1924.

COMMENTS BY THE COUNTY MEDICAL OFFICER OF HEALTH
ON THE REPLY OF THE FARNHAM RURAL DISTRICT
COUNCIL TO THE RECOMMENDATIONS MADE BY THE
COUNTY MEDICAL OFFICER OF HEALTH IN HIS REPORT
ON THE SANITARY CIRCUMSTANCES AND ADMINIS-
TRATION OF THE DISTRICT.

1. It is satisfactory to learn that this recommendation is now being carried out. Systematic investigation and a sanitary survey of cases of notifiable disease were certainly not being made at the time the district was visited by the County Medical Officer of Health.

2. Having regard to the fact that there is a steam disinfecting apparatus at the Isolation Hospital, it does not appear that the cost of transport is a sufficient excuse for the failure properly to disinfect by steam, bedding after cases of infectious disease.

Any attempt to disinfect a mattress otherwise than by steam, for example, after it has been used by a patient in a late stage of pulmonary tuberculosis is not likely to be successful.

3. Experience has shewn that verbal instructions, although useful, cannot take the place of printed instructions, and the Rural District Council is urged to supplement by leaflets the verbal instructions which are stated always to be given.

4. The Rural District Council is in error in the statement that the Health Visitors of the County Council report direct to the Sanitary Inspector of the Farnham Urban District Council.

The County Council has decided that reports must be made directly to the County Medical Officer of Health by members of his staff. It is only by this method that satisfactory co-ordination can be carried out. This procedure causes no appreciable delay.

5. The Rural District Council is urged to enforce the notification of intention to slaughter. This can be done by obtaining from the occupiers, at the time that the licences are renewed, an undertaking to notify.

6. The County Medical Officer of Health, in his Report, drew attention to the need for systematic house-to-house inspection. Casual visits and inspections by the Medical Officer of Health and Sanitary In-

spectors when "they are about the district and when they think necessary" cannot be considered at all equivalent to carefully made and properly recorded house-to-house inspections.

7. The Rural District Council is urged to carry out a systematic sampling of well water where there is available a public supply. At the present time the amount of sampling is likely only to reveal a small part of the pollution.

8. In view of the unsatisfactory conditions of housing in the Rural District and the large amount of overcrowding which exists, there must be many occasions on which persons suffering from a notifiable infectious disease ought to be admitted into the Isolation Hospital for their own safety and for the protection of the community. Certainly the Council should provide for cases of puerperal fever and also for diseases such as poliomyelitis, encephalitis lethargica, dysentery and pneumonia. It is quite conceivable that under certain circumstances measles and whooping cough and even chicken-pox might properly be admitted into the Isolation Hospital for treatment.

APPENDIX II.

REPORT OF THE COUNTY MEDICAL OFFICER OF HEALTH ON THE RIVER WANDLE.

The observations on which the Report is based were carried out between April 11th and June 25th, 1923, when the river was running at an average flow.

SECTION 1.

SOURCE.

The River Wandle begins at a culvert in Wandle Park and flows through the old town of Croydon for over a mile to Brighton Road. This culvert was built with dry joints to allow percolation of subsoil water, many miles of surface water drains are connected to it, and also a variable bourne from Purley.

IN WANDLE PARK.

The sides of the banks are cemented to a point just beyond the first footbridge, after which they are lined with small flints in concrete. The channel measures about 5 feet across, the flow is sluggish, the bottom of the channel is exposed in places. At the first footbridge a surface water culvert opens into it on the right bank.

A lake in the Park communicates by two large culverts with the river on its left bank.

The depth of the river increases at the last footbridge, and the Wandle leaves the park by running under the Wimbledon and West Croydon Railway by the right of the Vulcan Iron Works. Throughout this part of the course the flow is poor; leaves, soil, paper and other débris are the main contamination.

Immediately after a heavy rainfall much detritus is deposited on the sides of the bed and the water becomes muddy; this is clearly due to road washings from Croydon.

The River now passes by allotments on the left bank and the Gas Works grounds on the right. At the end of the railway siding the Wandle is fenced across, there are some decaying branches in the stream. The water is clean, the current is slow, and the bed is stony.

The River crosses under Waddon Marsh Road, having allotments on the right bank and Dye Works on the left, but there is no effluent from these Works discharged into it. The sides of the river are concreted. A small by-pass is given off to the mill pond of the Waddon Flour Mills, but water can only gain access to the by-pass in times of flood or when the sluice in the river is closed. This by-pass contains stagnant water owing to lack of flow, the bed being covered with slime, and there is scum on the surface.

The Wandle passes under a small footbridge having the sluice gate just mentioned, and then over a weir where the channel ceases to be concreted, over four more weirs and then it can receive water from the same mill pond by a tumbling bay. It passes under the railway line and again runs in a concreted channel to the left of the mill chimney shaft. Except in a few places the banks are clean, and there is a fair flow of water.

Just beyond the chimney shaft the river receives a large culvert Y.1 discharging surface water from Croydon; the water from the culvert is very oily, contains much detritus and smells strongly of tar.

WADDON SPRINGS TRIBUTARY.

These springs rise in the vicinity of a lake in Waddon Court and in marshy ground in Waddon Lodge. The outflow from this lake is a large volume of water, the banks are covered with reeds. Underground springs also feed the lake. The outflow passes under a bridge and swells out to form the mill pond of the Waddon Flour Mills, the water appears to be clean but the flow is very sluggish. The outlet of this pond passes under Waddon Flour Mills through a tumbling bay—very little water, if any, is used for power—the channel is now concreted and the tributary joins the Wandle below the chimney shaft.

On the right bank, at level of Croydon Boundary Stone, a blind ditch, with muddy banks containing dirty water, joins the Wandle. A wire screen is placed across the river to keep back débris at this point.

SECTION 2.

At the beginning of this section on the right bank are watercress beds.

The river now is in a bad condition—the bed is covered with black slime and the sides are much overgrown with weeds.

Branch A. From the western extremity of the watercress beds a small branch A leaves the Wandle and runs in a north-westerly direction—it soon meets with a spring having several heads rising in the chalk. At

the junction of the footpath from Beddington Lane to Waddon Marsh Lane it takes a north-westerly direction and follows the side of this path. Opposite to Park House Farm it turns south, and is met by an underground spring. After passing by the Farm it appears as a ditch on the left side of the lane. It is now culverted across the road, and then as an open stream passes beside Wandle Cottage to join the river at the level of the watercress beds near Guy's Road.

In the first part of its course this stream is little more than a marsh, but after receiving the springs its flow becomes better and the banks are fairly clean.

The Wandle, covered by planking, passes through the grounds of Wandle Flour Mills to a tumbling bay. Before reaching this bay it gives off a by-pass on the right which is joined by a branch from the tumbling bay—the sides are very dirty and covered with black mud.

There is not much water power used at the Mills—electricity having replaced it to a large extent.

Beyond the Mills the river becomes broad over a gravel bed and appears to be clean, with an improved flow. At Bridges Road surface water is discharged into the river by a culvert Y.2. A footpath follows the left bank and a few small springs join it. The Wandle now passes under a bridge at Beddington Lane—the water becoming somewhat muddy, probably from the ford.

At the end of the bridge a sluice is interposed to regulate the flow on to watercress beds. The overflow from the mill joins at this point, whereas Branch A previously referred to joins slightly lower down.

WANDLE MILL BY-PASS.

This by-pass bends round from the mill by way of the Pneumatic Engineering Works, runs under a footbridge under Wandle Road, skirts several houses, and crosses under Beddington Lane to gain the main river in Guy's Road at the level of the sluice mentioned above. There is much slime on the banks and the water is muddy.

The banks and the bed of the main river are still dirty—the river divides into two parts, B and C, passes over a weir and encircles watercress beds.

Branch B. The right part B. forms one of the boundaries of Park House Farm, and is then culverted into the ground of the Beddington Park Orphanage.

The banks are much overgrown with weeds, and there is slime on the bed—in part of its course the sides are bricked.

Branch C. The left part C. follows Guy's Road as a dirty stream with poor flow and a muddy bed—it passes under a fence and bends round to gain the Orphanage grounds.

SECTION 3.

The river flows through the Orphanage grounds; the banks are overgrown with weeds, and the bed is silted up; the two parts B. and C. join the river here.

The river emerges from these grounds by a culvert and bends at a right angle, the flow is very sluggish, the bed is muddy and the banks are overgrown with weeds, especially at a bend where there is much silt. It passes over a weir, and a culvert then discharges the contents of a muddy ditch running parallel with the river bank; another discharge from the same ditch by an open silted channel now occurs.

The Wandle now passes under a footbridge and over another weir. The right bank is muddy but the flow improves; the river then passes under a brick bridge.

The river enters Beddington Park and becomes wider, but it is somewhat muddy from fording beasts; there are two other weirs, and then an obtuse bend where two culverts Y.3 discharge surface water on the left bank.

The river then becomes cleaner, but the right bank is marshy after the obtuse angle where mud is present. It passes under the footpath from the church—the banks are much overgrown, but they have been cleaned recently. It flows over a weir, which holds back some silt, into an old mill pond in private grounds where the water is clean; towards the outlet this pond becomes dirty with much slime and weeds, but it has been narrowed artificially and work is still being carried out. On the right bank there is an overflow which passes through the grounds of “The Grange.”

Another overflow or by-pass runs through the grounds of French's Bridge Cocoa Mills parallel to the main river, it passes under the bridge and re-joins the river.

The banks are much overgrown, the bed slimy, and the water dirty. The Wandle goes over a weir under French's Mills and emerges covered with scum at the bridge over London Road, Wallington.

TRIBUTARIES OF SECTION 3.

A. A lake covered with slime and very marshy rises by springs in the grounds of Turner's Chocolate Factory, flows over a weir into a

narrow channel in the grounds, it appears open in front of a brewery and is here supplemented by another underground spring rising beyond the brewery.

There is no discharge of trade effluent from the brewery.

This stream flows through the grounds of "Wandle Bank," and runs alongside London Road, and passes over three weirs and is joined by several springs. The stream is clean and of good velocity; it is culverted into the Wandle below the bridge and receives storm water and surface water Y.4 at this point.

B. On the other side of the road a dirty pond fed by springs is close to the Cocoa Factory—there are much slime and weeds in the pond. The outlet receives several springs and flowing under the footbridge it runs into the river just before the London Road bridge.

C. At the footbridge another small spring feeds the river—a slimy pond is in the grounds beyond.

D. A small spring rises in Beddington Park to the right of the footpath, and has a sluice over a bricked area. On the left bank it is met by sluggish springs from the woods.

This water is clean over gravel and sand; at the level of the Lodge in the Park it turns at a right angle following the right side of London Road it passes under the road, leaving a blind end, which acts as a surface water drain and gains Mizen's Hackbridge watercress beds; from the beds the water discharges under the railway bridge apparently to form a small stream at Hackbridge Mills.

The Wandle passes through the grounds of Bridge House, where the flow is sluggish. The banks are somewhat muddy, especially at the bends, until the river forms the boundary of the watercress beds where a small branch feeds some other watercress beds. The river now passes under the Southern Railway, and here the sides of the river are badly overgrown, not more than a quarter of the breadth of the channel being patent.

SECTION 4.

This section describes the Carshalton branches of the Wandle.

Branch A. Springs rise in the Convent grounds and form a large lake covered with much scum and weeds; the surface water from Short's Road and Low Road drain into a small pond and are culverted into the lake. Swimming baths from the Convent also discharge into the lake, which overflows by two culverts across West Street into a stream running through the "Lodge" grounds, picks up other springs and then discharges into the Carshalton pond. The water here is clean.

Branch B. (i) Rising from underground springs in Carshalton Park a broad sluggish stream runs at a right angle to Ruskin Road, through the park for a few hundred yards passing under Ruskin Road; beyond the road a culvert Y.5 on each side discharges surface water.

The flow being sluggish there are many weeds, the stream falls over a weir, then under a bridge, and passing through culverts gains Carshalton Park House, where it goes through the wall and meets a stream running along the High Street.

(ii) Hogpit Pond has two outlets by culverts:—

(a) Forms the stream in High Street, to which reference has just been made;

(b) Joins the village pond.

Branch C. A small pond in Wandle Lodge, known as St. Margaret's Pool, rises from springs in the grounds at the corner of Pound Street and West Street, Carshalton, and after passing as a sluggish stream through private grounds gains access to Carshalton Pond at "Honey Wood."

Branch D. Carshalton Pond receives tributaries from the Convent grounds, the Lodge, Wandle Lodge, and other springs, including Ann Boleyn's Well. It is covered with weeds and overflows through the grounds of the "Grove"; where it divides, the right part passes over a waterfall and gains the watercress beds, the left part passes through a water wheel at the site of an old mill. The former is clean and of good velocity, the latter is sluggish with little flow, therefore much slime. These two parts join and the flow is good; the stream passes under a stone bridge having given off tributaries to watercress beds on the right; now the banks become overgrown and the beds silted. It passes by a sluice through a chemical factory.

Branch E. is formed by the junction of Branch B. (i) and B. (ii), is culverted into the grounds of Bramble Haw and is led by a culvert across Westcroft Road, picking up surface drainage water it passes allotments on the right and an orchard on the left; here the banks are so overgrown that there is practically no flow. An overflow on the left bank controlled by a sluice discharges into the main tributary from Carshalton Pond, but the stream flows on through a sluice under the water wheel at Smith's Iron Works and joins the main tributary between the Chemical Works and the lower mill.

The Carshalton tributary is slimy and the bed muddy. It now forms a mill pond and passes through the lower mill and under the bridge, a by-pass being given off at lower mill which is now closed.

The tributary passes under three arched bridges, where it is muddy and overgrown; here it receives two surface water culverts, Y.6, the contents of which are oily and evil smelling. It gains Shepley House and is here joined by the by-pass which has a poor flow augmented by two small water wheels; the banks are dirty. The tributary passes through the grounds, opposite Shepley House a small stream of sluggish water joins. The tributary now enters the main river.

SECTION 5.

During its course to Hackbridge Mills the Wandle appears to be clean.

The river becomes very sluggish, the remains of oil are still on the surface towards Hackbridge Mills. Before this it makes a rough circle so that both parts pass through the mill. Inside the circle is an island of marshy ground overgrown with reeds. The river passes through a grid into the Hackbridge Chamois Leather Mills and gives off a by-pass which joins the main river soon after.

The river is now fairly clean, an effluent Z.1 is given off from the Leather Mills. The banks are silted and shew a deposit of lime. It passes under a bridge at Nightingale and Hackbridge Roads; on the left bank it now receives from a large culvert surface water from Carshalton, Y.7, and on the right bank a large culvert from Hackbridge and Wallington, Y.8, is being constructed.

A small branch (the overflow from the Hackbridge watercress beds) runs parallel to the river on its right bank, this branch has a poor flow and dirty banks and rejoins the river at the level of the bridge.

The river now passes through the grounds of Hackbridge Cottage and House, where there is a ford; the flow is sluggish. It then divides into four streams—A., B., C. and D.—the one on the right A. being the original river, the others have been made for ornamental purposes. The right part passes over three weirs and under two foot-bridges, then under Culvers Avenue and through the grounds of "Culverside." The river is rapid in flow and appears clean.

B., C. and D. have very poor flow and are slimy; they join together at "The Culvers," and proceed as a single stream towards the old mill. Just before this is a by-pass which takes overflow water and discharges it into the stream A. in Culverside grounds. The banks here are reedy.

The part which passes under the mill is used for irrigating nurseries and watercress beds; it joins the main stream A. by a cross branch and later meets A. at Rushey Meadow. The banks of the river

are overgrown and there are many reeds. The river then passes through Mizen's Nurseries.

On the left bank a culvert, X.1, discharges from Carshalton Sewage Works; the bed is so overgrown in places that not more than one-sixth of its breadth is patent; the water is muddy. The river now gains the Mitcham Leather Mills.

SECTION 6.

At the level of the Isolation Hospital at Beddington Corner a piped outlet from the right bank of the Wandle discharges into a channel A; this gives a supply to some watercress beds; the channel supplies a small mill controlled by a sluice and then turns at a right angle.

The outlet, B., from the watercress beds, joins this channel, and forms stream C.; the banks are much overgrown with weeds and are irregular; the branch divides, one part passing into the old mill pond, which contains debris, mud, and is very marshy; the other part turns at a right angle controlled by a sluice runs north and is met near the grounds of Mill Pond House by the overflow from the mill pond. It then passes through the grounds of Mill Pond House, where a fence has been erected across the stream to keep back the debris.

During the course of this stream through the nurseries its banks are much overgrown; near the pond the breadth of the stream is diminished to about one-third of its extent by weeds.

This stream takes a northerly course across the Common and at the footbridge in Goat Road meets a stream, X2, from Beddington Corner, which is the effluent of the Croydon Sewage Farm.

EFFLUENT FROM CROYDON SEWAGE FARM.

Some distance beyond Hackbridge Station effluent from the sewage farm runs from the boundary of Beddington Park and picks up some surface drainage and drainage of sewered land, the effluent passes under the railway line at Hackbridge, then under New Road bridge it picks up more effluent and runs in a concreted channel to the right of London Road as far as Lower Farm; here it is joined by two parallel streams of effluent which have a rapid flow. It passes over a weir and near some cottages, then runs parallel to London Road and passing under the footbridge at a pair of cottages, drains more sewered land. It divides into two parts, one part bends to the right with poor flow and communicates with a large pond where the ground is very marshy; the other part has a fence across it, and passes under London Road after giving off a branch to the pond. This pond is stagnant, the sides are overgrown with weeds, and the ground is very marshy in places.

The effluent now crosses the common, the banks are somewhat irregular, but the flow is good. It passes under two footbridges and at the bridge in Goat Road meets with the stream from the watercress beds at Beddington Corner.

The stream passes through market gardens, where the banks are very irregular, and joins the main river after giving a branch to the watercress beds of Mizen Bros. The stream divides into two parts, and each part joins the main river; both parts are very broad and the flow sluggish.

The River Wandle runs through the grounds of the Mitcham Leather Mills, and divides into a right and left part. The right part falls over two weirs into a sluice gate under the mill, curves to the left, and forms a pond.

The left part passes through a grid supplying two large water wheels, and is joined by the right part just before the footbridge over Goat Road. The water is clean. A small stream running alongside the footpath to the right of the Isolation Hospital is culverted into the mill pond.

The river now divides to form a head for the Eagle Leather Works; the two parts of the river are broad and enclose a triangular piece of ground, the left part is probably the original channel of the river. The right part is a V-shaped branch, and before joining the left part receives the stream containing the effluent from Croydon Sewage Farm and the outfall from the Beddington Corner watercress beds. It also gives off a branch to Mizen Bros.' watercress beds. The banks are well cared for, but owing to the width of the river the flow is poor and the bed muddy.

SECTION 7.

The river on the left bank gives off a branch which passes over a weir; it picks up surface drainage and runs through fields; in places the banks are overgrown and the water is almost stagnant; the bed is muddy alongside the Eagle Leather Works.

The main river runs through the land of the Eagle Leather Works, the banks are well kept, the Wandle gradually diminishes in breadth. It divides, one part going under the mill, the other by an old wheel; the latter part also divides, and its left division picks up the stream which went over the weir. The three divisions unite beyond the mill.

The outfall from Mizen Brothers' watercress beds turns at a right angle near the Eagle Leather Works, and a surface water drain, Y.9,

from the adjoining railway land, gains access to it. The stream now runs on to a blind end but before doing so a piped outlet passes under Willow Lane, supplies Duthries' watercress beds, and picks up a small stream running through marshy ground on the right bank of the river; it supplies another watercress bed, crosses under London Road, Mitcham, and reaches the Wandle in Ravensbury Park.

The Wandle pursues a winding course in the vicinity of Bennett's Hole, turning at a right angle it divides into three parts, A., B. and C., at the footbridge:—

A. The right or main part is a constructed channel; it curves, having watercress beds on the right bank; there is much deposit, especially where the flow is sluggish at the bends. Near the mill its flow is very slow. It divides, and on the left a small by-pass is given off. Each of main parts passes under sluice gates and works a wheel at the Wandle Fibre Mills.

B. The middle part is controlled by a sluice gate, which is closed. This portion is little more than a stagnant ditch.

C. The left part is very sluggish, the sides are clean; it passes through a sluice over a weir and joins the middle part B. just before the mill; they unite with the by-pass, go through a sluice, and then expand.

The main part A. passes through the mill and divides into right and left portions; the left takes up the junction of B.C. and the by-pass, and joins the right at the level of the bridge over London Road, Mitcham.

There is a pond on the left bank of C. which is overgrown with weeds.

SECTION 8.

After passing under the bridge at London Road the river divides and gives off a branch M.; the two parts join to form a broad sluggish river in Col. Bidder's grounds, the stream continues to Rutter's Tobacco and Snuff Mills. From the right bank there is a by-pass over a weir.

Where the river divides, the ground is very marshy, and there are many reeds on the banks, the main river to the mill is very sluggish, and the banks are reedy.

M. Branch M. given off in the grounds pursues a winding course, turns at a right angle, and leaves the grounds to gain the vicinity of a disused mill; it turns and gives off a branch which divides into two parts, A. and B.

A. passes over a weir and runs in front of a rubber factory under a footbridge and through a field. It then discharges into a horsepond.

B. turns at a right angle and runs parallel to A.

C. The main stream turns at a right angle and gives off a broad branch on the right, C., which is much overgrown with weeds; this passes over a weir, then becoming very sluggish joins B. at the level of the disused mill. Contamination from a manure heap occurs here. It then crosses under the road as a narrow stream and runs through a field.

D. The main stream M. now gives off a branch, D., on the right by a culvert to the disused mill pond, which is much overgrown with weeds; it passes in two parts under the mill. These parts re-join to form a sluggish stream.

The main stream M. runs slowly, parallel to the Wandle; on the left bank there is a weir from the Wandle forming a blind end.

The part which left the disused mill is parallel to the main stream M., and on the left bank receives its overflow.

The stream now turns at a right angle under a footbridge, and runs parallel to Morden Road; it soon receives the branch stream B.; it now turns to the left and passing under a footbridge gains the grounds of Morden Hall, after it has picked up the overflow from the horsepond which has been augmented by branch A.

SECTION 9.

The Wandle leaves Rutter's Mills and divides into two parts, A. and B.

A. passes close to the Morden Road, turns at a right angle at a cottage, and picks up a culvert, Y.10, discharging surface water from an open ditch.

The water is very sluggish and the bed is covered with mud; the banks are reedy; the river turns at a right angle to pass in front of Morden Lodge, and communicates on the right with a pond of stagnant water, which is very reedy towards the outlet.

B. is broad with a fair flow; the banks are overgrown; on the right it picks up the stream C., which has passed under Morden Road; it now divides, the left part meeting with A.

It is broad here in the grounds of Morden Hall, much silted and reedy. There are now three streams, D., E., and F., running side by side.

D. The flow is sluggish and the water dirty. The banks are held up in places with wood; it passes through gardens and orchards; the banks are irregular but clean. It then flows under a footbridge and meets E.

E. has passed through the woods, and is rather more rapid in flow.

F. appears to be the main River Wandle. The flow is better, the banks are clean, but the water is dirty.

These three streams swell out to form a mill pond from which three branches, H., G. and K., are given off.

The right H., originally a by-pass, runs over a weir, and the flow is maintained by three more weirs; it passes under several footbridges and gives off a small branch on the left, each part having a sluice. H. runs on with a good flow, but at a footbridge it becomes slower and the banks are overgrown; there is fording for beasts. The right bank is very reedy and marshy in places; the flow is maintained, it passes through a sluice and joins the right division of the Wandle just before the railway crossing; here it is very marshy and the banks are overgrown, only half the stream being patent. The branch of this by-pass divides, the right part empties into a pond, the edges of which are reedy and the banks are marshy.

The pond empties into the right division of the River Wandle by a sluice; the left part winds with a good flow and joins the main river at its bifurcation.

K. There is an ornamental part given off on the left over a weir; the flow is sluggish, the water is dirty; it passes under a wall, gains the kitchen gardens of Morden Hall, then flows under another wall, round a cottage, and turning at a right angle joins L., which is a branch of G., the main river.

L. is given off near the old Snuff Mills and passes over a weir, broadens and becomes parallel to K., turns at a right angle with a sluggish flow and joining K. becomes a single stream, which soon divides; one part is culverted under Morden Hall, the other becomes very broad and sluggish, turns at a right angle and joins with the part which has passed under Morden Hall, forming a rhomboid. Where these two parts join, a small branch passes over a weir, under a footbridge, and enters the park, the banks are overgrown with weeds, and turning at a right angle it joins the main river. There are two outlets from the rhomboid. The right outlet is broad, the left outlet has a fairly rapid flow, they are parallel and join with M. and with a branch from the main river.

At the Old Snuff Mills Branch G., which is the main River Wandle, is cleaner and passes under the mill, it broadens out and becomes sluggish where it receives a small stream. It divides into two parts, which continue through the grounds of Morden Hall with sluggish flow; the banks are reedy in places; each passes under the Wimbledon to Croydon line. The banks here are much overgrown, especially those of the right division; the two divisions next pass through a field and are much overgrown in places.

SECTION 10.

Just before Phipps Bridge the two parts of the river communicate and beyond the bridge form one channel; the banks are overgrown. On the left bank is a house belonging to Hadfield's Varnish Works, here the banks are well kept. The Wandle passes "The Nook" and gains Liberty's Silk Factory Grounds, it is here very sluggish, the water is dirty, but the banks are clean.

A portion passes over a weir on the right, picks up a surface spring and forms three streams, A, B and C.

A. The right, controlled by a sluice gate, runs through marshy ground, pursues a winding course and giving a large part of its contents to B, runs on to a blind end which communicates with B.

B. The middle part runs over a concreted bed where the flow is sluggish and the banks overgrown.

C. The left part expands to form a pond which supplies a wheel in the dye works and then communicates with B.

At Liberty's Silk Mills the junction broadens with an improved flow, the banks are overgrown with weeds, it passes under a plank bridge and on the left receives drainage from a stagnant ditch. Passing under a wall it joins a branch D. from below Phipps Bridge.

D. On the right bank of the Wandle above "The Nook" a small stream is diverted by a sluice gate, it receives two springs, one of surface water, the other draining ornamental lakes in the grounds of Harland's Works, these lakes receive surface drainage Y.11 from Mitcham Cricketers' Green area. There is some mud here on the bottom, but otherwise the stream is clean, it passes through marshy ground and round "The Nook," becoming dirty it runs as a ditch along Phipps Bridge Road. In Western Road near the Albion public house a culvert Y.12 discharges surface water from Three Kings Pond and Mitcham Fair Green. The stream becomes almost stagnant and contains much rubbish, it is culverted across the road and passes near some

old houses; the banks are muddy and the water is dirty. The stream is culverted under the railway just below Merton Abbey Station. It now runs beside a footpath to Wandle Bridge, receiving the contents of two culverts Y.13. The banks are much overgrown, there are many bends, the current is sluggish and there is thick black mud on the bed, the water is very dirty and offensive at this part. The stream joins the Wandle at Wandle Bridge, Colliers Wood.

The main river passes through an old water wheel and gives off a by-pass which goes through a grid and a sluice, re-joining the Wandle under the footbridge. It then passes under the railway line (Merton Park to Merton Abbey).

There is a U-shaped lake in Liberty's staff ground, the lower end has a culvert bringing water from the Wandle, the upper end discharges into the Wandle by another culvert. The Wandle now picks up some stagnant water adjacent to the road and reaches allotments on the right and a timber yard on the left. The flow is rapid, the banks are overgrown, the water is dirty, and there is an old ditch on the right bank. The water has been made to flow over the right bank to irrigate the allotments. The river passes under a footbridge and at a large overgrown mill pond divides, the right part passes under MacAlpine's Paper Mill to form a pressure head, it is open, then culverted and passes the back of the mill, it then joins the left part which has gone under Stevenson's Mill. The river becomes open along the High Street, Colliers Wood, and then meets the junction formed by branches A. to D.

SECTION 11.

The Wandle now runs along Wandle Bank and on the right feeds the Old Mill Pond, the water is very shallow, sluggish and dirty. The pond discharges into the Wandle lower down.

A. At the end of the pond near Wandle Bank there is a small branch A. running in a concrete channel. It pursues a winding course through Wandle Bank Park and receiving the discharge of the Baths passes under South Road, Wimbledon, to join the Wandle on its right bank at the level of the Wandle Valley Joint Sewage Works. The flow of this stream is poor and the water is dirty; between its outfall and the footbridge in South Road the water is almost black, and there is much foul sludge on its banks.

The River Wandle passes under Conolly Brothers' Leather Mill, which has just been re-built and a main race for a turbine fitted. A by-pass is given off and rejoins the river after the mill. The river

runs under South Road, is joined by A. and has the Wandle Valley Joint Sewage Works on its right bank, new contact beds are being installed here. Large quantities of partially treated sewage are discharged from these works by a large culvert which was probably intended for storm water overflow. The Wandle flows towards the Railway line from Wimbledon to Tooting Junction, and on its left bank receives surface water from two culverts Y.14 and Y.15. Just before the river passes under the Railway line it receives surface water from another culvert Y.16 on its left bank. A concreted channel running parallel to the railway for about 150 yards discharges its contents into the Wandle on the right bank, just after the river passes under the railway line, this is the outfall of the River Graveney. The banks of the Wandle are much fouled with sewage and infested with rats, and the water is in a filthy condition. The Wandle passes towards Plough Lane Bridge, it has allotment grounds on the left bank and the Wandle Valley Joint Sewage Works on the right bank. The banks are still covered with black mud, are much overgrown with weeds, and the water is so foul that it is almost sludge. Before the Wandle passes under Plough Lane Bridge there are some watercress beds on its right bank, but these beds are not fed from the river.

A ditch runs parallel to the main sewage channel, it is sluggish and covered with scum, with mud on the floor, the banks are irregular, it receives overflow from Plough Lane. Winding as a dirty stream through allotments at the back of Summerstown, it passes through Stevenson's Box Mills and discharges into the Wandle by a grid on the right bank—before this it gives off a branch which runs parallel to the river as a dirty stream, is culverted through Garratt Park and ultimately discharges into the Wandle at the level of a bridge at the end of Summerley Street.

The Wandle expands to form a mill pond at Plough Lane Bridge, the sides are covered with reeds, water is thick with scum, the beds are covered with black mud and the odour is offensive. The river supplies power to the Chamois Leather Mill. Before passing under the Mill, a by-pass is given off on the right and re-joins the river at the end of Mill House Grounds, the banks have been concreted by the mill owner to prevent flooding.

The main river goes through the centre wheel of the mill. A culvert Y.17 discharges surface water from Wimbledon on the right bank at the level of the mill.

The Wandle now has the Wimbledon Sewage Works on its left bank, the sewage is treated by precipitation—one part passes into settling

tanks and over filter beds and discharges into the river in several places, the other passes over land. The river divides to enclose a small island. During this part of its course the water is very dirty, banks are overgrown in places, and there is much black mud at the bends of the river. In places the bottom of the river can be seen covered with thick black mud.

SECTION 12.

The Wandle divides into four parts, B., C., D. and E., before Earlsfield Bridge at Summerfield Road.

B. Branch B. on the left falls over a weir, and expands to form a pond; here a culvert should discharge the effluent from the Wandle Valley Joint Sewerage Board, the river winds round and receives the effluent from Wimbledon Sewage Farm, passes under the railway line (Earlsfield to Wimbledon) and joins the Wandle at the Incandescent Mantle Factory.

C. The right part passes over a weir and discharges into a channel where it receives surface water from Garratt Park. On the right bank a large brick culvert is being constructed—Y.18.

D. This branch is, in fact, the main river, it passes under a bridge, then over a wheel and through a weir at the site of an old mill; there is much scum on the surface of the water.

E. The next branch passes under a road and works a small wheel. The banks are overgrown, the water is stagnant. These three branches C., D. and E. join before passing under Earlsfield Railway Bridge.

An open channel containing the discharge from the Power Station of the Electric Railway joins the Wandle on its left bank at the level of the Ironclad Incandescent Mantle Works. Under this channel is a culvert through which water is pumped up to the Power Station. This water mainly consists of sewage effluent from Wimbledon and the Wandle Joint Sewage Works.

The river passes beside Smart's Laundry on the right, the banks are concreted. It then goes under a bridge in Penwith Road, then under a bridge in Duntshill Road, and under a footbridge in Earlsfield Joinery Works.

The flow is moderate, the water is very dirty. It then passes under a footbridge in Lyndon Road. The left banks are concreted at the level of an old mill, Lyndon Grove is on the right bank and also a rag and bag washer's factory. From the footbridge both banks are concreted to just before the Veritas Incandescent Mantle Works.

The Wandle now passes through Benham's Engineering Works, a by-pass is given off on the left bank which soon joins the river again, but before doing so gives off a branch which runs through the Wandsworth New Park, running in a channel with concreted banks, this branch is shallow, but the flow is fairly good. The stream passes under a footbridge over Mapleton Road. Only the left bank is now concreted, it passes under a large sewer, on the right bank is a pond, it crosses under a bridge at Buckhold Road where the right bank is muddy.

This branch leaves the New Park and pursues a curved course, the banks are very irregular. It passes to the right of the Welsbach Incandescent Mantle Works and joins the River Wandle just above the Public Baths.

Although the water is filthy, the banks are well kept throughout the New Park.

The main river now expands and supplies Wandsworth Flour Mills, giving off a by-pass, which joins the river at Buckhold Road. The Wandle passes under Buckhold Road and receives on its left bank the branch which has run through Wandsworth New Park. It now flows alongside Wandsworth Public Baths and passes under the Wandsworth High Street Bridge.

SECTION 13.

The Wandle divides at Wandsworth High Street into two parts A. and B.

A. The right part is culverted under Young's Brewery to the left of York Road, and reaches Clark's Timber Yards, where it expands to form a broad canal. On its left bank it communicates with the Wandle by a concreted and then a piped pass. The current is now slow, and at an obtuse bend there is much black mud and scum. It passes under the Southern Railway line from Waterloo to Putney, having the London County Council Electric Light works on the left bank, it goes under a foot-bridge, then becoming narrower it passes under a sluice and gains the right bank of the Thames. The current is slow, the water is very dirty.

B. The left part is the main Wandle, it passes beside buildings and supplies the Waterside Saw Mills, having previously given off a by-pass, which joins the river again after it has passed under the Mill. The river is now broad, the water is dirty and the flow sluggish. On the left bank it gives off a branch C. which passes under a sluice, there is much mud and scum. It now passes as a broad river under

the Railway Bridge, to the left of the Electric Light Works, then under a footbridge and swells out to form a basin, it is then joined by C. and gains the right bank of the Thames. The flow is much improved, but the water is very dirty.

C. This branch, known as the Creek, is a by-pass given off from the Wandle on its left bank, between the Waterside Saw Mills and the Southern Railway line, it passes by a sluice gate under a footbridge to the left of Thorley's Poultry Food Factory and joins B. after both have passed under the Southern Railway.

The water is dirty, the rate of flow depends upon the use of the sluice gates.

RIVER GRAVENEY.

SECTION A.

The River Graveney is the main tributary of the River Wandle. It rises from springs in the vicinity of Manor Farm Road, Norbury, and emerges from a small culvert where this road joins Norbury Avenue.

The sides of the river are concreted, the water is clean, the flow is slow over a gravel bed.

It is culverted under Norbury Avenue, and forms a boundary of the Golf Course; the sides of the river are still concreted. As Norbury Brook it passes through the Golf Course, then under Streatham High Road, by Hermitage Bridge, where there is a ford, then it runs under a railway line and receives surface water from a culvert. In places debris is present, but the stream is fairly clean.

SECTION B.

As an open stream it flows through agricultural land as far as Greyhound Lane, receiving surface water from a culvert at this point.

The banks are irregular but fairly clean. There is a gravel bottom and the flow is slow.

SECTION C.

The Graveney passes under Greyhound Lane; on the right bank it receives storm overflow water from a large culvert and on the left bank surface water from a small drain; it passes under two railway lines, being in a concrete channel during the remainder of its course. The Graveney now forms the boundary between Wandsworth Municipal Borough and Mitcham Urban District, and before reaching Streatham

Road receives the contents of several small surface drains on both banks. Near Roe Bridge it receives surface water from Tooting on the right bank and Gorringe Park on the left bank. It passes under Streatham Road by Roe Bridge and it receives on the right bank storm water from an egg-shaped brick culvert and on the left bank surface water from another culvert.

The stream then passes between Seely Road and Southcroft Road and runs under Eastbourne Road. On the left bank it receives the contents of a large number of small surface water drains and two large surface water culverts, and on the right bank several small drains discharge surface water into it. It passes towards Durham House, and receives the contents of two large culverts on the right bank. The flow is poor, the water is dirty, and the bed is silted in places. There are tins and other rubbish in the stream.

SECTION D.

At Durham House the stream runs in a deep channel of concrete, and it is culverted across Seely Road, passing on the left of Mitcham Road, it crosses to the left of Langley Road, following the right of the railway. Level with Tooting Junction Station it becomes an open channel as far as Waterfall Bridge, where a large open channel discharges surface water on the left bank. The flow in this section is slow, the water is not clean.

SECTION E.

It is culverted on the right side of the railway, and then about 150 yards from the Wandle it flows in the open, joining the Wandle on the right bank of that river.

OBSERVATIONS.

MILLS.

For several centuries there have been many mills on the banks of the Wandle, and it is said that there are more there than on any other river of similar size in this country. For the use of these mills it has been necessary to construct numerous by-passes, mill ponds, sluices, dams and weirs; and to alter the course and width of the river in many places. These alterations of the course of the river interfere with the natural flow and prevent it from being self-cleansing.

WATERCRESS BEDS.

There are many watercress beds on the banks of the Wandle, some of which obtain their supply directly from the river, others from

tributaries. At Beddington it is stated that the watercress does not flourish so well since the surface water from Croydon containing much oil and tar has been discharged into the Wandle.

SURFACE WATER: SOURCES OF POLLUTION.

Most of the surface water contains tar, oil and other detritus from road washings. The culverts are marked Y. on the map and are situated as follows:—

Section 1. Y.1. A large volume of surface water from Croydon gains access at the Waddon Mills. There is much tar, oil and detritus in this discharge.

Section 2. Y.2. Surface water from the adjoining roads discharge into the Wandle at Bridge Road, Beddington.

Section 3. Y.3. In Beddington Park two culverts discharge surface water from South Beddington.

Section 3. Y.4. At Wallington Bridge surface water gains access to the river.

Section 4. Y.5. Two culverts discharge surface water from adjoining roads at Ruskin Road, Carshalton.

Section 4. Y.6. At the three arched bridges, Carshalton, two culverts discharge surface water.

Section 5. Y.7. At Hackbridge a large culvert discharges surface water from Carshalton on the left bank of the river.

Section 5. Y.8. At Hackbridge a large culvert discharges surface water from Wallington and Hackbridge on the right bank of the river.

Section 7. Y.9. At Willow Lane a drain discharges surface water from the adjoining railway land.

Section 9. Y.10. An open ditch draining Morden Road is culverted into the Wandle.

Section 10. Y.11. Surface water is culverted from Cricketers' Green, Mitcham, and gains access at the level of "The Nook."

Section 10. Y.12. Near the Albion Public House, Western Road, Mitcham, surface water from Fair Green, Mitcham, gains access by a culvert.

Section 10. Y.13. Above MacAlpine's Paper Mills culverts discharge surface water into a branch of the Wandle.

Section 11. Y.14, Y.15, Y.16. Culverts discharge surface water from adjoining land on the left bank of the Wandle between South

Road, Wimbledon, and the Railway Lane from Wimbledon to Tooting Junction.

Section 11. Y.17. A culvert discharges surface water from Wimbledon at the Chamois Leather Works, Plough Lane.

Section 11. Y.18. A large culvert discharges storm water from Wandsworth just above Earlsfield Bridge.

SEWAGE.

The situations where sewage effluent is turned into the Wandle are marked X. on the map; they are:—

Section 5. X.1. Carshalton Urban District Sewage Works.

Section 6. X.2. Croydon County Borough Sewage Farm.

Section 11. X.3. Wandle Valley Joint Sewage Farm.

Section 11. X.4. Wimbledon Municipal Borough Sewage Beds.

Section 11. X.5. Wandle Valley Joint Sewage Farm.

Section 11. X.6. Wimbledon Metropolitan Borough Sewage Farm.

The schemes of the various Authorities for the treatment of sewage should provide an innocuous effluent, but there is no doubt that from the works of the Wandle Valley Joint Sewage Board there is being discharged into the Wandle large volumes of sewage which has undergone comparatively little treatment. The grossly polluted condition below South Road, Wimbledon, is due to this effluent of raw sewage.

OTHER EFFLUENTS.

Most of the mills on the Wandle discharge their effluents into the sewers. The effluent Z.1. on the map gains access to the river.

Section 5. Z.1. At Hackbridge Leather Mills an effluent containing lime is discharged.

CONDITION OF THE WATER.

Originally the Wandle was noted for its trout, and experiments have been made in late years by some of the riparian owners to stock a part of the river with fish, but they soon died out, presumably owing to the tar, oil and chemicals discharged into the river.

In the first part of its course the river (apart from detritus brought down by various surface water drains) is comparatively clean, but as the Wandle increases in size and receives numerous effluents it becomes dirty. Between South Road, Wimbledon, and its outfall at Wandsworth it is in a very foul condition.

CONDITION OF THE BANKS.

In many instances the banks belong to private persons; in other cases to local authorities or firms. The Eagle Leather Works, for example, has bought land, so as to be the riparian owner of the river for a considerable length, and the banks are well kept. In other cases the banks are overgrown with weeds and the velocity of the river much impaired. Where the river passes through private grounds it is usually considerably diverted for ornamental purposes, but the banks are well kept.

OWNERSHIP.

The banks and half of the channel of the River Wandle belong to the owners of the land through which the river passes up to the point where the Parishes of Tooting and Streatham intersect the river. From this point, which is presumably about the level of Plough Lane, Wimbledon, to its outfall into the Thames at Wandsworth, the Wandle is a main sewer, and comes under the jurisdiction of the London County Council. The Port of London Authority also has powers over the river from Stevenson's Box Mills, Wandsworth, to its outfall.

LEGAL POWERS.

METROPOLIS LOCAL MANAGEMENT ACT, 1855.

Section D. The River Wandle is classified as a main sewer from the point where the parishes of Tooting and Streatham intersect the river to its outfall into the Thames at Wandsworth.

Section 135. The Metropolitan Board of Works has the power to close up or destroy any of its main sewers, and shall cause them to be constructed, covered and kept so as not to be a nuisance or injurious to health, and to be properly cleared, cleansed and emptied. It has also powers to deal with the various effluents discharged into the Wandle in its area of jurisdiction.

THE RIVERS POLLUTION PREVENTION ACT, 1876.

Section 8. Every Sanitary Authority has power to enforce the provisions of this Act in relation to any stream within or passing through any part of its district, and is enabled to institute proceedings against any other Sanitary Authority or person, whether such offence is committed within or without the district of the first-named Sanitary Authority.

THE LOCAL GOVERNMENT ACT, 1888.

Established County Councils and the powers of the Metropolitan Board of Works were transferred to the London County Council.

Section 14. A County Council has power, in addition to any Local Authority, to enforce the provisions of the Rivers Pollution Prevention Act, 1876, in relation to so much of any stream as is situated within or passes through or by part of the County.

THE RIVER WANDLE PROTECTION ACT, 1908.

Croydon County Borough is deprived of power in the future to sink wells that would affect the Wandle, but can use the Waddon Well, subject to the pumping limitation of 50 million gallons in 30 days.

The Middlesex County Council by a local Act passed in 1898 obtained comprehensive powers for the protection of streams in that county.

SUMMARY.

From Plough Lane, Wimbledon, the Wandle is a sewer.

Having regard to—

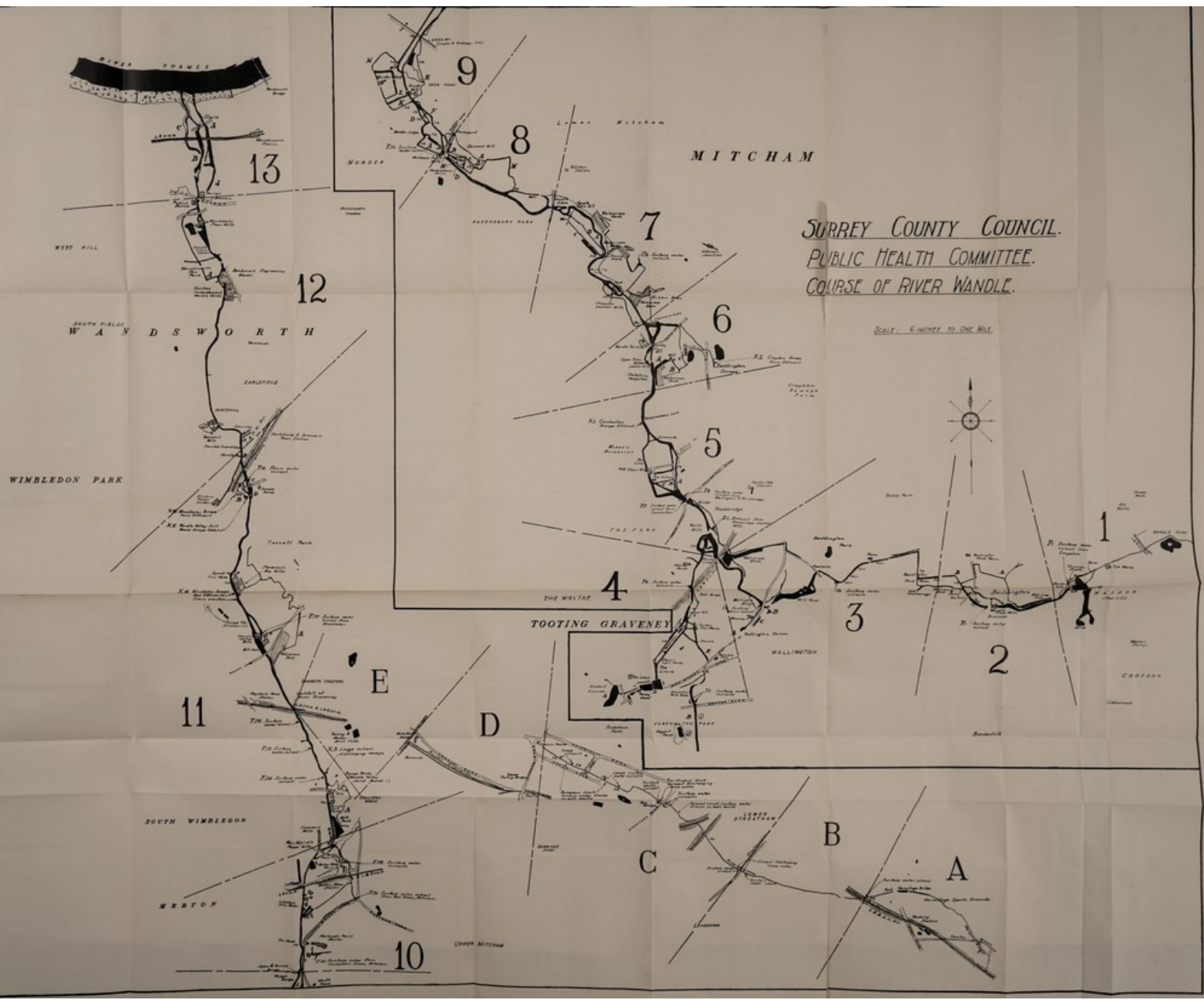
- (a) the amount of building which is going on in the districts through which the river flows;
- (b) the number of industries along the banks of the stream;
- (c) the large volume of road washings and surface water which is turned into the river; and
- (d) the financial burden which would fall on the riparian owners if they were called upon to carry out individually the work necessary to remove the serious nuisances which undoubtedly exist,

one is reluctantly driven to the conclusion that the only reasonable scheme likely to meet the situation is to narrow the channel of the river and largely to replace the present banks with concrete. The improvement likely to follow the adoption of such a suggestion is well demonstrated in that length of the Graveney which has been turned into a concrete channel at Wimbledon by the London County Council.

RECOMMENDATIONS.

1. Steps be taken to obtain Parliamentary powers either to establish a Wandle River Board, vested with authority to levy a rate and to execute work by default, or to authorise the County Council to take such steps as may be necessary to prevent pollution and obstruction.

2. As the promotion of a private Bill would be assisted if support were forthcoming from the local sanitary authorities of the districts through which the river flows, it is suggested that those bodies might be invited to a conference to discuss the advisability of the establishment of a River Board.
3. Pending the establishment of this Board proceedings should be taken by the County Council to prevent gross contamination of the Wandle, such as that now being caused by the Wandle Valley Joint Sewage Board.

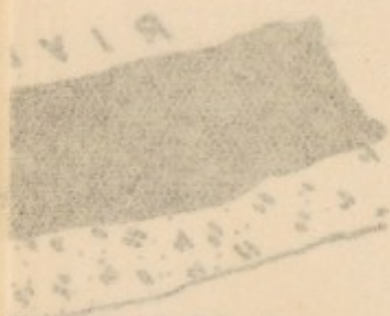


SURREY COUNTY COUNCIL.
PUBLIC HEALTH COMMITTEE.
COURSE OF RIVER WANDLE.

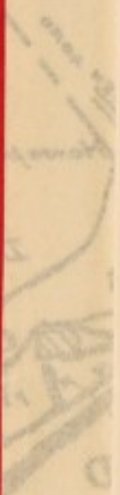
SCALE: 1 INCH TO 1 MILE

Wimbleton

3



WIMBLETON PARK



WEST HILL
W
SOUTH HILL

Grass

Urban District

Rural District

Administrative

APPENDIX III.

TABLE I.

GIVING THE POPULATION IN EACH OF THE CENSUS YEARS, 1901,
1911 AND 1921.

	1901.	1911.	1921.
Urban Districts	396,405	524,625	572,138
Rural Districts	123,361	151,402	167,264
Administrative County	519,766	676,027	739,402

APPENDIX III

TABLE I

GIVEN THE POPULATION IN EACH OF THE COUNTRIES, 1911 AND 1921.

	1911	1921	1931
United States	100,000,000	120,000,000	140,000,000
Canada	10,000,000	12,000,000	14,000,000
British Empire	400,000,000	450,000,000	500,000,000

TABLE II.

POPULATION.

DISTRICTS.		Area in statute acres (land and inland water).	Population.						+ Increase. - Decrease.	Registrar-General's Estimate (Mid-Year).
			1911.			1921.				
			Persons.	Males.	Females.	Persons.	Males.	Females.		
URBAN.										
1. Barnes	2,519	30,377	13,624	16,753	34,299	15,008	19,291	3,922	34,400	
2. Beddington and Wallington.....	3,040	14,322	6,199	8,123	16,308	7,129	9,179	1,986	16,340	
3. Carshalton	2,926	11,634	5,221	6,413	14,021	6,158	7,863	2,387	14,610	
* 4. Caterham	2,438	10,841	5,338	5,503	11,763	5,947	5,816	922	12,370	
5. Chertsey	10,776	13,816	6,696	7,120	15,127	7,161	7,966	1,311	15,070	
6. Coulsdon and Purley	8,572	18,872	8,020	10,852	21,491	8,916	12,575	2,619	22,000	
7. Dorking	1,338	7,848	3,544	4,304	8,057	3,545	4,512	209	8,004	
8. Egham	7,786	12,551	5,998	6,553	13,725	6,333	7,392	1,174	13,620	
9. Epsom	4,423	19,156	8,810	10,346	18,804	8,848	9,956	- 352	19,230	
10. Esher and The Dittons	5,979	12,518	5,561	6,957	14,309	6,335	7,974	1,791	14,260	
11. Farnham	3,214	11,680	5,590	6,090	12,128	5,660	6,468	448	12,180	
* 12. Frimley	7,674	13,673	7,320	6,353	13,676	6,807	6,869	3	13,590	
13. Godalming (M. B.)	813	8,846	4,305	4,541	9,197	4,426	4,771	351	9,238	
14. Guildford (M. B.)	2,592	23,820	11,227	12,593	24,926	11,696	13,230	1,106	25,830	
15. Ham	1,869	1,435	616	819	1,510	644	866	75	1,542	
16. Haslemere	2,263	3,520	1,537	1,983	3,865	1,506	2,359	345	3,753	
17. Kingston-on-Thames (M. B.)	1,131	37,975	17,717	20,258	39,479	18,191	21,288	1,504	40,320	
18. Leatherhead	3,508	5,491	2,725	2,766	5,817	2,761	3,056	326	5,855	
19. Maldens and Coombe	3,221	12,137	5,786	6,351	14,495	6,577	7,918	2,358	14,780	
20. Merton and Morden	3,237	14,140	6,746	7,394	17,532	8,249	9,283	3,392	18,290	
21. Mitcham.....	2,935	29,606	14,758	14,848	35,119	16,910	18,209	5,513	36,460	
22. Molesey, East and West	1,517	6,492	2,981	3,511	7,280	3,280	4,000	788	7,354	
23. Reigate (M. B.)	5,995	28,502	12,947	15,555	28,914	12,785	16,129	412	28,710	
24. Richmond (M. B.).....	2,491	33,221	14,054	19,167	35,639	15,265	20,374	2,418	35,120	
25. Surbiton	3,049	17,717	7,453	10,264	19,547	8,472	11,075	1,830	19,670	
26. Sutton.....	1,835	21,270	10,055	11,215	21,063	9,381	11,682	- 207	21,120	
27. Walton-on-Thames	6,860	12,856	5,679	7,177	14,644	6,334	8,310	1,788	14,690	
28. Weybridge	1,371	6,286	2,568	3,718	6,684	2,809	3,875	398	6,403	
29. Wimbledon (M. B.)	3,221	54,966	24,071	30,895	61,418	28,885	32,533	6,452	58,000	
30. Windlesham	5,691	4,249	2,079	2,170	4,878	2,215	2,663	629	4,721	
31. Woking	11,826	24,808	11,996	12,812	26,423	12,070	14,353	1,615	26,770	
Total.....	126,110	524,625	241,221	283,404	572,138	260,303	311,835	47,513	574,300	
RURAL.										
1. Chertsey	16,021	9,383	4,761	4,622	11,163	5,396	5,767	1,780	11,150	
2. Dorking	39,526	10,580	5,103	5,477	10,575	4,853	5,722	- 5	10,250	
3. Epsom	32,580	30,245	13,951	16,294	34,118	15,355	18,763	3,873	34,630	
4. Farnham	26,149	15,945	7,447	8,498	18,332	8,334	9,998	2,387	18,220	
5. Godstone	53,512	23,931	11,210	12,721	25,387	11,468	13,919	1,456	25,340	
* 6. Guildford	53,342	18,274	8,951	9,323	21,879	11,186	10,693	3,605	21,350	
7. Hambledon	60,932	21,849	10,670	11,179	23,090	11,096	11,994	1,241	22,860	
8. Reigate	44,649	21,195	10,022	11,173	22,720	10,442	12,278	1,525	22,700	
Total.....	326,711	151,402	72,115	79,287	167,264	78,130	89,134	15,862	166,500	
Administrative County	452,821	676,027	313,336	362,691	739,402	338,433	400,969	84,508	740,800	

* In these districts a deduction is made from the population shown above when calculating the death rates. This is necessary consequent upon these districts having within their borders a certain number of military personnel. The population for the whole county for purposes of death rates is estimated to be 737,754.

TABLE II.

POPULATION.

DISTRICT.	1911.	Area in acres land and water.	Persons.	1911.	Persons.
1. Harrow	30,377	2,519	30,377	30,377	30,377
2. Redington and Washington	11,302	3,040	11,302	11,302	11,302
3. Chesham	11,034	2,920	11,034	11,034	11,034
4. Chesham	10,841	2,438	10,841	10,841	10,841
5. Chesham	13,810	10,778	13,810	13,810	13,810
6. Chesham and Harrow	18,875	8,572	18,875	18,875	18,875
7. Dorking	7,848	1,338	7,848	7,848	7,848
8. Epsom	12,551	7,780	12,551	12,551	12,551
9. Epsom	10,150	4,423	10,150	10,150	10,150
10. Epsom and The Downs	12,518	5,079	12,518	12,518	12,518
11. Epsom	11,080	3,214	11,080	11,080	11,080
12. Epsom	13,073	7,074	13,073	13,073	13,073
13. Guildford (M.R.)	8,840	813	8,840	8,840	8,840
14. Guildford (M.R.)	23,820	2,502	23,820	23,820	23,820
15. Ham	1,431	1,809	1,431	1,431	1,431
16. Haslemere	3,520	2,903	3,520	3,520	3,520
17. Kingston-on-Thames (M.R.)	37,973	1,131	37,973	37,973	37,973
18. Leatherhead	5,491	3,502	5,491	5,491	5,491
19. Mole and Chesham	12,137	3,221	12,137	12,137	12,137
20. Mole and Molesey	14,140	3,237	14,140	14,140	14,140
21. Molesey	20,008	2,935	20,008	20,008	20,008
22. Molesey, East and West	8,482	1,517	8,482	8,482	8,482
23. Molesey (M.R.)	22,502	2,905	22,502	22,502	22,502
24. Molesey (M.R.)	23,521	2,491	23,521	23,521	23,521
25. Sutton	17,715	3,049	17,715	17,715	17,715
26. Sutton	21,270	1,835	21,270	21,270	21,270
27. Walton-on-Thames	12,850	6,880	12,850	12,850	12,850
28. Weybridge	6,288	1,371	6,288	6,288	6,288
29. Wokingham (M.R.)	44,088	3,321	44,088	44,088	44,088
30. Wokingham	4,319	3,691	4,319	4,319	4,319
31. Woking	41,808	11,820	41,808	41,808	41,808
Total	126,110	126,110	126,110	126,110	126,110
1. Chesham	10,051	9,383	10,051	10,051	10,051
2. Dorking	30,520	10,580	30,520	30,520	30,520
3. Epsom	32,580	30,245	32,580	32,580	32,580
4. Epsom	20,149	15,045	20,149	20,149	20,149
5. Guildford	23,612	23,612	23,612	23,612	23,612
6. Guildford	23,342	18,274	23,342	23,342	23,342
7. Guildford	20,932	21,849	20,932	20,932	20,932
8. Guildford	11,049	21,193	11,049	11,049	11,049
Total	326,711	181,402	326,711	326,711	326,711
Administrative County	452,821	876,927	452,821	452,821	452,821

In these districts a deduction is made from the population shown upon these districts having within their borders a certain purpose of death rates is estimated to be 107,131.

TABLE III.

The following statements referring to quinquennial periods will serve to show the gradual reduction in all these rates:—

BIRTHS.

During five years 1890-1894	...	25·7 per 1,000 population
During five years 1895-1899	...	24·9 per 1,000 „
During five years 1900-1904	...	23·9 per 1,000 „
During five years 1905-1909	...	23·4 per 1,000 „
During five years 1910-1914	...	20·5 per 1,000 „
During five years 1915-1919	...	16·1 per 1,000 „

DEATHS.

During five years 1890-1894	...	13·9 per 1,000 „
During five years 1895-1899	...	13·0 per 1,000 „
During five years 1900-1904	...	12·0 per 1,000 „
During five years 1905-1909	...	11·0 per 1,000 „
During five years 1910-1914	...	9·9 per 1,000 „
During five years 1915-1919	...	12·0 per 1,000 „

DEATHS UNDER ONE YEAR.

During five years 1890-1894	...	...	109·0 per 1,000 births
During five years 1895-1899	...	...	117·0 per 1,000 births
During five years 1900-1904	...	...	103·0 per 1,000 births
During five years 1905-1909	...	...	83·0 per 1,000 births
During five years 1910-1914	...	...	73·7 per 1,000 births
During five years 1915-1919	...	...	66·9 per 1,000 births

TABLE IV.

BIRTHS IN 1923.

DISTRICTS.	Number.	Net Rate per 1,000 population.	Excess of births over deaths.
URBAN.			
1. Barnes	558	16.2	216
2. Beddington and Wallington.....	221	13.5	49
3. Carshalton.....	275	18.8	150
4. Caterham	178	14.4	93
5. Chertsey	231	15.3	105
6. Coulsdon and Purley	305	13.9	141
7. Dorking	116	14.5	19
8. Egham.....	220	16.2	64
9. Epsom	257	13.4	105
10. Esher and The Dittons	192	13.5	74
11. Farnham	204	16.7	73
12. Frimley	233	17.1	121
13. Godalming (M.B.)	139	15.0	44
14. Guildford (M.B.)	461	17.8	205
15. Ham	21	13.6	9
16. Haslemere	52	13.9	11
17. Kingston-on-Thames (M.B.).....	706	17.5	290
18. Leatherhead	103	17.5	51
19. Maldens and Coombe	236	16.0	91
20. Merton and Morden	341	18.6	188
21. Mitcham.....	786	21.6	443
22. Molesey, East and West	100	13.6	19
23. Reigate (M.B.)	414	14.4	125
24. Richmond (M.B.).....	554	15.8	152
25. Surbiton	348	17.7	131
26. Sutton	381	18.0	160
27. Walton-on-Thames	240	16.3	122
28. Weybridge	95	14.8	51
29. Wimbledon (M.B.)	868	15.0	321
30. Windlesham	67	14.2	18
31. Woking	388	14.5	196
Total	9,290	16.2	3,837
RURAL.			
1. Chertsey.....	176	15.8	68
2. Dorking	176	17.2	48
3. Epsom.....	509	14.7	235
4. Farnham	338	18.6	124
5. Godstone	385	15.2	123
6. Guildford	315	14.8	118
7. Hambledon	344	15.0	88
8. Reigate	350	15.4	107
Total	2,593	15.6	911
Administrative County	11,883	16.0	4,748

TABLE IVa.

Diagram showing the birth rate (per 1,000 population) in the Administrative County in each of the years 1889-1923.

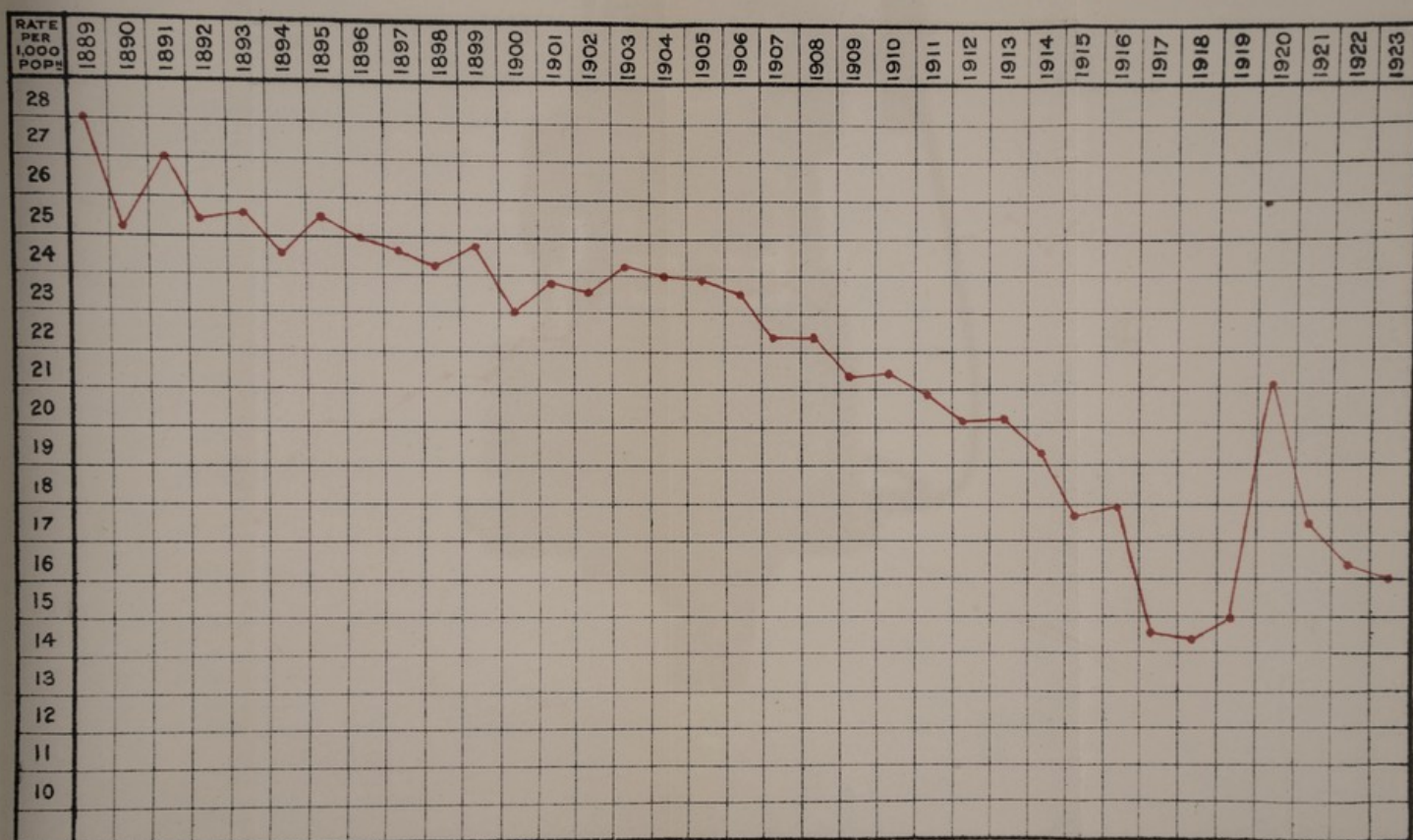


TABLE IV.

Diagram showing the birth rate (per 1,000 population)

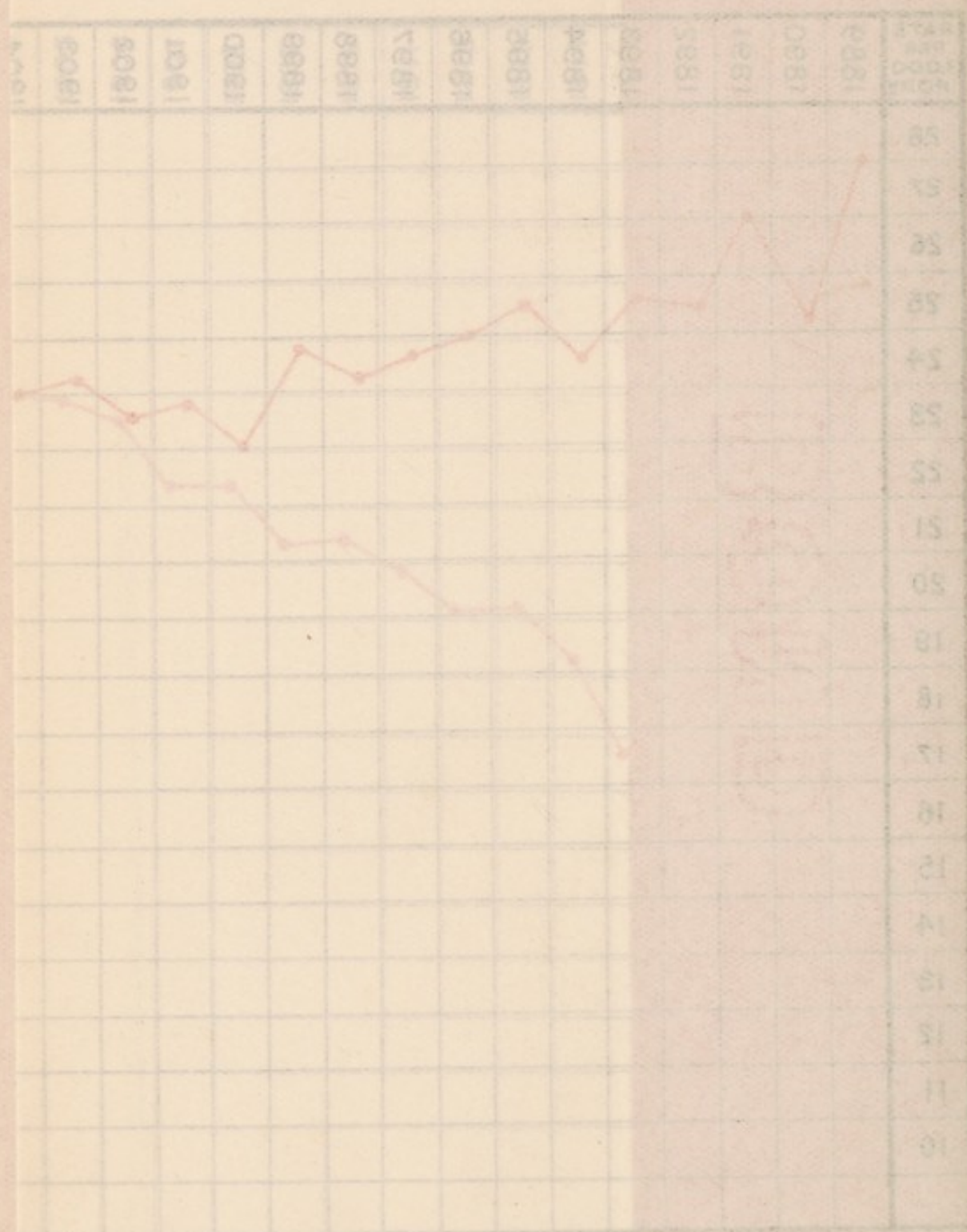


TABLE Va.
Diagram showing the death rate from all causes (per 1,000 population) in the Administrative County in each of the years 1889-1923.

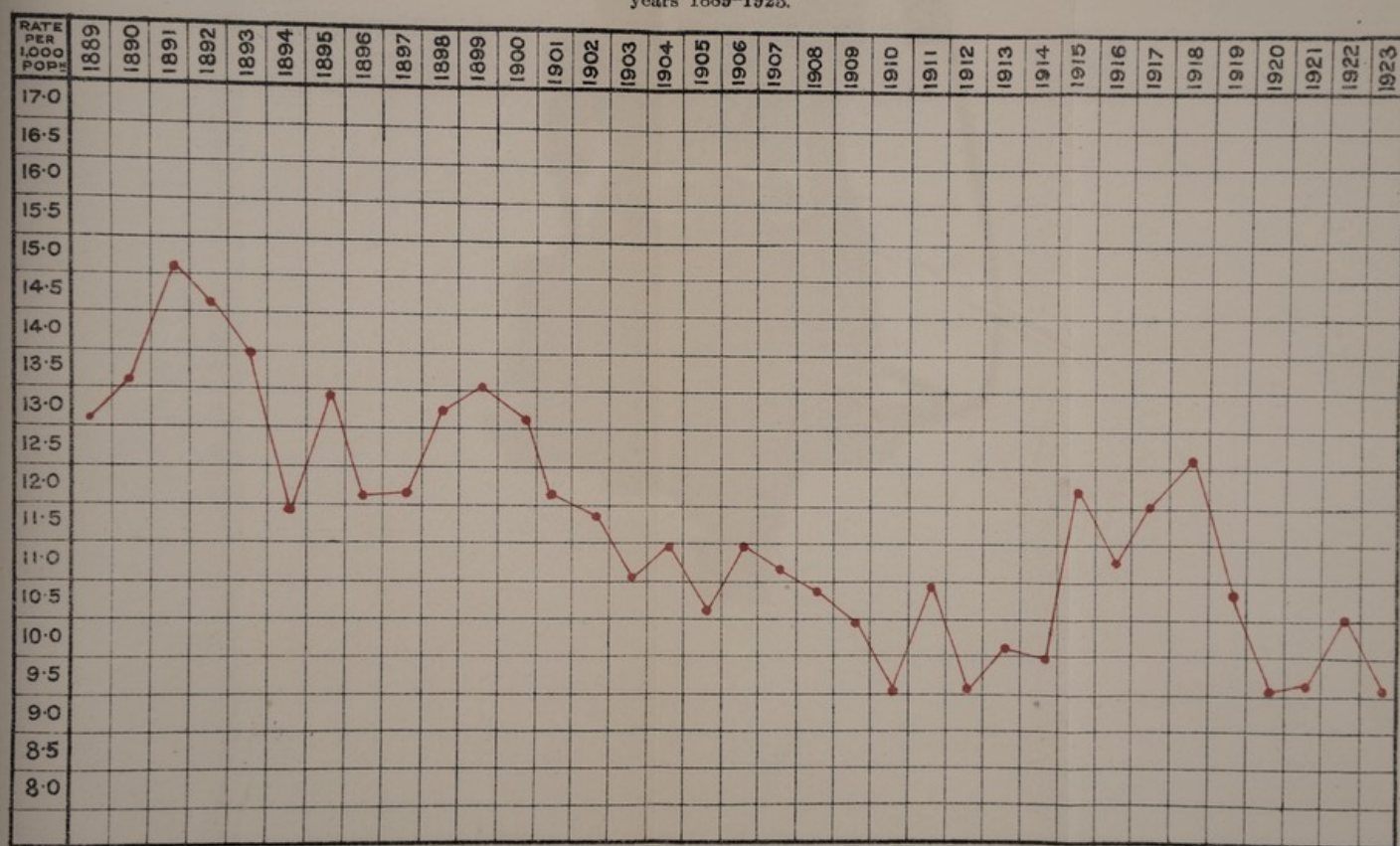


TABLE Va.

Diagram showing the death rate per 1,000 live births for the years 1881-1931.

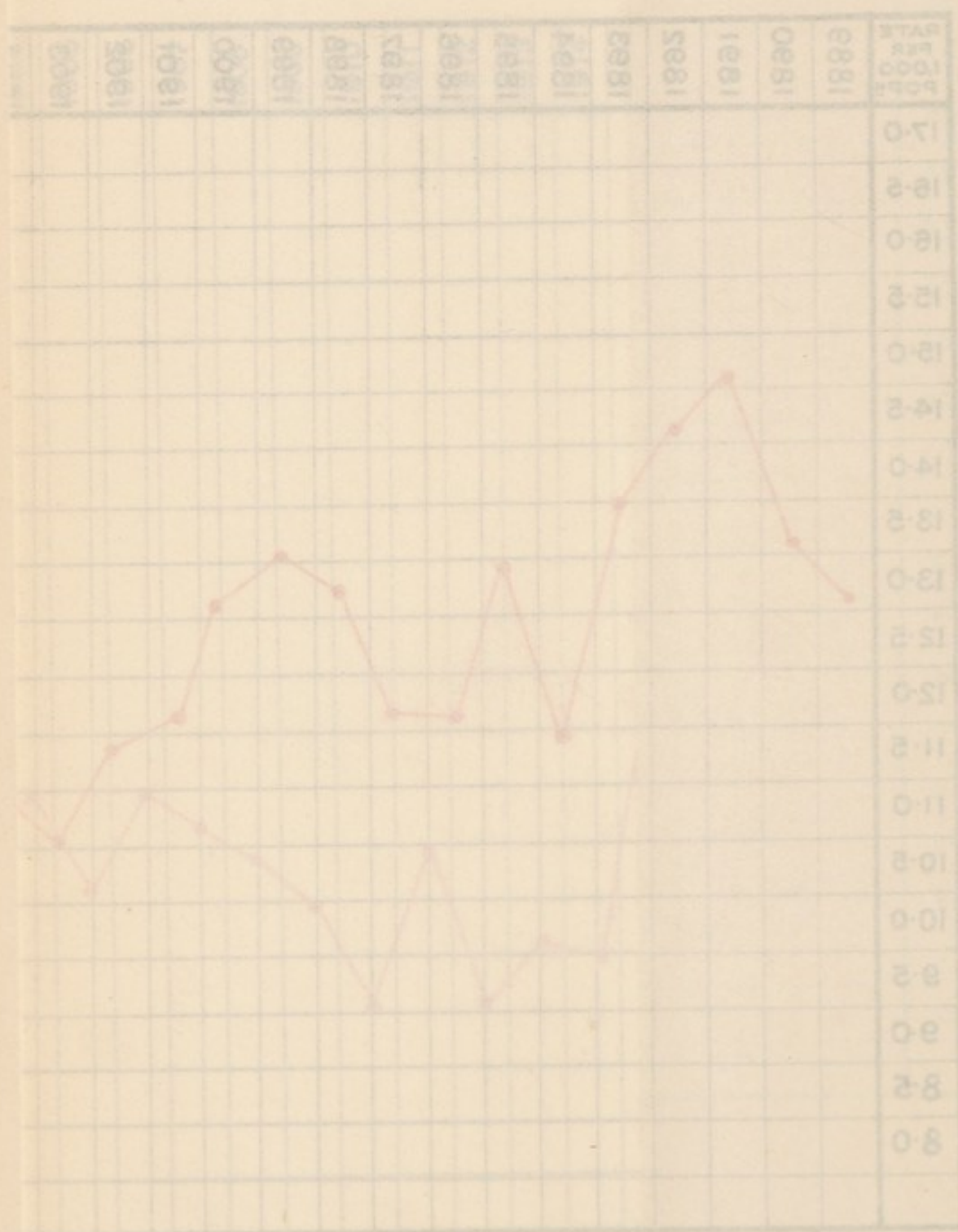


TABLE V.

DEATHS FROM ALL CAUSES IN 1923.

DISTRICTS.		Number.	Net rate per 1,000 population.
URBAN.			
1.	Barnes	342	9.9
2.	Beddington and Wallington.....	172	10.5
3.	Carshalton	125	8.6
4.	Caterham.....	85	7.6
5.	Chertsey	126	8.4
6.	Coulsdon and Purley	164	7.5
7.	Dorking	97	12.1
8.	Egham.....	156	11.5
9.	Epsom	152	7.9
10.	Esher and The Dittons	118	8.3
11.	Farnham	131	10.8
12.	Frimley	112	9.6
13.	Godalming (M.B.)	95	10.3
14.	Guildford (M.B.)	256	9.9
15.	Ham	12	7.8
16.	Haslemere	41	10.9
17.	Kingston-on-Thames (M.B.)	416	10.3
18.	Leatherhead	52	8.9
19.	Maldens and Coombe	145	9.8
20.	Merton and Morden	153	8.4
21.	Mitcham	343	9.4
22.	Molesey, East and West	81	11.0
23.	Reigate (M.B.)	289	10.1
24.	Richmond (M.B.)	402	11.4
25.	Surbiton	217	11.0
26.	Sutton	221	10.5
27.	Walton-on-Thames	118	8.0
28.	Weybridge	44	6.9
29.	Wimbledon (M.B.)	547	9.4
30.	Windsor	49	16.4
31.	Woking	192	7.2
Total.....		5,453	9.5
RURAL.			
1.	Chertsey	108	9.7
2.	Dorking	128	12.4
3.	Epsom	274	7.9
4.	Farnham	214	11.7
5.	Godstone	262	10.3
6.	Guildford.....	197	9.2
7.	Hambleton	256	11.2
8.	Reigate	243	10.7
Total.. ..		1,682	10.1
Administrative County.....		7,135	9.7

TABLE VI.

ADMINISTRATIVE COUNTY OF SURREY.—CAUSES OF AND AGES AT DEATH IN 1923.

Causes.	Under 1 year.	1 & under 2 years.	2 & under 5 years.	5 & under 15 years.	15 & under 25 years.	25 & under 45 years.	45 & under 65 years.	65 & under 75 years.	75 years & upwards.	All Ages.
Enteric fever ...	—	—	—	1	2	4	—	—	—	7
Small-pox ...	—	—	—	—	—	—	—	—	—	—
Measles ...	7	8	6	3	—	—	—	—	—	24
Scarlet fever ...	—	1	4	7	—	1	—	—	—	13
Whooping cough ...	22	5	7	3	—	1	—	—	—	38
Diphtheria and croup ...	—	2	7	13	1	—	—	—	—	23
Influenza ...	4	—	—	6	5	8	22	37	34	116
Encephalitis lethargica ...	—	—	1	4	1	5	2	—	—	13
Meningococcal meningitis ...	3	1	—	3	—	—	—	—	—	7
Tuberculosis of the respiratory system ...	—	1	2	12	86	186	122	19	4	432
Other tuberculous diseases ...	8	14	13	19	9	14	10	5	4	96
Cancer, malignant disease ...	1	1	1	4	6	66	431	284	216	1,010
Rheumatic fever ...	—	—	—	8	6	6	2	1	1	24
Diabetes ...	—	—	—	2	2	9	27	22	16	78
Cerebral hæmorrhage, &c. ...	—	—	—	—	1	7	118	143	223	492
Heart disease ...	—	—	1	8	13	73	287	304	314	1,000
Arterio-sclerosis ...	—	—	—	—	—	3	57	119	196	375
Bronchitis ...	15	4	4	1	1	5	50	95	232	407
Pneumonia (all forms) ...	53	28	16	14	20	49	111	66	80	437
Other respiratory diseases ...	2	1	2	1	3	13	25	23	31	101
Ulcer of stomach or duodenum ...	—	—	—	—	1	18	24	9	3	55
Diarrhœa and enteritis ...	44	4	—	1	1	2	3	5	12	72
Appendicitis and typhlitis ...	—	—	4	17	11	9	20	10	1	72
Cirrhosis of liver ...	—	—	—	—	—	3	27	10	2	42
Acute and chronic nephritis ...	—	1	—	2	6	19	72	64	44	208
Puerperal sepsis ...	—	—	—	—	1	9	—	—	—	10
Other accidents and diseases of pregnancy and parturition ...	—	—	—	—	3	19	—	—	—	22
Congenital debility and malformation (including premature birth) ...	262	2	3	—	—	2	—	1	—	270
Suicides ...	—	—	—	—	8	21	32	10	3	74
Other deaths from violence ...	13	8	7	18	23	21	40	33	29	192
Other defined diseases ...	94	18	19	30	42	124	285	234	568	1,414
Cancers ill defined or unknown	6	—	—	1	—	—	—	—	—	7

TABLE VIIa.

Diagram showing the infant mortality rate (per 1,000 registered births) in the Administrative County in each of the years 1889-1923.



TABLE VII.

Diagram showing the infant mortality rate per 1,000 live births for 1921-1923.

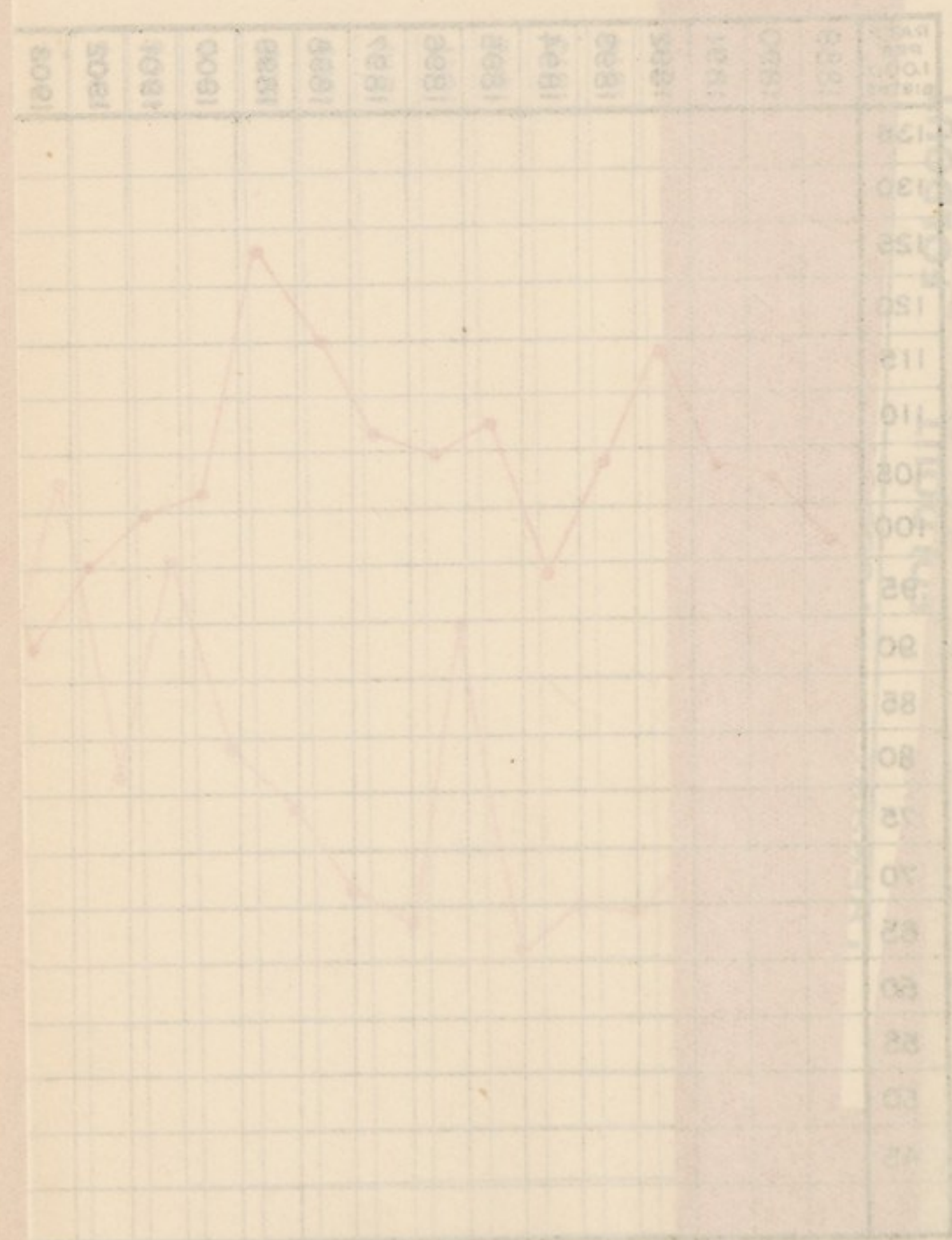


TABLE VII.

DEATHS UNDER ONE YEAR IN 1923.

DISTRICTS.	Number.	Net rate per 1,000 births.
URBAN.		
1. Barnes	26	47
2. Beddington and Wallington	11	50
3. Carshalton.....	10	36
4. Caterham	10	56
5. Chertsey	11	48
6. Coulsdon and Purley	11	36
7. Dorking	4	34
8. Egham	10	45
9. Epsom	14	54
10. Esher and The Dittons	3	16
11. Farnham	9	44
12. Frimley	5	21
13. Godalming (M.B.)	4	29
14. Guildford (M.B.).....	17	37
15. Ham	1	48
16. Haslemere	5	96
17. Kingston-on-Thames (M.B.)	46	65
18. Leatherhead	6	58
19. Maldens and Coombe	8	34
20. Merton and Morden	8	23
21. Mitcham	47	60
22. Molesey, East and West	3	30
23. Reigate (M.B.).....	16	39
24. Richmond (M.B.)	32	58
25. Surbiton	9	26
26. Sutton	16	42
27. Walton-on-Thames	12	50
28. Weybridge	2	21
29. Wimbledon (M.B.)	39	45
30. Windlesham	4	60
31. Woking	11	28
Total.....	410	44
RURAL.		
1. Chertsey	8	45
2. Dorking	9	51
3. Epsom	14	28
4. Farnham	23	68
5. Godstone	19	49
6. Guildford	14	44
7. Hambledon	22	64
8. Reigate	15	43
Total.....	124	48
Administrative County.....	534	45

TABLE VIII.

DEATHS FROM THE SEVEN PRINCIPAL EPIDEMIC DISEASES, 1923.

DISTRICTS.	Number.	Net rate per 1,000 population.
URBAN.		
1. Barnes	10	0·29
2. Beddington and Wallington	3	0·18
3. Carshalton.....	—	—
4. Caterham	2	0·18
5. Chertsey	2	0·13
6. Coulsdon and Purley... ..	1	0·05
7. Dorking.	—	—
8. Egham	1	0·07
9. Epsom	1	0·05
10. Esher and The Dittons	1	0·07
11. Farnham	1	0·08
12. Frimley	2	0·17
13. Godalming (M.B.)	1	0·11
14. Guildford (M.B.).....	2	0·08
15. Ham	—	—
16. Haslemere.....	—	—
17. Kingston-on-Thames (M.B.)	12	0·30
18. Leatherhead	2	0·34
19. Maldens and Coombe.....	4	0·27
20. Merton and Morden	5	0·27
21. Mitcham	17	0·47
22. Molesey, East and West	1	0·14
23. Reigate (M.B.).....	5	0·17
24. Richmond (M.B.)	8	0·23
25. Surbiton	4	0·20
26. Sutton	3	0·14
27. Walton-on-Thames.....	8	0·54
28. Weybridge	2	0·31
29. Wimbledon (M.B.)	21	0·36
30. Windlesham	—	—
31. Woking	5	0·19
Total	124	0·22
RURAL.		
1. Chertsey	3	0·27
2. Dorking.....	1	0·10
3. Epsom	6	0·17
4. Farnham	3	0·16
5. Godstone	3	0·12
6. Guildford	6	0·28
7. Hambledon	4	0·17
8. Reigate	3	0·13
Total	29	0·17
Administrative County.....	153	0·21

TABLE VIII.
Diagram showing the death rates (per 1,000 population) from Diphtheria,
Scarlet Fever, Enteric Fever, Measles and Whooping Cough, in the
Administrative County in each of the years 1889-1923.

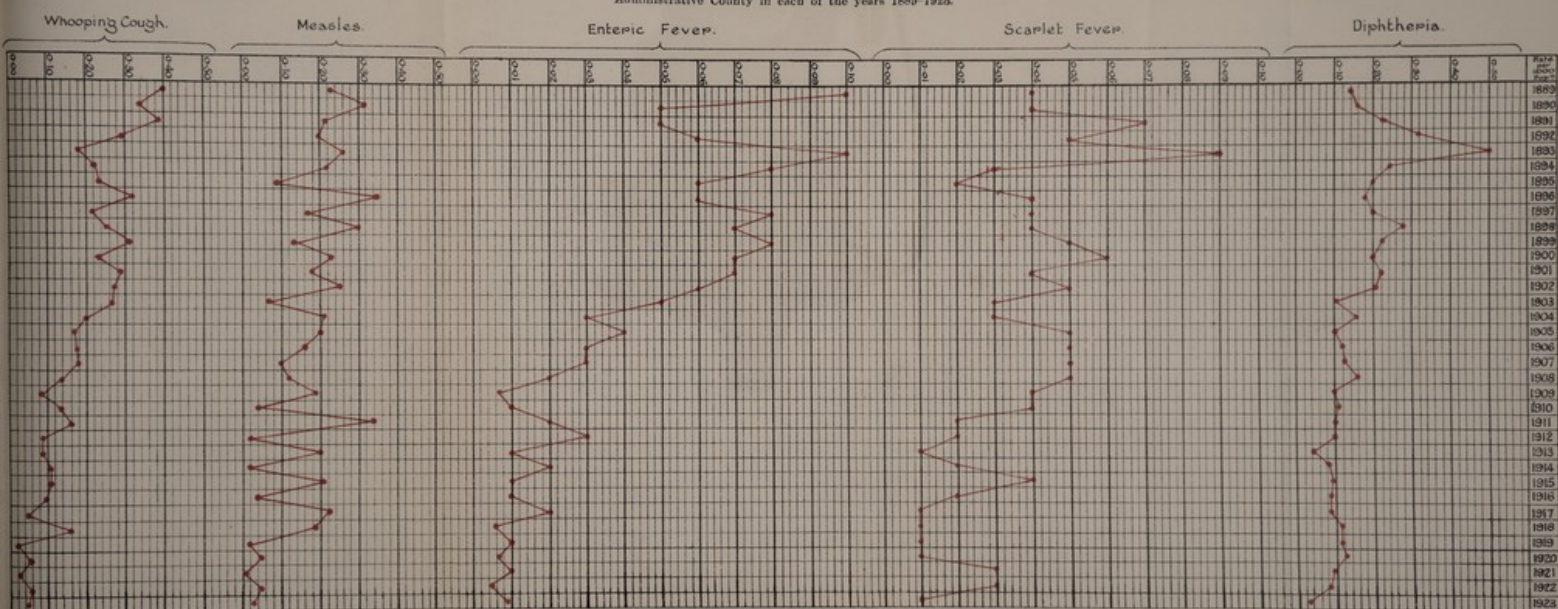


TABLE IX.

DEATHS FROM HEART DISEASE, RESPIRATORY DISEASES, TUBERCULOUS
DISEASES AND CANCER, 1923.

DISTRICTS.	Heart disease.		Respiratory diseases. (non-tuberculous.)		Pulmonary tuberculosis.		Other tuberculous Diseases.		Cancer.	
	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.
URBAN.										
1 Barnes	36	1.05	51	1.48	21	0.61	3	0.09	46	1.34
2 Beddington & Wallington..	24	1.47	16	0.98	12	0.73	1	0.06	35	2.14
3 Carshalton ...	17	1.16	17	1.16	12	0.82	3	0.21	24	1.64
4 Caterham	9	0.80	9	0.80	5	0.44	1	0.09	8	0.71
5 Chertsey	35	2.32	17	1.13	5	0.33	2	0.13	15	1.00
6 Coulsdon and Purley	22	1.00	29	1.32	11	0.50	2	0.09	26	1.18
7 Dorking	22	2.75	17	2.12	4	0.50	1	0.12	12	1.50
8 Egham	27	1.98	21	1.54	13	0.95	3	0.22	17	1.25
9 Epsom	12	0.62	32	1.66	10	0.52	3	0.16	24	1.25
10 Esher and The Dittons	13	0.91	21	1.47	5	0.35	1	0.07	23	1.61
11 Farnham	21	1.72	17	1.40	10	0.82	—	—	20	1.64
12 Frimley	18	1.54	8	0.69	7	0.60	1	0.09	15	1.28
13 Godalming (M.B.)	10	1.08	11	1.19	6	0.65	1	0.11	15	1.62
14 Guildford (M.B.)	36	1.39	37	1.43	11	0.43	3	0.12	38	1.47
15 Ham	—	—	3	1.94	1	0.64	—	—	3	1.94
16 Haslemere ...	4	1.07	4	1.07	5	1.33	—	—	5	1.33
17 Kingston-on-Thames (M.B.)	58	1.44	50	1.24	20	0.50	3	0.07	54	1.34
18 Leatherhead..	3	0.51	3	0.51	7	1.20	—	—	9	1.53
19 Malden and Coombe	25	1.69	22	1.49	7	0.48	5	0.34	12	0.81
20 Merton and Morden	23	1.26	21	1.15	10	0.55	4	0.22	19	1.04
21 Mitcham	45	1.23	47	1.29	32	0.87	5	0.14	33	0.91
22 Molesey E & W	12	1.63	9	1.22	2	0.27	2	0.27	19	2.58
23 Reigate (M.B.)	43	1.50	42	1.46	14	0.49	1	0.03	47	1.64
24 Richmond (M.B.)	43	1.22	48	1.37	36	1.03	4	0.11	64	1.82
25 Surbiton	26	1.32	31	1.58	14	0.71	6	0.31	32	1.63
26 Sutton	28	1.33	27	1.28	8	0.38	4	0.19	36	1.71
27 Walton-on-Thames	14	0.95	13	0.88	8	0.54	2	0.14	16	1.09
28 Weybridge ...	10	1.56	7	1.09	1	0.16	1	0.16	5	0.78
29 Wimbledon (M.B.)	79	1.36	84	1.45	35	0.60	2	0.03	68	1.17
30 Windlesham	12	2.54	5	1.06	1	0.21	—	—	8	1.69
31 Woking	30	1.12	27	1.01	12	0.45	4	0.15	30	1.12
Total	757	1.33	746	1.31	345	0.60	68	0.12	778	1.36

TABLE IX.—*continued.*

DISTRICTS.	Heart disease.		Respiratory diseases. (non tuberculous.)		Pulmonary tuberculosis.		Other tuberculous diseases		Cancer.	
	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.	No.	Rate per 1,000.
RURAL.										
1 Chertsey	14	1.26	10	0.90	3	0.27	3	0.27	15	1.35
2 Dorking	17	1.66	18	1.76	3	0.29	1	0.10	23	2.24
3 Epsom	39	1.13	33	0.95	18	0.52	5	0.14	44	1.27
4 Farnham	42	2.31	22	1.21	10	0.55	3	0.16	24	1.32
5 Godstone	42	1.66	33	1.30	15	0.59	8	0.32	38	1.50
6 Guildford	16	0.75	28	1.31	7	0.33	2	0.10	27	1.26
7 Hambledon	35	1.53	31	1.36	15	0.66	2	0.09	26	1.14
8 Reigate	38	1.67	24	1.06	16	0.70	4	0.18	35	1.54
Total	243	1.46	199	1.20	87	0.52	28	0.17	232	1.39
Administrative County	1000	1.35	945	1.28	432	0.59	96	0.13	1010	1.37

TABLE IX.—*continued.*

ADMINISTRATIVE COUNTY. DEATHS FROM SPECIFIED DISEASES.

Diseases.	Deaths.	Rate per 1000 population.	Ten Years 1912-21.
			Average death-rate per 1000 population.
Organic Heart Disease ...	1,000	1.35	1.25
Respiratory Diseases, all forms (excluding pulmonary tuberculosis)	945	1.28	1.56
Tuberculosis, Pulmonary ...	432	0.59	0.75
„ All other forms	96	0.13	0.20
Cancer, Malignant Disease	1,010	1.37	1.25

TABLE IXa.

Diagram showing the death rate from Respiratory Diseases (per 1,000 population) in the Administrative County in each of the years 1889-1923.

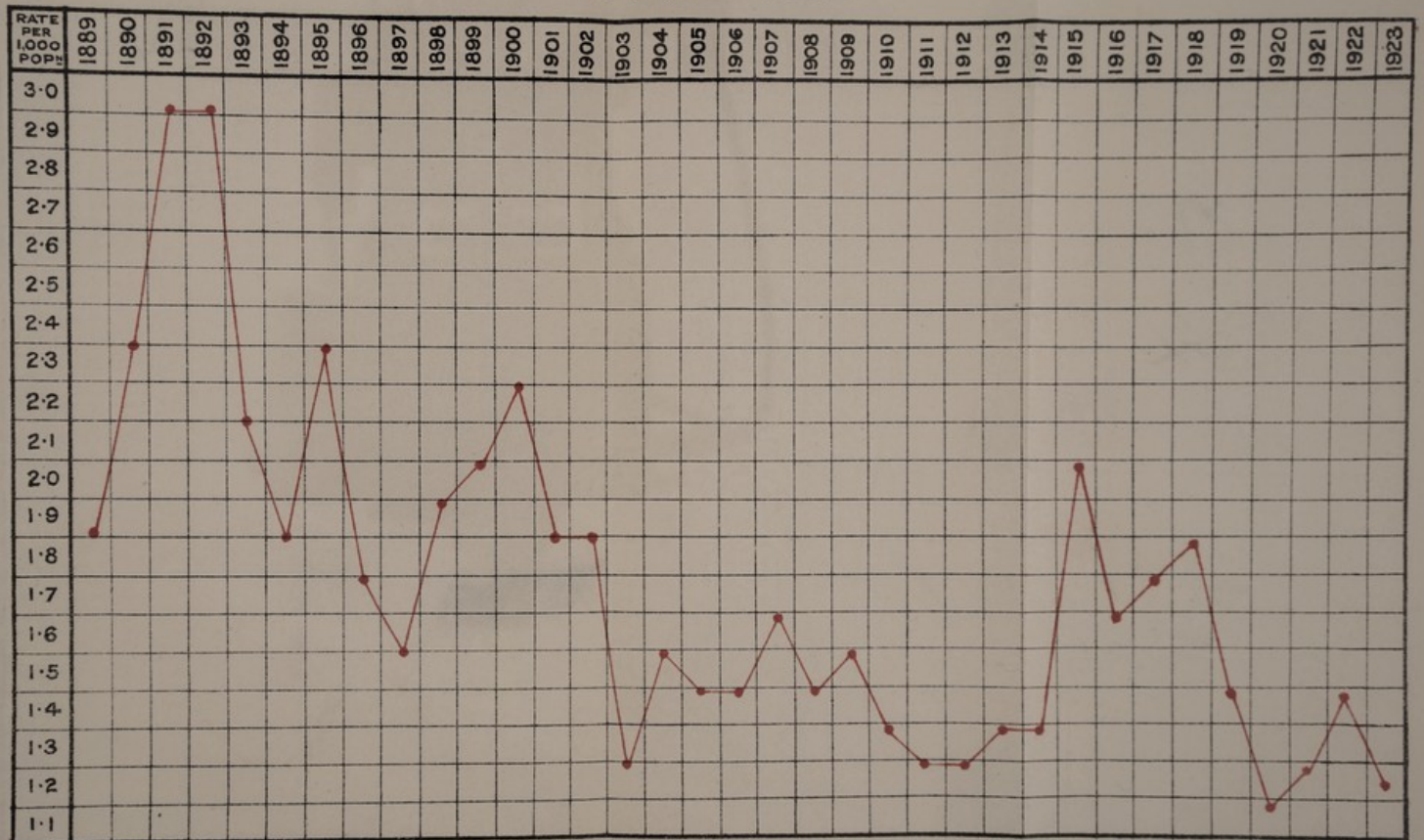


TABLE IXa
Diagram showing the depth of the water from the bottom of the bay to the surface of the water in 1901-1902.

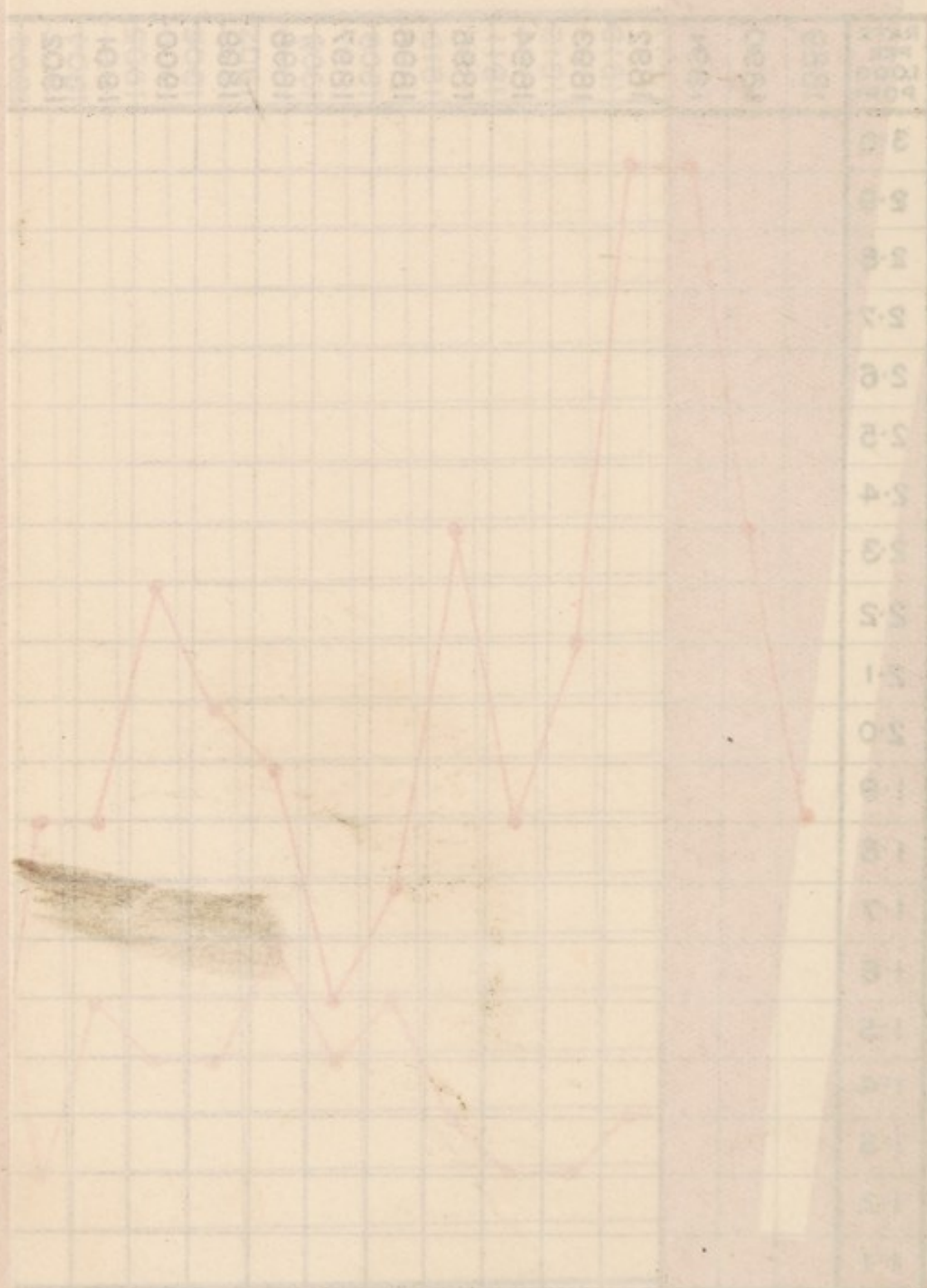


TABLE IXb.

Diagram showing the death rate from Pulmonary Tuberculosis (per 1,000 population) in the Administrative County in each of the years 1889-1923.

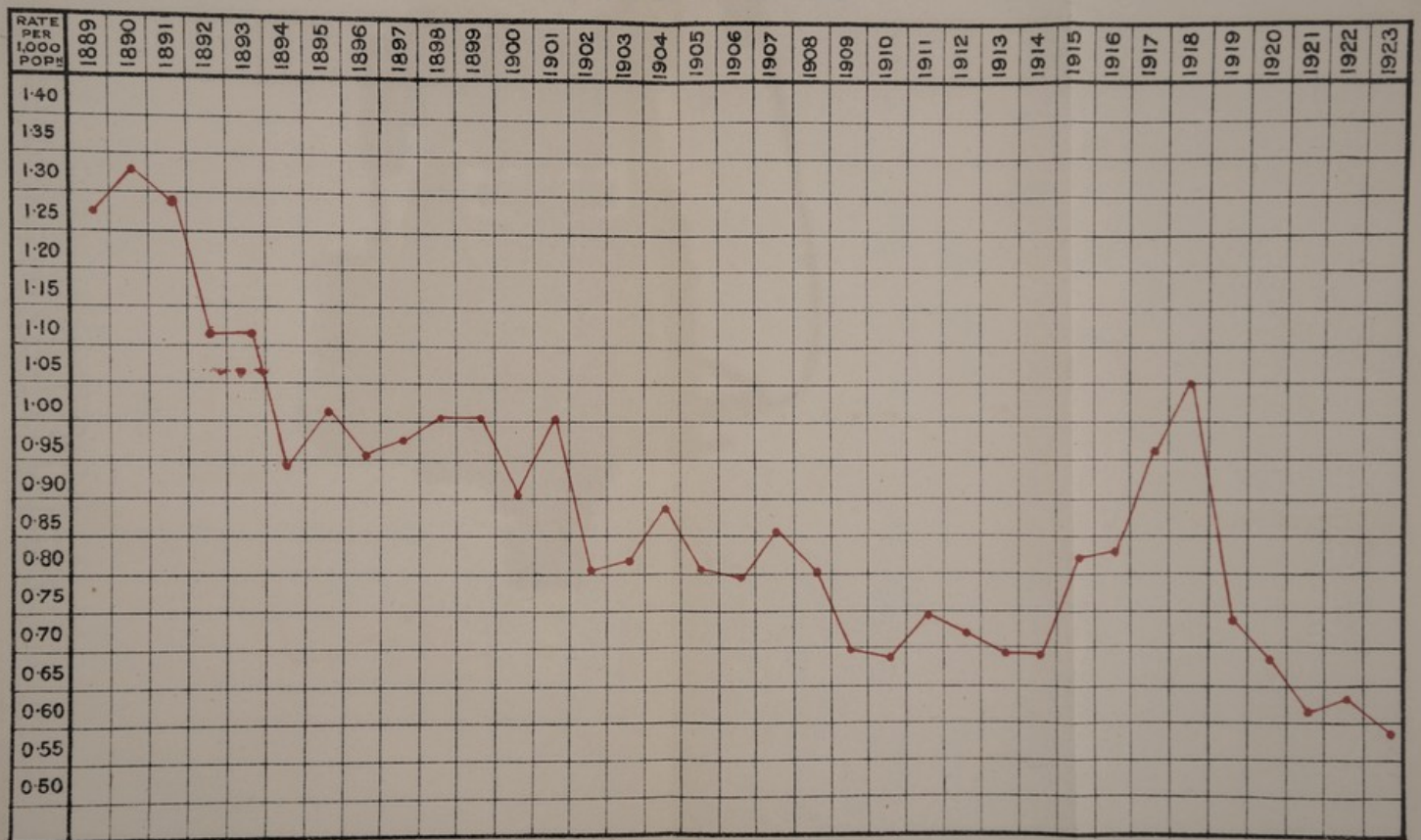


Diagram showing the death rate (per 1000 live births) in the United States, 1881-1921

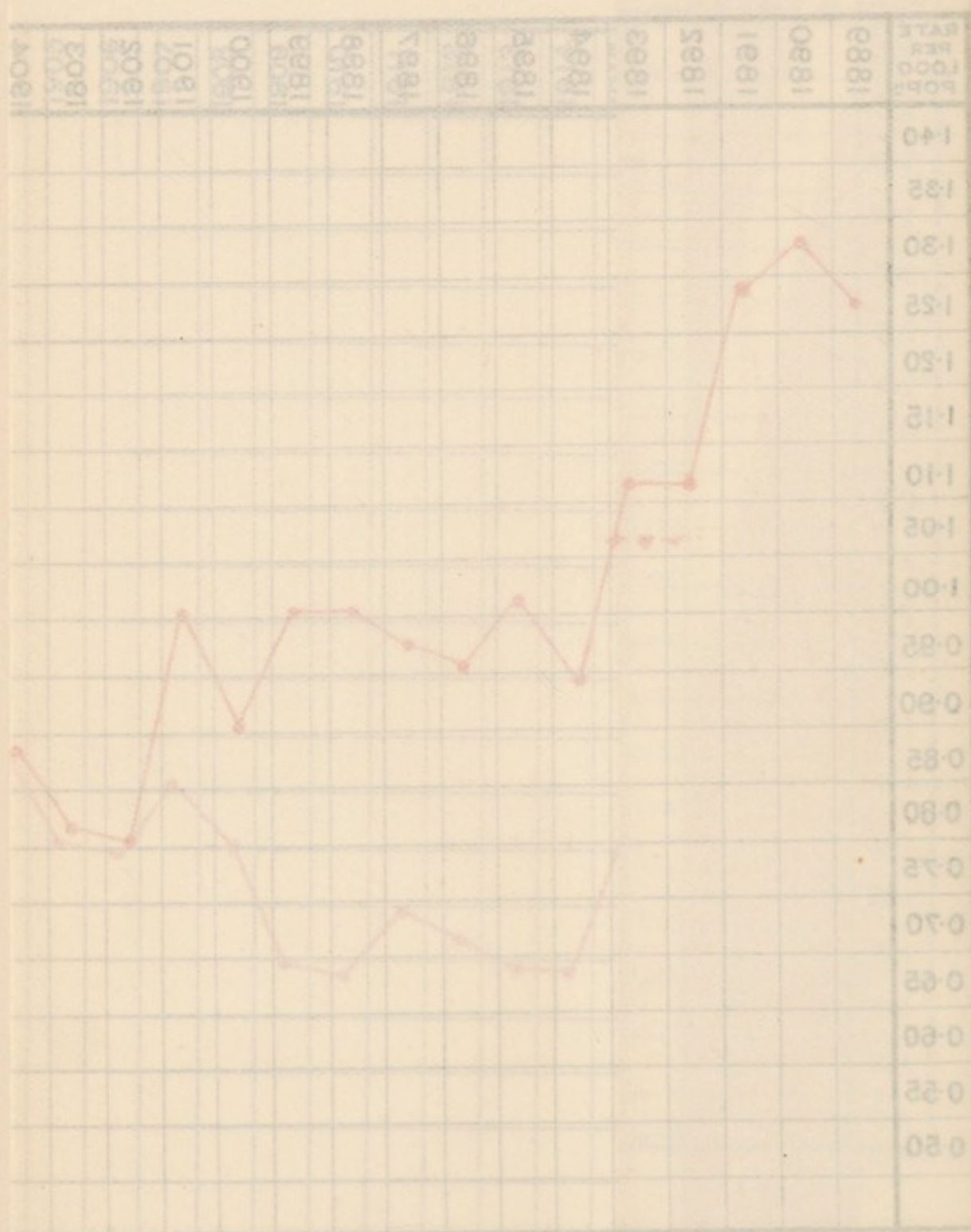


TABLE X.

NOTIFICATIONS OF INFECTIOUS DISEASES, 1923.

Diseases.	Number of cases notified.	Attack-rate per 1,000 population.
Small-pox	2	0·003
Cholera	—	—
Diphtheria	596	0·81
Erysipelas	171	0·23
Scarlet fever	1,235	1·67
Typhus fever	—	—
Enteric fever	84	0·11
Relapsing fever	—	—
Continued fever	—	—
Puerperal fever... ..	23	0·03
Plague	—	—
Tuberculosis—Pulmonary	668	0·91
„ Non-pulmonary	152	0·21
Cerebro-Spinal fever	3	0·004
Acute Poliomyelitis	24	0·03
Ophthalmia neonatorum	62	0·08
Acute Polio-Encephalitis	2	0·003
Encephalitis Lethargica	27	0·035
Malaria (contracted in this country)	—	—
„ (contracted abroad)	—	—
Dysentery	30	0·04
Pneumonia	276	0·37
Trench fever	—	—
Totals ...	3,355	4·5

TABLE X.

National census of infectious diseases, 1931

Attack rate per 1,000 population	Number of cases reported	Disease
0.00	2	Cholera
0.01	386	Dysentery
0.02	171	Typhoid
1.07	4,202	Scarlet fever
0.11	84	Epidemic typhus
0.00	—	Relapsing fever
0.00	—	Brucella fever
0.01	66	Typhus
0.01	102	Leptospirosis (icterohemorrhagic)
0.00	2	Non-typhoid
0.00	24	Enteric fever
0.00	63	Acute febrile syndrome
0.00	2	Acute febrile syndrome
0.00	47	Leptospirosis (icterohemorrhagic)
0.00	—	Other febrile diseases
0.00	—	(continued above)
0.00	30	Unknown
0.07	278	Unknown
4.0	2,363	Total

TABLE XI

GIVING THE CASES NOTIFIED AND THE ATTACK RATE PER 1,000 POPULATION FROM CERTAIN SPECIFIED INFECTIOUS DISEASES IN THE VARIOUS SANITARY DISTRICTS IN THE COUNTY.

DISTRICTS.	SMALLPOX.		DIPHTHERIA.		ERYSIPELAS.		SCARLET FEVER.		ENTERIC FEVER.		PUERPERAL FEVER.		TUBERCULOSIS.			
	Cases.	Rate per 1,000.	Cases.	Rate per 1,000.	Cases.	Rate per 1,000.	Cases.	Rate per 1,000.	Cases.	Rate per 1,000.	Cases.	Rate per 1,000.	Pulmonary.		Non-Pulmonary.	
													Cases.	Rate per 1,000.	Cases.	Rate per 1,000.
URBAN.																
1 Barnes	—	—	20	0.58	9	0.26	76	2.21	1	0.03	3	0.09	35	1.01	12	0.35
2 Beddington and Wallington	—	—	39	2.38	4	0.24	27	1.65	6	0.37	2	0.12	18	1.10	6	0.37
3 Carshalton	1	0.07	22	1.50	2	0.13	36	2.46	4	0.27	—	—	11	0.75	1	0.07
4 Caterham	—	—	6	0.53	4	0.35	116	10.32	2	0.18	—	—	14	1.24	—	—
5 Chertsey	—	—	8	0.53	3	0.19	30	1.99	1	0.06	—	—	16	1.06	5	0.33
6 Coulsdon and Purley	—	—	27	1.23	2	0.09	40	1.81	11	0.50	—	—	16	0.73	3	0.13
7 Dorking	—	—	5	0.62	1	0.12	4	0.50	1	0.12	—	—	7	0.87	1	0.12
8 Egham	—	—	13	0.95	5	0.36	21	1.54	6	0.44	1	0.07	12	0.88	4	0.29
9 Epsom	—	—	11	0.57	22	1.14	6	0.31	5	0.26	—	—	12	0.62	2	0.10
10 Esher and The Dittons	—	—	2	0.14	1	0.07	9	0.63	—	—	—	—	15	1.05	3	0.21
11 Farnham	—	—	13	1.06	3	0.24	17	1.39	1	0.08	—	—	8	0.65	1	0.08
12 Frimley	—	—	—	—	1	0.08	15	1.28	1	0.08	1	0.08	4	0.34	1	0.08
13 Godalming (M.B.)	—	—	3	0.32	3	0.32	11	1.19	1	0.11	—	—	8	0.86	—	—
14 Guildford (M.B.)	—	—	11	0.42	2	0.08	38	1.47	—	—	—	—	18	0.70	6	0.23
15 Ham.	—	—	—	—	1	0.65	5	3.24	—	—	—	—	1	0.65	—	—
16 Haslemere	—	—	—	—	—	—	4	1.06	1	0.27	—	—	4	1.06	—	—
17 Kingston-upon-Thames (M.B.)	—	—	17	0.42	22	0.54	118	2.92	1	0.02	2	0.05	52	1.29	8	0.20
18 Leatherhead	—	—	1	0.17	1	0.17	5	0.85	—	—	—	—	7	1.19	—	—
19 Malden and Coombe	—	—	11	0.74	5	0.33	17	1.14	—	—	—	—	8	0.54	3	0.20
20 Merton and Morden	—	—	39	2.13	7	0.38	59	3.22	—	—	—	—	19	1.03	3	0.16
21 Mitcham	—	—	35	0.95	15	0.41	110	3.01	2	0.05	2	0.05	42	1.15	20	0.54
22 Molesey, East and West	—	—	14	1.90	—	—	6	0.81	1	0.13	—	—	6	0.81	1	0.13
23 Reigate (M.B.)	—	—	6	0.20	4	0.14	12	0.41	3	0.10	2	0.07	25	0.87	8	0.28
24 Richmond (M.B.)	1	0.03	29	0.82	4	0.11	31	0.88	2	0.05	4	0.11	45	1.28	4	0.11
25 Surbiton	—	—	15	0.76	4	0.20	29	1.47	3	0.15	—	—	19	0.96	10	0.50
26 Sutton	—	—	33	1.56	2	0.09	16	0.76	11	0.52	—	—	17	0.80	6	0.28
27 Walton-on-Thames	—	—	10	0.69	2	0.13	16	1.09	2	0.13	—	—	9	0.61	—	—
28 Weybridge	—	—	1	0.15	—	—	7	1.09	—	—	—	—	5	0.77	—	—
29 Wimbledon (M.B.)	—	—	88	1.51	10	0.17	94	1.63	2	0.03	1	0.02	55	0.95	12	0.20
30 Windlesham	—	—	—	—	—	—	—	—	—	—	—	—	1	0.21	1	0.21
31 Woking	—	—	22	0.82	8	0.30	44	1.64	—	—	1	0.03	21	0.79	3	0.11
Total	2	0.003	501	0.87	147	0.26	1,019	1.78	68	0.12	19	0.03	530	0.93	124	0.21
RURAL.																
1 Chertsey	—	—	12	1.07	1	0.09	6	0.54	—	—	—	—	5	0.45	4	0.36
2 Dorking	—	—	5	0.49	2	0.20	24	2.34	1	0.10	1	0.10	9	0.88	1	0.10
3 Epsom	—	—	8	0.23	7	0.20	32	0.92	7	0.20	2	0.06	22	0.64	4	0.12
4 Farnham	—	—	5	0.27	4	0.22	21	1.15	2	0.11	—	—	16	0.88	2	0.11
5 Godstone	—	—	34	1.34	1	0.04	29	1.14	2	0.08	—	—	23	0.91	6	0.24
6 Guildford	—	—	15	0.70	3	0.14	35	1.64	3	0.14	—	—	12	0.56	4	0.19
7 Hambledon	—	—	12	0.52	5	0.22	55	2.40	1	0.04	1	0.04	21	0.92	3	0.13
8 Reigate	—	—	4	0.18	1	0.04	14	0.62	—	—	—	—	30	1.32	4	0.18
Total	—	—	95	0.57	24	0.14	216	1.30	16	0.10	4	0.02	138	0.83	28	0.17
Administrative county	2	0.003	596	0.81	171	0.23	1,235	1.67	84	0.11	23	0.03	668	0.91	152	0.21

IN RAISING THE CASE NOTED AND THE ATTORNEY
IN THE DISTRICT IN THE COUNTY

TABLE XIa.

STATEMENT GIVING THE INFECTIOUS DISEASE ISOLATION HOSPITALS TOGETHER
WITH THE SANITARY DISTRICTS THEY SERVE.

Name of hospital.	Sanitary district served.	Situated at	Number of beds.
Barnes Isolation ...	Barnes U.D. ...	South Worple Way	40
Cuddington Joint	Carshalton U.D. ...	Cuddington ...	56
	Leatherhead U.D. ...		
	Sutton U.D. ...		
Dorking Joint	Epsom R.D. ...	Westcott ...	27
	Dorking U.D. ...		
	Dorking R.D. ...		
Epsom and Egham Joint	Beddington and Wallington U.D. ...	Beddington Corner	100
	Coulsdon and Purley U.D. ...		
	Mitcham U.D. ...		
	Merton and Morden U.D. ...		
Egham ...	Caterham U.D. ...	Within District ...	18
Epsom ...	Egham U.D. ...	Hook Road, Epsom	22
Epsom and Egham Joint	Epsom U.D. ...	Red Lion Lane, Tolworth	40
	Esher and The Dittons U.D. ...		
	Surbiton U.D. ...		
Farnham Joint	Maldens and Coombe U.D. ...	Weydon Hill, Farnham	40
	Ham U.D. ...		
	Farnham U.D. ...		
Farnham ...	Farnham R.D. ...	Mytchett ...	10
Frimley ...	Haslemere U.D. ...		
Guildford, Godalming and Woking Joint	Frimley U.D. ...	Woodbridge, Guildford	72
	Guildford M.B. ...		
	Godalming M.B. ...		
	Woking U.D. ...		
Molesey, East and West	Guildford R.D. ...	West Molesey ...	16
	Hambleton R.D. ...		
	Molesey, East & West U.D. ...		
Reigate Joint	*Kingston-upon-Thames M.B. ...	Whitebushes ..	38
	Reigate M.B. ...		
Reigate ...	Reigate R.D. ...	Heston and Isleworth U.D.	45
Richmond ...	Richmond M.B. ...		
Wimbledon ...	Wimbledon M.B. ...	Wimbledon ...	104
Godstone ...	Godstone R.D. ...	Bletchingley ...	34
Ottershaw ...	Chertsey U.D. ...	Ottershaw ...	38
	Walton-on-Thames U.D. ...		
	Weybridge U.D. ...		
	Windlesham U.D. ...		
	Chertsey R.D. ...		

* Also sends cases to Wimbledon and Hampton Isolation Hospitals.

TABLE XII.

STATEMENT GIVING THE CASES, AND CASE RATE, DEATHS, AND DEATH RATES IN EACH OF THE YEARS 1912-1923.

Year.	PULMONARY TUBERCULOSIS.				OTHER FORMS OF TUBERCULOSIS.			
	Cases notified.	Case-rate per 1,000 population.	Deaths.	Death-rate per 1,000 population.	Cases notified.	Case-rate per 1,000 population.	Deaths.	Death-rate per 1,000 population.
1912	1379	2.04	488	0.72	Not notifiable.		147	0.21
1913	1187	1.73	477	0.69	453	0.72	162	0.23
1914	964	1.33	482	0.68	264	0.36	144	0.20
1915	941	1.42	540	0.82	203	0.30	161	0.24
1916	842	1.30	537	0.83	244	0.38	152	0.23
1917	799	1.27	605	0.96	223	0.35	171	0.27
1918	887	1.37	674	1.04	187	0.28	138	0.21
1919	787	1.14	505	0.73	121	0.17	107	0.15
1920	646	0.90	483	0.67	109	0.15	118	0.16
1921	648	0.88	449	0.61	127	0.17	109	0.14
1922	687	0.93	466	0.63	123	0.16	100	0.13
1923	668	0.91	432	0.59	152	0.21	96	0.13

TABLE XIV.

LIST OF DISPENSARIES.

Dispensary.	Address.	Sessions.	Medical Officer.
Barnes	The Hospital, South Worple Way, Mortlake	Wed., 6-7.30 p.m. Fri., 10-11.30 a.m.	Dr. E. A. Freear Wilkes
Camberley	St. Michael's Church Rooms	Wed., 10 a.m. (1st each month)	Dr. E. Donaldson
Cobham	Boys' Club	Wed., 2 p.m. (2nd each month)	Dr. C. K. Attlee
Dorking	Imperial Club, West Street	Thurs., 10 a.m. (1st & 3rd)	Dr. A. H. Hayes
Egham	St. Paul's Mission Room	Thurs., 10 a.m. (2nd each month)	Dr. A. C. Renwick
Farnham	Bayfield, High Park Road	Thurs., 10 a.m. ...	Dr. E. Donaldson
Guildford ..	49, Farnham Road	Tues., 10 a.m. ... Fri., 10 a.m. ...	Dr. E. Donaldson
Kingston	3, Grove Crescent	Tues., 9.30 a.m. (for children) Wed., 5.30 p.m.... Fri., 1.30 p.m.	Dr. A. C. Renwick
Mitcham	Lower Green	Tues., 10 a.m. (for children) Thurs., 2 p.m.	Dr. C. K. Attlee
Purley	Red Cross Centre (near Cottage Hospital)	Mon., 2.30 p.m....	Dr. C. Herington
Redhill	1A, Cecil Road ...	Mon., 2 p.m. Wed., 2 p.m.	Dr. C. L. Lakin
Sutton	Public Hall, Church Road	1st, & 3rd Wed., 2 p.m.	Dr. C. K. Attlee
Weybridge	Vigo House	Wed., 10 a.m. (1st each month)	Dr. A. C. Renwick
Wimbledon	145, Merton Road	Mon., 1.30 p.m. ... Tues., 5.30 p.m. (1st each month) Fri., 10 a.m. (child- ren & suspected cases for tests)	Dr. C. K. Attlee
Woking	Clarence Avenue	Mon., 10.30 a.m.	Dr. A. C. Renwick

TABLE XV.

ATTENDANCES AT DISPENSARIES.

Dispensary.	Sessions.	New patients examined.	Total attendances.	Numbers attending at end of year.
Barnes	Wednesday and Friday	98	567	64
Bamberley	Wednesday (monthly) ...	28	43	1
Bobham	Wednesday (monthly) ...	16	40	9
Borking	Thursday (fortnightly) ...	29	47	27
Bgham	Thursday (monthly) ...	47	77	28
Barnham	Thursday	44	568	69
Buildford	Tuesday and Friday ...	139	951	89
Kingston	Tues., Wed. and Fri. ...	400	1,490	241
Mitcham	Tuesday and Thursday...	191	849	108
Murley	Monday	89	866	125
Bedhill	Monday and Wednesday	169	1,369	77
Button	Wednesday (fortnightly)	54	372	43
Weybridge	Wednesday (monthly) ...	52	111	27
Wimbledon	Mon., Tues. and Fri. ...	327	2,390	170
Woking	Monday	99	421	115
Totals, 1923 ...	—	1,782	10,161	1,193
Totals, 1922 ...	—	1,639	12,434	837

TABLE XVI.

ADMINISTRATIVE COUNTY, 1923.

PRIMARY EXAMINATION FOR DIAGNOSIS.

	Pulmonary.				Non-Pulmonary.			
	Tubercu- lous.	Doubtful.	Non- Tubercu- lous.	Totals.	Tubercu- lous.	Doubtful.	Non- Tubercu- lous.	Totals.
Contacts ...	27	56	267	350	12	1	9	22
Others ...	511	240	494	1,245	91	32	42	165
Total ...	538	296	761	1,595	103	33	51	187

DOUBTFUL CASES—FINAL RESULTS.								
					Pulmonary.	Non- Pulmonary.	Totals.	
On Books, 1st January, 1923 ...	336	Diagnosed as Tuberculous ...			39	3	42	
Added during year ...	329	,, ,, Non-Tuberculous ...			144	32	176	
		Lost sight of ...			238	35	273	
		Still doubtful, 31st December, 1923			146	28	174	
Total ...	665				567	98	665	

TABLE XVII.

PATIENTS TREATED IN RESIDENTIAL INSTITUTIONS.

	Males.		Females.	Children		Total.
	Civilian.	Ex-Service.		Boys.	Girls.	
Pulmonary	117	81	251	19	32	560
Non-Pulmonary	20	5	21	36	28	110
Total	197	86	272	55	60	670

NUMBER OF TREATMENT DAYS.

	Males.		Females.	Children.		Total.
	Civilian.	Ex-Service.		Boys.	Girls.	
Pulmonary	16,921	8,472	21,674	3,109	4,391	54,567
Non-Pulmonary	3,121	1,271	3,529	6,613	5,162	19,696
Total	20,042	9,743	25,203	9,722	9,553	74,263
Average treatment days per patient	101·7	113·3	92·6	176·7	159·2	110·8

Daily average number of beds occupied=203

TABLE XVIII.

VENEREAL DISEASES.

	London centres only.	Surrey centres.		Total.
		Guildford.	Richmond.	
Number of persons dealt with for the first time...	623	107	127	
Number of persons discharged after completion of treatment ...	*	3	10	
Total attendances in out-patient departments ...	12133	1268	2449	
Number of in-patient days of treatment given to persons suffering from Venereal Diseases	4531	—	—	
Number of doses of salvarsan substitutes given	1425	269	326	
Pathological examinations:—				
At Treatment centres	2084	—	—	
For practitioners ...	1081	—	—	

* Not given.

TABLE XIX.

The following statement shews the County Council welfare centres, the attendances in 1923, and the proportion of notified to registered births:—

District.	Name of centre.	Attendances.						Births registered		Births notified by			Percentage of notified to registered births.
		New cases.			Totals.								
		Ante-natal consultations.	Infants under 1 year.	Children under 5 years.	Ante-natal consultations.	Infants under 1 year.	Children under 5 years.	Legitimate.	Illegitimate.	Medical practitioners.	Midwives.	Parents and others.	
URBAN.													
Barnes	Barnes and Mortlake	9	119	55	34	1631	944	536	22	225	250	10	86.9
Caterham	Caterham Hill	—	45	15	—	370	524	172	6	74	83	—	88.2
	Valley	—	18	1	—	156	252						
Chertsey	Addlestone	—	27	23	—	164	155	213	18	104	97	19	95.2
	Chertsey	2	36	17	8	248	649						
Dorking	Dorking	—	59	7	—	548	385	106	10	62	52	1	99.1
Egham	Egham	2	48	13	2	478	989	205	15	173	31	—	92.7
	Egham Hythe	2	28	12	2	384	612						
Epsom	Epsom	7	53	13	22	664	988	244	13	59	203	5	100.0
Esher and The Dittons	Claygate	2	14	6	14	82	181	185	7	150	10	—	83.3
	Long Ditton	17	37	8	54	370	1423						
Farnham	Badshot Lea	—	17	3	—	129	179	196	8	24	167	1	94.1
	Farnham	—	73	10	—	1005	815						
	Hale	—	29	5	—	299	225	220	13	86	76	—	69.5
	Camberley	12	68	23	71	544	1071						
	Frimley	3	20	8	16	86	275	137	2	74	61	4	100.0
Godalming	Godalming	60	77	40	68	629	754						
Ham	(Mothers can attend Surbiton)	—	—	—	—	—	—	20	1	3	15	—	85.7
Haslemere	Haslemere & Shottermill	—	34	23	—	259	552	47	5	16	36	—	100.0
Leatherhead	Leatherhead	1	24	7	1	258	608	93	10	26	46	5	75.7
Maldens and Coombe	Maldens and Coombe	—	69	25	—	1022	2287	225	11	75	122	4	85.2
Molesey, East and West	Molesey	27	52	8	68	488	1154	97	3	21	81	1	100.0
Surbiton	Surbiton	4	108	37	12	1163	853	320	28	195	89	11	84.8
Walton-on-Thames	Hersham	2	29	8	13	420	1004	230	10	56	125	2	76.3
	Walton	10	37	15	24	275	685						
Weybridge	Weybridge	1	41	20	31	667	1416	93	2	29	62	1	96.8
Windlesham	Bagshot	14	22	14	14	95	124	65	2	9	65	1	100.0
	Windlesham	—	20	2	2	83	97	367	21	147	232	1	97.9
Woking	Woking Town	26	87	17	56	858	630						
	Knap Hill	—	51	13	—	534	691						
Totals (Urban Districts)		201	1342	448	512	13909	20522	3771	207	1608	1903	66	90.0
RURAL.													
Chertsey	Byfleet	—	12	8	3	80	347	173	3	57	85	2	81.8
	Chobham	—	15	1	2	93	358						
Dorking	Effingham	—	10	2	—	53	154	164	12	94	42	2	78.4
	*South Holmwood	4	18	24	10	63	136						
Epsom	Banstead	1	18	2	1	156	388	484	25	221	194	8	83.1
	Bookham	—	12	4	—	89	340						
	Cheam	2	11	3	4	208	441	180	167	235	290	—	—
	Cobham	—	29	6	—	180	167						
	Tadworth	—	13	7	—	235	290	329	9	65	223	1	85.5
	Worcester Park	1	17	6	2	188	606						
Farnham	Ash	3	39	18	5	311	407	340	470	—	—	—	—
	Ash Wyke	2	9	6	3	85	147						
	Bourne	2	22	6	2	340	470	86	122	110	126	—	—
	Hindhead	—	14	5	—	86	122						
	Rowledge	2	11	5	2	108	110	108	110	126	—	—	—
	The Sands	—	11	7	—	52	126						
	Tongham	1	7	8	1	33	59	66	151	151	166	—	—
	Wrecclesham	—	10	3	—	66	151						
Godstone	Bletchingley	—	17	6	—	83	151	53	166	415	777	—	—
	Dormansland	—	11	4	2	53	166						
	Hurst Green	—	17	9	—	140	415	244	777	204	359	—	—
	Limpfield	6	12	—	47	244	777						
	Lingfield	—	18	11	—	120	204	370	15	178	142	2	83.6
	Oxted	1	9	8	1	82	359						
	Warlingham	6	16	11	8	147	581	147	581	284	—	—	—
	Whyteleafe	—	7	9	—	143	284						
Guildford	Guildford M.B. (serves part of R.D. by arrangement)	—	7	—	—	22	—	111	164	—	—	—	—
	§Elstead	—	24	23	—	111	164						
	Merrow	2	16	1	12	175	247	300	15	88	186	3	88.0
	Penslake	1	11	3	3	80	136						
	Send	—	28	20	—	140	246	19	38	79	159	—	—
	†Ripley	2	11	28	3	19	38						
Hambleton	†Shalford	5	24	37	19	79	159	328	16	148	155	1	88.4
	Witley	—	27	21	—	69	81						
Reigate	Reigate M.B. (serves part of R.D. by arrangement)	—	12	8	—	46	27	232	504	—	—	—	—
	Horley	—	31	12	—	232	504						
	Horley Salfords (Weighing Centre)	—	16	2	—	107	118	331	19	218	85	1	86.9
	Walton-on-the-Hill	—	10	5	—	115	299						
Totals (Rural Districts)		41	602	339	130	4633	9775	2479	114	1069	1112	20	84.9
Totals (M. and C. W. Area)		242	1944	787	642	18542	30297	6250	321	2677	3015	86	87.9

* Opened

† Opened

§ Opened

‡ Opened

The following statement shows the County Council notified to registered births:—

New cases		Name of centre		District
Antenatal	Infants under 1 Yearly	Antenatal	Infants under 1 Yearly	
URBAN				
11955	943	Barnes and Mortlake	Barnes	Barnes
4551	—	Catford Hill	Catford	Catford
181	—	Valley	Chertsey	Chertsey
3752	—	Addlestone	Dorking	Dorking
3871	28	Chertsey	Epsom	Epsom
597	—	Dorking	Farnham	Farnham
4831	22	Epsom	Ham	Ham
2821	22	Epsom Hythe	Hastings	Hastings
5331	722	Epsom	Leatherhead	Leatherhead
146	241	Claygate	Malden and Coombe	Malden and Coombe
378	1745	Long Ditton	Molesey	Molesey, East and West
173	—	Badshot Lea	Sutton	Sutton
7301	—	Farnham	Walton-on-Thames	Walton-on-Thames
295	—	Hale	Weybridge	Weybridge
6832	1217	Camberley	Windsor	Windsor
208	381	Frimley	Woking	Woking
7708	6088	Godalming	Knapp Hill	Knapp Hill
(Mothers can attend Sutton)				
34	—	Hastings & Shottermill		
34	1	Leatherhead		
68	—	Malden and Coombe		
52	27	Molesey		
108	4	Sutton		
29	2	Hersham		
27	10	Walton		
41	1	Weybridge		
22	14	Basingstoke		
20	—	Windsor		
25	26	Woking		
51	—	Knapp Hill		
Totals (Urban Districts)				
1342	201			
RURAL				
12	—	Byfleet		
15	—	Chobham		
40	—	Eltham		
18	4	South Holmwood		
18	1	Barnstead		
12	—	Bookham		
41	2	Chesham		
29	—	Godham		
13	—	Tadworth		
17	1	Worcester Park		
20	3	Ash		
29	2	Ash Wyke		
22	2	Bourne		
14	—	Hindhead		
11	2	Rowledge		
11	—	The Sands		
7	1	Tongham		
10	—	Wrotham		
17	—	Wrotham		

TABLE XX.

Statement shewing the numbers of:—

(i) Houses erected in Surrey during the year 1923: and

(ii) Houses in course of erection at the end of 1923.

Sanitary district.	By Local Authority under assisted schemes.		By private persons.		By Public Utility Societies.		Total.	
	Houses erected during year 1923.	Houses in course of erection at end of 1923.	Houses erected during year 1923.	Houses in course of erection at end of 1923.	Houses erected during year 1923.	Houses in course of erection at end of 1923.	Houses erected during year 1923.	Houses in course of erection at end of 1923.
URBAN.								
Barnes	—	—	188	165	—	—	188	165
Beddington and Wallington	—	—	121	75	—	—	121	75
Carshalton	—	—	107	107	—	—	107	107
Caterham	6	20	26	20	—	—	32	40
Chertsey	—	—	20	5	—	—	20	5
Coulson and Purley	—	—	255	216	—	—	255	216
Dorking	—	—	29	15	—	—	29	15
Egham	—	—	*53	*34	—	—	*53	*34
Epsom	—	—	36	18	—	—	36	18
Esher and Dittons	—	—	130	65	—	—	130	65
Farnham	10	4	52	17	—	—	62	21
Frimley	—	10	31	23	—	—	31	33
Godalming (M.B.)	—	15	15	14	—	4	15	18
Guildford (M.B.)	4	29	83	65	—	10	87	104
Ham	—	—	2	—	—	—	2	—
Haslemere	—	—	16	5	—	1	16	6
Kingston-on-Thames (M.B.)	—	—	47	27	—	—	47	27
Leatherhead	—	—	16	19	—	—	16	19
Maldens and Coombe	—	—	140	160	—	—	140	160
Merton and Morden	—	—	73	63	—	—	73	63
Mitcham	—	—	153	156	—	—	153	156
Molesey, East and West	—	—	12	5	—	—	12	5
Reigate (M.B.)	—	—	48	74	—	—	48	74
Richmond (M.B.)	—	—	25	53	—	—	25	53
Surbiton	6	—	31	40	—	—	37	40
Sutton	—	16	45	35	—	—	45	51
Walton-on-Thames	—	—	41	23	—	—	41	23
Weybridge	10	—	12	9	—	—	22	9
Wimbledon (M.B.)	—	—	62	55	—	—	62	55
Windsorham	—	—	14	12	—	—	14	12
Woking	—	—	86	55	—	—	86	55
RURAL.								
Chertsey	—	—	78	10	—	—	78	10
Dorking	—	—	25	8	—	—	25	8
Epsom	—	—	388	230	—	—	388	230
Farnham	—	—	80	56	—	—	80	56
Godstone	—	12	98	75	—	—	98	87
Guildford	—	36	101	—	1	—	102	36
Hambledon	—	—	63	38	—	—	63	38
Reigate	—	—	158	139	—	—	158	139
TOTALS	36	127	2,960	2,186	1	15	2,997	2,328

* 22 of these houses are of a temporary character.

TABLE XXI.

NUMBERS OF SAMPLES ANALYSED.

Articles.	Number of samples analysed.	Number genuine.	Number adul- terated.	Prosecu- tions.	Convic- tions.
Milk	1,589	1,440	149	69	33
Milk—seperated ...	1	1	—	—	—
Cream	19	14	5	1	1
Cream—preserved ...	12	12	—	—	—
Butter	66	64	2	—	—
Cheese	6	6	—	—	—
Margarine	10	10	—	—	—
Lard	9	9	—	—	—
Bread	—	—	—	—	—
Flour	20	15	5	—	—
Flour—self-raising ...	1	1	—	—	—
Tea	5	5	—	—	—
Coffee	4	4	—	—	—
Cocoa	54	52	2	—	—
Sugar	7	6	1	—	—
Mustard... ..	5	5	—	—	—
Confectionery and Jam	23	21	2	—	—
Pepper	10	10	—	—	—
Vine	—	—	—	—	—
Beer	4	4	—	—	—
Spirits	25	16	9	4	—
Drugs	11	11	—	—	—
Other Articles	123	108	15	—	—
Totals	2,004	1,814	190	74	34

100
CONTENTS
REPORT OF THE SCHOOL MEDICAL OFFICER

Surrey Education Committee.

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR

1923.

CONTENTS.

REPORT OF THE SCHOOL MEDICAL OFFICER.

	PAGE.
Preface	101
Staff... ..	103
Co-ordination	103
Elementary schools—	
(a) Numbers and attendances	103
(b) School hygiene	103
Medical inspection	104
Defects and diseases	105
Infectious diseases	105
Following up	107
Medical treatment	107
(a) Tonsils and adenoids	108
(b) Defects of vision	108
(c) Dental defects	108
(d) Tuberculosis	109
Crippled children—orthopædic treatment of	109
Dental inspections—age groups	110
Open-air education—	
(a) Playground classes	112
(b) School journeys	112
(c) „ camps	112
(d) Open-air classrooms in public elementary schools	113
(e) Day open-air schools	113
(f) Residential open-air schools	113
Physical training—vacation courses of instruction... ..	113
Provision of meals	114
School baths	114
Co-operation of parents	114
„ „ teachers... ..	114
„ „ school attendance officers	115
„ „ voluntary bodies	115
Blind, deaf, defective and epileptic children	115
Nursery schools	120
Secondary schools	120
Continuation schools	120
Employment of children	120
Special enquiries	120
Appendix I. Memorandum upon communicable diseases in schools	121
Appendix II.—	Table
Routine and special inspections	I.
Defects found	II.
Number of exceptional children of school age	III.
Treatment of defects	IV (i).
„ „ of vision	IV (ii).
„ „ „ nose and throat	IV (iii).
„ „ dental defects	IV (iv).
Uncleanliness and verminous conditions	IV (v).
Notifications of infectious disease	V.
„ „ contagious disease	V.
Schools closed on account of infectious disease	VI.
Examination of county scholars	VII.
List of clinics	VIII.
Children suffering from tuberculosis admitted to institutions ..	IX.
Centres for physical training courses for teachers ..	X.
Henley Fort Camp—schools from which children were admitted ...	XI.
School days lost on account of closure due to infectious diseases	XII.
Number of children excluded from school owing to infectious diseases	XIII.
Cases referred to N.S.P.C.C.	XIV.
Treatment of defects—1923 and previous years	XV.

PREFACE.

The following report deals briefly with the work of medical inspection, following-up and treatment of children attending the public elementary schools, carried out during the year 1923, under the general direction of the school medical officer.

The re-organisation of staff outlined in the report for the year 1922 is working smoothly and has made possible a scheme more comprehensive than that formerly in force in the county.

During 1923, 20,651 children have been systematically medically examined. Of this number, 15·6 per cent. were found suffering from disease or defect other than dental caries sufficiently serious to require treatment. As a result of following-up, 63·8 per cent. of children needing treatment actually received it. Dental inspection of 18,784 children was made. The teeth in 59·0 per cent. were found to require attention, and dental treatment was provided for 62·0 per cent. of the children found to require it. Institutional treatment was provided for varying periods for 104 children who were blind, deaf, epileptic, physically or mentally defective. The gross cost for all these medical services was £16,150.

Now that the Board of Education is prepared to allow reasonable extension in the work of the school medical department, opportunity arises to consider certain directions in which advance may properly be made.

1. In the medical and dental inspection, following-up and treatment of children attending the secondary schools. Steps have been taken by the Education Committee during the current year to begin medical inspection and following-up of three age groups—entrants, children aged 12, and leavers—and dental inspection of all children.
2. In the scheme of dental inspection and treatment at present carried out in the public elementary schools.

3. In the measures to detect and control infectious and contagious diseases in the schools. The Committee has approved an increase in the staff of health visitors for this purpose.
4. In the facilities for physically defective children, *e.g.*, remedial exercises. This matter is dealt with later in this report.
5. In open air education work such as playground classes, open air schools.
6. In provision for children mentally abnormal. Reference to this subject will be found in a section of this report.

Under each of these headings further outlay might well be incurred. Money wisely spent in physical welfare of children is soundly invested.

JOSEPH CATES.

County Public Health Department,
5, Grove Crescent,
Kingston-upon-Thames.

15th April, 1924.

1. **STAFF.**—The names and qualifications of the medical and dental staff are given on page 6.

2. **Co-ORDINATION.**—The school medical officer is county medical officer of health. The assistant medical officers undertake maternity and child welfare work and also act as assistant tuberculosis officers. They are anæsthetists for dental purposes. The specialist for mental defect in school children is medical officer to the Mental Deficiency Committee. There is one whole time ophthalmic surgeon for the treatment of children attending the various school clinics.

The school nurses are health visitors, and as such they assist at the maternity centres and tuberculosis dispensaries and visit infants and children up to five years of age.

The clerical work of the school medical service is performed by the staff of the public health department.

3. **ELEMENTARY SCHOOLS.**

(a) *Numbers and Attendances.*—At the end of the year there were in the education area of the county 278 public elementary schools having 395 departments; 129 were provided schools and 149 non-provided. The average attendance was 55,786. On the 31st March, 1923, there were 61,997 children on the register, twenty-three of these being under five years of age.

(b) *School Hygiene.*—Each assistant medical officer carries out a survey of the hygienic condition of all the schools in his area and such recommendations as appear reasonable are made to the Education Committee by the school medical officer.

During 1923, 531 recommendations were made relating to 189 schools. The defects discovered were:—

<i>Defects.</i>	<i>No. of</i>		<i>Recommendations.</i>
Drinking vessels used in common	225
Desks, unsuitable and bad type	68
Heating, inadequate	40
Lighting, natural and artificial, insufficient	38
Closets and urinals—constructional defects	20
Playgrounds—surface in need of repair	20

Closets and urinals—faulty flushing apparatus	18
Ventilation, inadequate	15
Lavatory basins—insufficient	13
School buildings constructional defects	9
Re-decoration—internal 6, external 2	8
Classrooms, uncleanness	6
Earth closets, no lids	5
Teachers' closets not provided	4
Playgrounds—no shelter	4
Closets, insufficient number	4
Miscellaneous	34

4. MEDICAL INSPECTION.

(a) The following four groups of children were inspected:—

- (i) The entrants, children entering school for the first time.
- (ii) The intermediates, children whose eighth birthdays occurred during the year.
- (iii) The leavers:
 - (a) Children whose twelfth birthdays occurred during the year.
 - (b) Children due to leave school during the year, and not inspected while twelve years of age.
- (iv) The specials, certain children of various ages, concerning whose condition teachers required advice.

The numbers of children examined in the various age groups are set out in table I. on page 134.

(b) The scope of the medical examination has been that outlined in the schedule of the Board.

(c) During 1923 the assistant medical officers continued an attempt to secure the early ascertainment of crippling defects among the school population, and the results of their survey are to be found in table III.

(d) There was little disturbance of school arrangements involved by medical inspections, but in several instances the accommodation available was unsuitable. In the plans for new schools a room for medical work should be provided.

5. DEFECTS AND DISEASES.

The defects and diseases discovered by routine medical inspection are set out in table II. on page 135. Of the children systematically examined, 7·4 per cent. had defective vision or squint, 12·9 per cent. enlarged tonsils, adenoids or enlarged tonsils and adenoids, and 1·3 per cent. defective hearing.

6. INFECTIOUS DISEASES.

During the year the Committee again considered the question of the control of infectious diseases in schools, and the loss of education involved in school closure.

After a conference between the county medical officer of health and several of the medical officers of health of local sanitary authorities in Surrey, the regulations relating to the school exclusions were revised. The new regulations are given as an appendix to this report.

At a meeting of the Medical Service and Special Schools Committee held on 28th November, 1923, the county medical officer was requested to prepare a scheme of school nursing and following up, so that the necessity for school closure on account of infectious diseases might largely be obviated.

The closure of a public elementary school can be effected by one of two methods.

(1) It may be compelled by requirement of the Sanitary Authority, or any two members thereof, acting on the advice of the medical officer of health of the district.

(2) It may be performed by the Local Education Authority (in effect the managers of any particular school) acting on the advice of the county school medical officer.

In the Barnes urban, Beddington and Wallington urban, Coulsdon and Purley urban, Chertsey urban and rural, Mitcham urban, Walton-on-Thames urban, Weybridge urban, and Windlesham urban sanitary districts the first method is always used, but in the remainder of the public elementary education area, schools are only closed with the approval of the county school medical officer.

If it were possible on the outbreak of infectious disease to arrange for a nurse to visit the school daily to examine con-

tacts and to follow up suspected cases in their homes, there is little doubt that the prevalence of infectious diseases would be diminished, the need for the rigid exclusion of contacts would be reduced and school closure would not often be necessary.

Reference to tables XII. and XIII. will show that during the years 1922 and 1923, some 3,624 school days were lost on account of closure due to infectious diseases. That is to say almost seventeen school years.

In the same period over 17,300 children were excluded from school. Assuming that the average time lost by each child was 14 days, which is a low estimate, the total amount of absence of individual children amounted to 243,000 days or 1,130 school years.

If steps should be taken to prevent the spread of infectious disease and to reduce the loss of attendance in the public elementary schools, four additional health visitors should be appointed to the staff.

The duties of the nurses would be to visit schools on the outbreak of infectious disease and to examine the children suspected to be infected, and also the contacts and to follow up in the homes. In the event of a period of freedom from epidemics, the nurses would act as relief to the other health visitors and would take sickness and holiday duties.

The salaries of the appointments would be according to scale and would be £800 per annum in the first year, with an amount of £100 for travelling and for subsistence allowance when detained away from home. The expenditure would be allocated to the following services:—Public Health (Tuberculosis) one-sixth, Maternity one-half, and Education one-third.

After discussion, the Committee decided to appoint four additional health visitors.

Teachers are expected to notify at once to the county school medical officer any case or suspected case of communicable diseases among their scholars, and also instances in which children are in contact with infection in their homes.

Copies of these notifications are sent to the medical officer of health of the district in which the children reside, and also to the school nurse, in order that she shall visit the school. Prompt action by teachers in this matter is essential if the spread of infectious diseases in the schools is to be prevented.

Table VI. is a list of the schools closed during 1923, and the periods of closure.

Table V. gives a summary of the notifications received from the teachers.

7. FOLLOWING-UP.

The school nurses are present at the medical inspections, and they assist the medical officers in this work, and at the school clinics. They are thus able to obtain a more intimate knowledge of the defects discovered and of the advice to be given to the parents. They visit the homes to encourage the parents to obtain an appropriate and efficient remedy. They make arrangements for attendance of the children at school clinics or hospitals, and they are responsible for the collection of the fees paid by parents.

The nurses visit the schools for the maintenance of cleanliness, and to check the spread of communicable diseases. They follow up children absent from school on account of infectious diseases.

Table IV. (v) shows the work done by the school nurses under the cleansing scheme. The proportion of children found to be dirty compares favourably with that of previous years. Notifications concerning insanitary houses are sent to the sanitary authorities.

8. MEDICAL TREATMENT.

The scheme of the Authority provides for the treatment of minor ailments at school clinics, and, in a few instances, on school premises. The work is done by a school nurse under the direction of an assistant medical officer. A list of the clinics is given in table VIII., and a return of the ailments treated in table IV. (i).

(a) *Tonsils and Adenoids.* — The operative treatment of enlarged tonsils and adenoids is carried out at the general and cottage hospitals in the county. These institutions provide treatment for 28/6d. a case; this charge includes the cost of one night in hospital, if further detention is considered advisable, a payment of 2/6 per night is made. The number of children treated is given in table IV. (iii).

(b) *Defects of Vision.*—Children suffering from defects of vision are treated by the ophthalmic surgeon of the county staff. In table IV. (ii) is given an analysis of the children examined.

(c) *Dental Defects.* — The treatment of dental defects is undertaken by the school dental surgeons. The school clinics are used as dental clinics according to the list in table IV. (iv).

The number of children inspected for dental defects was 18,784. The percentage of children suffering from dental defects who received treatment was 62·0.

Mr. Wilson, school dentist, states:—

The dental treatment of school children is unquestionably of national importance, and one of the great aims of the school medical and dental services is the building up of a healthy nation. By sacrificing the dental care of children from 8 to 13 years of age during the next five years we would be responsible without question for the dental defects and bad health of the future man and woman.

It seems to me that the most important and fruitful ages for treatment as the commencement of an accelerating system would be those of 6, 7, 8, 12 years and, if possible, the leavers. The age of 5 could be left out without any serious disadvantage to any system of age groups introduced. Children of this age attend the clinics in very few numbers, due to the feelings of their parents, who do not realise the importance of the temporary teeth and an imagination that the operation is too painful for a child so young. The ages of 6 and 7 years would invite inclusion as being the earliest opportunity after 5 of commencing the supervision of the child at the beginning of his school life, whilst at this period the permanent teeth are commencing to erupt and so can be watched from their first appearance onwards.

Much work is required around the age of 8 years, and the group is too important for non-inclusion. Between 9 and 11 years there is a good deal of change going on in the average mouth. Much shedding of

temporary teeth and the eruption of permanent ones are taking place, so that within certain limitations the mouth is taking care of itself. The age of 12 cannot be set aside, as normally the child at this time has lost all the temporary set, and with the exception of the wisdom tooth the whole of the permanent dentition should have erupted. It is not a "patching up" period by any means, but rather a most opportune time for the best and most permanent treatment. Added to this the child of 12 years is more receptive to the education of the care of his mouth and he will show more interest in it than at any earlier period of his school life. If time and numbers permitted the leavers might well be included in such a suggested age group scheme for the reasons already stated. These children are about to pass out beyond our reach, and it is our last chance of supervising their dental fitness.

Working upon such a scheme an addition might be made each year of an age group between 8 and 12 years, so that in three years all ages except that of five would be under the control of the dental staff. The previously neglected age of 5 could be included in the 4th year without much serious handicap, as the beginners would really have missed but one year of school life in dental supervision.

Looking over the records and figures of my own district for 1923, I am convinced of the greater appreciation of dental treatment by the older scholars. The percentage of five-year-olds treated was very low, but with the increase of each age the percentage increased also. Quoting these figures the percentages of treatments to recommendations were:— 5 years—30 per cent.; 6 years—37·5 per cent.; 7 years—53·4 per cent.; 8 years—58·6 per cent. Whilst in the case of "specials" (including all ages from 9 to 13 years) more children attended the clinics than were inspected, *i.e.*, many came for treatment of their own accord.

There is not as yet sufficient help received from the head teachers in encouraging dental treatment. Especially in the infant schools much depends upon the influence of the teaching staff, for there more than in the senior departments the teachers are brought continually into contact with the parents and are thus able to assist the dental service.

(d) *Tuberculosis*.—Children suffering or suspected to be suffering from tuberculosis are referred to the tuberculosis officers. The number of children provided with treatment during 1923 is set out in table IX.

(e) *Crippled Children—Orthopædic treatment of*. — The Education Committee has made arrangements for the orthopædic treatment of school children at British Red Cross Cura-

tive Posts at Kingston, Weybridge and Woking. An orthopaedic surgeon visits at regular intervals—Mr. Foley attends at Woking and sees there also the children from the Weybridge centre, and Mr. McCrae Aitken visits Kingston. There is a staff of trained masseuses at each post to carry out remedial treatment under the direction of the surgeon.

Children are referred to the posts by the assistant medical officers. A payment of 3/- per attendance is made by the Education Committee in all approved cases.

After treatment has been completed the children are followed up in their homes by the county health visitors.

The following is a statement of the number of children treated during the financial year ended 31st March, 1924:—

Centre.	Number of	
	Children treated.	Treatments.
Kingston	9	192
Weybridge	3	68
Woking	83	446
Totals	95	706

8A. AGE GROUPS FOR DENTAL INSPECTION.

As a result of an inquiry made in June, 1922, by one of the medical officers of the Board of Education into the school medical service of Surrey, a letter was received from the Board pointing out that owing to the fact that dental inspection was concentrated on the detached 5, 8 and 12 year old groups, the scheme did not conform to the conditions of a satisfactory dental scheme as laid down by the Board. This letter was considered by the Medical Service and Special Schools Committee on 4th October, 1922, and it was resolved that it be pointed out to the Board that if the

scheme of the Board were adopted — whereby children of the earlier age groups, either 5—8 or 6—9 were inspected in the first year and the scheme extended year by year by the addition of the new 5 or 6 year old groups as well as the re-inspection of all those children previously inspected—it would result in a considerable increase of the dental staff. A further letter was received from the Board and considered by the Medical Service Committee on the 29th November, 1922; the Board still pressed the Committee to adopt the scheme. A further communication was sent to the Board and the Board's reply thereto was considered by the Committee on the 31st January, 1923. The Board admitted that if their scheme were adopted the appointment of additional dentists would be necessary. The Committee resolved that the Board be asked to receive a deputation from the Committee in order that the matter might be further explained. As a result of this meeting the Board invited the Education Committee to make an alternative suggestion.

The present school dental staff consists of four whole time and one half time dental surgeons. These officers have inspected 10,600 children from the beginning of January to the end of July, 1923, or an average of 17,000 in a school year. They have treated in the same period 2,644 children or an average of 4,000 in a school year. One age group among children attending the public elementary schools contains about 7,000 children, and it follows therefore that the present staff cannot deal with more than 17,000 inspections and 4,000 treatments, that is to say rather less than three age groups in a year. In other words one dentist is equivalent to approximately half an age group—or 4,000 children. It appears the utmost which can be attempted by the present staff is three age groups. The Board will certainly insist on the re-examination next year of the children seen this year whichever group is dealt with. If 6, 7 and 12 be selected then next year the 7, 8 and 13 together with the 6 and 12 must be done, in all five groups will have to be treated, but as three of the groups will have been recently inspected the amount of treatment would be somewhat less than that of a primary inspection. This suggestion would lead to the appointment of at least two additional whole time dentists, and with two dental nurses next year and one dentist and one nurse yearly thereafter.

On the other hand the Board would favour the three groups 6, 7, 8, and in the following year 6, 7, 8 and 9. This grouping would possibly require only one additional dentist and a nurse each year.

The Committee decided that the time was not opportune to incur the additional expenditure, and resolved to inspect and treat the children of the ages 6, 7 and 12, and not to provide for the re-examination of further groups in the following year.

The Board of Education urge the need for the re-inspection next year of the children examined during 1924.

9. OPEN-AIR EDUCATION.

(a) *Playground Classes*.—There is no record of these classes, but several schools avail themselves of fine weather in the summer term to hold classes in the playground.

(b) *School Journeys*.—There have been none under the technical term employed by the Board of Education.

(c) *School Camps*.

Henley Fort.—The camp opened for the second year on April 28th, 1923, and closed on September 15th, having been occupied between those dates for $12\frac{1}{2}$ weeks by 247 boys and 81 girls (328 children altogether) and 17 teachers. The average cost of the food for the scholars, teachers and caretakers worked out at approximately $6/11\frac{3}{4}$ per head per week, nearly 1/- lower than that for the 1922 season.

The number of applications made for admission was disappointing, and some of the schools from which applications were received and for which accommodation was arranged subsequently withdrew their applications. For these reasons the camp has not been used to its fullest extent, having been vacant during $7\frac{1}{2}$ weeks, including the whole of the summer holidays, within the dates above-mentioned, and having closed two weeks earlier than was anticipated.

Special efforts are being made in the hope of ensuring that the camp shall, in future, be occupied by scholars from public elementary schools in the county during the ordinary school holidays.

An outbreak of infectious disease unfortunately occurred during the visit of one of the schools, and due attention should be given to the difficulty which exists in providing hospital accommodation for children who develop infectious disease in the camp. The camp is situated in

Guildford Borough, but the local sanitary authority will not admit into the isolation hospital a patient from the camp unless the responsibility for the cost of treatment is accepted by the County Education Authority. On the other hand, if the patient is removed to his home in an ambulance, the expenses incurred may be considerable.

Arrangements have now been made for the medical examination by an assistant medical officer of all children about to enter the camp, and it is hoped that this procedure may reduce the risk of another outbreak of disease.

While it is intended that the children as a rule shall sleep under canvas, in inclement weather the only alternative is extremely unsatisfactory, and the Committee should lose no time in providing more suitable sleeping accommodation.

In table XI. are shown the schools from which children attended the camp, the period of stay, and the average cost per head for food.

In other respects the premises and service at the camp have been improved, and steps are being taken to effect further changes and to make the camp and its arrangements better known to all the teachers in the county, in the hope that more schools will take advantage of it in the 1924 and succeeding seasons.

The experience of those schools from which children have attended has confirmed last season's conclusions as to the educational and physical benefits derived from these visits to the camp.

The Board of Education have now recognised attendance of children at the camp as equivalent to attendance at school for grant-earning purposes.

(d) *Open-air class-rooms in public elementary schools.*—None.

(e) *Day open-air schools.*—None.

(f) *Residential open-air schools.*—None.

10. PHYSICAL TRAINING, 1923-24.

The organiser of physical training for the county reports that during the years 1923-24 classes for upper and infant school teachers have been held at five centres. The classes have been greatly appreciated by the teachers, and have been well attended; the numbers are given in table X.

The organiser has followed up this instruction in the schools with detailed criticism, thus raising the standard of the work and bringing it as far as possible up-to-date.

Teachers who attend the classes receive a certificate, if 75 per cent. attendance is made and if the examination test is satisfactory.

There is a compulsory daily lesson of 20 minutes' duration in all the upper schools. This lesson can be extended to 30 minutes at the option of the teacher. One period a week for organised games in the afternoon is optional.

In the infant departments there is a compulsory daily lesson of 15 to 20 minutes, and in the afternoon an optional lesson of games or dancing.

The organiser attaches considerable importance to the teaching of country dances, and these are taught in nearly all the schools. Country dance courses have been held in seven centres during the year.

Vacation Courses of Instruction.

It is to be regretted that the Board of Education has withdrawn its financial support. Teachers who wish to take part have now to do so at their own expense.

11. PROVISION OF MEALS.

The provision of Meals Acts, 1906-1914, have not been put in force in Surrey.

12. SCHOOL BATHS.

There are no school baths, but in the summer term arrangements are made for visits of children from certain schools to swimming baths.

13. CO-OPERATION OF PARENTS.

Parents are invited to attend at the medical examination. During the year 46 per cent. were present.

14. CO-OPERATION OF TEACHERS.

Teachers carried out very useful work in connection with medical inspection and treatment. Where care com-

mittees are formed the teachers are among the most active members, and in several instances a teacher acts as secretary to the committee.

15. CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

The school attendance officers undertake the following duties.

- (a) Follow up children excluded from school for uncleanness.
- (b) Refer certain children absent from school on alleged medical grounds.
- (c) Refer for report children irregular in attendance.
- (d) Report children of school age who are not on the registers.
- (e) Collect contributions from parents towards maintenance of children in special schools.

16. CO-OPERATION OF VOLUNTARY BODIES.

Care Committees are associated with certain of the schools, and the members perform useful social work. They arrange for the conveyance of children who have to travel long distances for treatment, and in some cases they assess the contributions of the parents.

When parents persistently refuse to obtain medical assistance for the defects discovered in children attending the public elementary schools, these instances of neglect (table XIV.) are referred to the National Society for the Prevention of Cruelty to Children. During 1923, 43 cases of neglect were reported to the Society, and in 33 cases the activities of the Society were successful, and treatment was provided.

17. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

A classification is now made of all children of school age coming within the definition of blind, deaf, defective or epileptic.

Children whose names are on the school registers are found by one or other of the following methods:—

- (a) By the assistant school medical officer at the routine visits to the schools.

(b) By the school nurse at the general survey during each term.

(c) By the teacher.

(d) By the school attendance officer.

If the names are not on a register, discovery is made by:—

(e) The school nurse during her visits to the homes.

(f) The school attendance officer.

(g) Relieving officers, district nurses and other persons.

The children are then seen by an assistant medical officer and his report is considered by a specialist on the staff. An examination is made by the specialist before the children are referred for admission to special schools.

The children who are not sent to institutions are kept under the constant supervision of the school nurses and are seen again from time to time by the medical officers. Mentally abnormal children are dealt with on similar lines.

All mentally defective children of school age are now supervised in school and at home by the school nurses, who report periodically on their general condition and home surroundings.

The numbers of exceptional children discovered during the year are given in table III., and also the total number in the county known to the school medical officer.

How best to deal with the mentally abnormal child is a problem still unsolved.

These children can be divided into the following classes:—

Backward.—This condition may be due to lack of opportunity to learn occasioned by absence from school on account of ill-health or for domestic reasons. Physical defects such as defects of vision and hearing are liable to cause the child to be backward, because these defects interfere with the reception of the instruction given in school.

Dull.—This term may be applied to children who are to a mild degree defective mentally owing to maldevelopment of the brain or to damage to the brain tissue before or shortly after birth. Dullness may be associated with or aggravated by a physical defect of the special senses, for example blind-

ness or deafness. When this defect is remedied the dullness may be diminished, but some degree of mental abnormality will remain.

Feeble-minded. — This is a grade of mental defect more pronounced than dullness so that the child will always need care, supervision and control for his own protection or for the protection of others.

Imbecile. — Mental defect so pronounced that the child is incapable of managing himself or his affairs or of being taught to do so.

Idiot. — Mental defect of such a degree that the child cannot guard against common physical dangers.

The numbers of these classes of children up to 16 years of age in Surrey at the end of the year so far as information is in the possession of the school medical department were as follows:—

Dull and backward	...	...	...	446
Feeble-minded	...	...	...	253
Imbecile	...	...	...	144
Idiot	...	...	...	17

These children are being dealt with in the following manner:—

	Dull and Backward.	Feeble-minded.	Imbeciles.	Idiots.
Attending Public Elementary Schools	446	157	21	—
Attending Certified Special Schools	—	28	—	—
Not at School	—	68	123	17

All the idiots and imbeciles and 13 of the feeble-minded children have been notified to the Local Control Authority

under Section 2 (2) (a) and (b) of the Mental Deficiency Act, 1913.

AN ideal scheme would undoubtedly provide for the removal from a public elementary school of children falling within any of the above-named classes; in other words the schools would contain only those children who could profit by the instruction given. It will be generally admitted that the presence of a mentally defective child in a class is unfair to the teacher and prejudicial to the education of the other children. If a teacher attempts to give individual instruction to the children who are backward, the other members of the class suffer. On the other hand if the teacher directs his instruction to the normal children the mentally abnormal soon drop hopelessly in the rear. The position has been well summarised by Binet and Simon in the following words:—

“The children pay no attention whatever to the work of the class and this is quite a good thing, for then the teacher forgets them in their corner and goes on as if they were not there. . . . The supervision of a single ill-balanced child is more trouble than the direction of 20 normal ones; either one or other must be neglected and the alternatives are equally objectionable.”

Beyond the difficulties of teaching, the presence of a low grade defective—an imbecile or an idiot—in a school has often an unfavourable moral influence upon the other children.

If the Local Education Authority could freely expend public money the following might be suggested as a suitable scheme.

In certain of the larger public elementary schools there might be classes for dull and backward children. After a period of attendance in such a class, and when sufficient progress has been made a child would be sent back to the ordinary class, or when found to be making no progress would be transferred to a special day school.

From each public elementary school there should be facilities for the admission of selected children to a special day school. One day school might serve for several elementary schools. To this special day school would be drafted children

who were backward to the extent of at least two years retardation, children who were dull and the high grade feeble-minded children. This special school would be used for:—

(i) The instruction of educable dull and backward children, some of whom would be eventually returned to the public elementary schools, and

(ii) The observation of the conduct and progress of children who were dull or feeble-minded. A few of this group might return to the public elementary schools, a number would remain for permanent instruction in the day special school, and the remainder would be drafted to a residential colony.

The residential colony could serve a large area—possibly one colony would be adequate for the whole of the administrative county. To this colony would be sent directly from the schools, idiots, imbeciles, and low grade feeble-minded children and also those high grade feeble-minded children who did not make substantial progress at the day special school. At the colony suitable out-door occupation would be provided for children who could benefit therefrom and the lowest grade could be kept under conditions of comfort and safety.

As a beginning there can be little doubt that the essential unit is the colony. Without this institution as an outlet the special day schools would soon be overcrowded and there would be no accommodation for the idiots, imbeciles and the low grade feeble-minded. It might be possible to commence with a colony and with special day schools in a few selected areas such as Mitcham, Barnes and Woking, or it might be thought sufficient to have a colony and a number of special classes for dull, backward and high grade feeble-minded children in the larger public elementary schools.

Although the County is at the present time only spending £1,850 per year in the education of feeble-minded children of school age, the Mental Deficiency Committee has some 46 children in institutions costing about £3,500 a year. The actual cost to the state of a mentally defective person must be considerable as a large percentage of feeble-minded children eventually drift into Poor Law Infirmarys or Prisons.

18. NURSERY SCHOOLS.

The authority has no nursery schools.

19. SECONDARY SCHOOLS.

There is no medical inspection of pupils in attendance at secondary schools, but this work will be begun during 1924.

20. CONTINUATION SCHOOLS.

There are no continuation schools provided by the Education Authority.

21. EMPLOYMENT OF CHILDREN.

The school medical service takes small part in the supervision of the employment of children and young persons.

22. SPECIAL ENQUIRIES.

No special enquiries were completed during the year.

APPENDIX I.

MEMORANDUM BY THE COUNTY MEDICAL OFFICER OF HEALTH UPON COMMUNICABLE DISEASES IN SCHOOLS.

Regulations for the exclusion of Children suffering from or having contact with Communicable Diseases

A—Infectious Diseases (a) Notifiable.

(b) Non-notifiable.

(a) *Notifiable Infectious Diseases.*—To this group belong small-pox, scarlet fever or scarlatina, diphtheria or membranous croup, typhoid or enteric fever, pneumonia, cholera, plague, puerperal fever, cerebro-spinal fever, acute poliomyelitis, acute polio-encephalitis, encephalitis lethargica, typhus fever, relapsing fever, continued fever, trench fever, dysentery, ophthalmia neonatorum, erysipelas, tuberculosis (all forms), and malaria. They are called notifiable because it is compulsory upon the medical attendant, and the parents or guardians of a patient, to notify the occurrence of any of them immediately to the Medical Officer of Health of the district in which the case occurs. In certain districts other diseases are notifiable; for details see Appendix Ia.

With regard to school attendance, diphtheria and scarlet fever are by far the commonest and most important of the above-named notifiable infectious diseases.

(b) *Non-notifiable Infectious Diseases.*—To this group belong measles, whooping cough, german measles, chicken pox, mumps, influenza, summer diarrhoea and common colds. Notification of these diseases is not generally compulsory by law (see Appendix Ia.)

1. The Head Teacher should receive information from the District Medical Officer of Health, School Attendance Officer, or parents, of any cases occurring among scholars.
2. No children suffering from any of these diseases shall be permitted to attend school. In the case of common colds, the head teacher should exercise his (or her) discretion in the matter of exclusion.

3. Children coming from houses in which any notifiable or non-notifiable infectious disease occurs must be excluded for the periods set out in Appendix Ib. except that children coming from houses in which erysipelas, typhoid or enteric fever, relapsing or continued fever, ophthalmia neonatorum, tuberculosis, malaria, puerperal fever, dysentery, german measles, chicken pox or common colds have occurred need not be excluded.
4. All exclusions are to be notified immediately to the County School Medical Officer and to the District Medical Officer of Health upon form ID, giving the reasons therefor, *i.e.*, whether upon instructions of the District Medical Officer of Health, notification by parent, or otherwise.
5. Any teacher suspecting that any child attending school is suffering from one of these diseases, must immediately withdraw the child from the class and report to the Head Teacher, who if satisfied that there are reasonable grounds for suspicion must exclude the suspected scholar and notify the exclusion at once to the County School Medical Officer and the District Medical Officer of Health on form ID.
6. No child who has suffered from an infectious disease shall be allowed to return to school without a medical certificate stating that this may be done without danger of conveying infection, or until the full period of exclusion appropriate to the disease as shown in Appendix Ib. has elapsed.

In any case of doubt the County School Medical Officer or a member of his staff should be consulted, and exclusion maintained meanwhile.

B—Contagious Diseases.

Included under this heading are ringworm, scabies (or itch), pediculosis (or lousiness), impetigo or any other suspicious scabbing skin disease and ophthalmia.

1. No children suffering or suspected to be suffering from any of these complaints shall be permitted to attend school.

Such cases are to be notified at once to the County School Medical Officer and to the District Medical Officer of Health on form CD

2. Such children shall not be allowed to return to school without a medical certificate stating that this may be done without danger of conveying disease.

In any case of doubt the County School Medical Officer or a member of his staff should be consulted, and the child excluded meanwhile.

3. Children coming from houses in which these complaints are known to exist need not be excluded.

Infectious and Contagious Diseases.

A child who has been excluded from school by the County School Medical Officer on account of infectious or contagious disease must not be allowed to return until a re-admission certificate has been issued by him or on his behalf.

This rule need not be observed in the case of a child who is excluded by the County School Medical Officer for a definite period.

It is important that cases of infectious disease which cannot be properly cared for at home should be admitted into isolation hospital.

Regulations for Teachers and Pupil Teachers suffering from or having contact with Communicable Diseases.

1. Any teacher or pupil teacher suffering from any infectious or contagious disease must stay away from school, and notify the cause of absence immediately to the Head Teacher, who will notify it to the County School Medical Officer and to the District Medical Officer of Health on Form ID. or CD.
2. No teacher who has suffered from any of these diseases shall return to duty without a medical certificate of freedom from infection.

In doubtful cases the County School Medical Officer or a member of his staff should be consulted.

3. Any teacher in whose residence any infectious disease has occurred must give up work at once, and notify the cause of absence to the Head Teacher, who will notify it to the County School Medical Officer and to the District Medical Officer of Health on Form ID.

This rule need not be observed in the case of erysipelas, typhoid or enteric fever, relapsing or continued fever, malaria, tuberculosis, puerperal fever, dysentery, ophthalmia neonatorum, summer diarrhoea, german measles, chicken pox or common colds, unless special directions be given; nor in the case of a contagious disease (B).

4. A teacher having given up work under section (3) above must remain away from school for the quarantine period of the disease as stated in Appendix II., unless he (or she) moves into lodgings which are free from infection. In case of doubt the County School Medical Officer should be consulted.

Notes upon the early signs and symptoms of Communicable Diseases.

A—Infectious Diseases.

Teachers should always be on their guard against infectious diseases in the school from the first day of the term to the last; observation of the children with this object in view should become an instinctive habit. This applies particularly to infants' schools, in which infectious diseases most commonly originate and spread and in which they are most fatal. Many of the infectious diseases are recognisable by a characteristic rash, and this may be the first indication observed. But there are in nearly all cases preliminary symptoms which ought to attract attention.

In the first place it may be laid down as a general rule that a teacher should send home at once any child suffering from—

Sudden vomiting.

Shivering fits.

Sore throat.

Severe cold, with sneezing and running from the nose and eyes.

Violent cough, especially if severe enough to cause vomiting.

Unwonted drowsiness and lethargy, with hot dry skin.

These are all highly suspicious symptoms, and are to be regarded with especial apprehension in young children.

Diphtheria.—This is one of the most troublesome and dangerous diseases occurring in schools, because of the facility with which infection may be spread by apparently healthy children.

The onset is generally insidious, and a young child may be peevish and ailing for a few days before anything more is noticed.

The chief symptom is general illness and pallor. If the throat be examined, white or grey patches may be seen on the tonsils. There is also generally enlargement of the glands at the angle of the jaw. There is no rash associated with it. It is important to remember that children suffering from diphtheria rarely complain of sore throat.

It is, however, a safe rule to regard any cases of sore throat as infectious and to exclude them at once for medical examination. Slight cases of diphtheria are very often missed; some can be detected only by bacteriological examination.

Scarlet Fever.—An attack is often ushered in by sudden vomiting. Sore throat is a very common early symptom. Shivering fits may occur, accompanied by hot dry skin. The combination of sore throat with vomiting and feverishness may be regarded as highly suspicious of this disease.

The rash appears early, often within a few hours, first on the neck and chest, thence spreading gradually over the rest of the body. When typical it has the appearance of a uniform bright red blush, which when looked at more closely is seen to be made up of countless tiny points set close together. The rash may, however, be very faint in some cases. Peeling begins in a week or ten days.

Mild cases are very difficult of detection; there may be scarcely any visible rash, and the other symptoms may be slight. They are often missed until peeling begins, and are, therefore, more dangerous to others than severe cases. Any child found in school with peeling hands, and a history of slight sore throat or other indisposition a few days before, should be excluded immediately for medical examination.

Measles.—This is a serious and often fatal disease. The early symptoms are those of a severe cold, viz., sneezing, running nose, inflamed watery eyes, and cough. Any child suffering in this way should be excluded at once; a cold is infectious even though it prove not to be commencing measles. The early stage of measles is the most infectious, hence particular care should be taken to watch for these suspicious symptoms. This applies more especially to infants' schools.

The rash generally appears two or three days later, first on the face and neck, thence spreading over the body. It consists of slightly raised dull red spots or blotches, often arranged in groups.

Whooping Cough.—This is a dangerous disease. The characteristic whoop is unmistakable; the child has a paroxysm of violent coughing, and then draws a long breath with a peculiar crowing noise. This does not always develop early, and any child who has violent fits of coughing should be excluded, especially if the coughing be followed by sickness and there is congestion of the face during coughing.

Chicken Pox.—This is a trivial ailment. The early symptoms are generally very slight or absent, but a child may be out of sorts for a day or two before the appearance of the eruption.

The rash itself may in slight cases pass unnoticed, unless the disease is prevalent: it consists of raised spots or pimples, rapidly becoming watery, then drying up and scabbing; these appear in successive crops. They are commonly seen about the scalp and face and on the chest.

Small Pox is liable to be confused with chicken pox. The early symptoms are more marked than in chicken pox. The patient is feverish and ill for three or four days before the rash appears.

The eruption is not unlike that of chicken pox at first, it appears early on the forehead and wrists; but the vesicles suppurate instead of remaining watery, and do not dry up and scab for a considerable time.

If the disease does attack a child who has at one time been vaccinated, it is apt to be so mild as to pass unrecognised, or to be mistaken for chicken pox.

German Measles.—The premonitory symptoms are generally mild or absent. The rash resembles that of measles, but is not usually preceded by a cold in the head; and the disease is generally a milder one throughout and is trivial.

Mumps.—The disease begins with stiffness and tenderness about the jaws, followed by swelling of the parotid gland on the cheek in front of the ear and behind the angle of the jaw; it may sometimes affect both sides.

Teachers in doubt about any suspected cases of infectious disease in school should always act on the assumption that the disease is infectious and they should always avail themselves of the assistance which can be afforded by the school nurses or assistant school medical officers.

B—Contagious Diseases.

Ringworm of the scalp is the most troublesome skin disease occurring in schools. Its early recognition is therefore a matter of great importance.

It is caused by the growth of a minute fungus on the skin and at the roots of hairs.

On the skin other than the scalp its appearance is generally characteristic—small circular patches, with raised margins, which spread quickly if not treated. On the scalp it generally causes scurfy patches covered with short broken hairs but its appearance is not always so typical here.

It is most difficult to eradicate the fungus from the hair of the scalp and which may remain at the roots of the hair for some time after apparent recovery. It is therefore most important to exclude all children suffering from this complaint until a medical certificate of fitness to return is obtained from the County School Medical Officer. Microscopic examination of the hairs is necessary in doubtful cases.

Scabies or *Itch* begins as an irritable rash, generally on the webs of the fingers, and at the wrists, and bends of the elbows. It is due to the burrowing and multiplication of a minute insect under the skin. As the disease spreads, and the patient scratches, the skin becomes much inflamed, and widespread eczema may supervene masking the real nature of the complaint.

In addition to proper treatment, disinfection of the clothes of the patient by boiling or other process is necessary in order to avoid recurrence of the disease.

Pediculosis or *Lousiness*.—The louse causing this complaint lives on the hair, and there lays its eggs, which are fixed to the hairs, and are known as "nits." These eggs hatch in about a week, and the resulting lice are ready to begin the process of laying eggs in about three weeks. The complaint is not cured until all nits have disappeared.

All cases should be referred to the school nurses who will receive instructions from the County School Medical Officer as to the course of action to be followed.

Impetigo.—This is most commonly met with on the face, especially about the mouth, though it may also occur on the arms and body.

The eruption is pustular, the pustules being of various sizes, followed by greenish yellow thick scales. This complaint is apt to affect and to spread chiefly among poorly-nourished children.

Ophthalmia is an inflammatory disease of the eyes, which are bloodshot, inflamed, and mattery; children suffering from it should be excluded for medical treatment.

Teachers in doubt about any suspicious cases of contagious disease in school should always act on the assumption that the condition is contagious and they should always avail themselves of the assistance which can be afforded by the school nurses or assistant school medical officers.

Closure of and exclusion from School.

The procedure to be followed in order to satisfy the conditions stated in the Code of the Board of Education may be summarised thus:—

A. School Closure must be applied in one of two ways, viz.:—

- (1) It may be compelled by requirement of the Sanitary Authority, or any two members thereof, acting on the advice of the Medical Officer of Health.
- (2) It may be performed by the Local Education Authority (in effect the Managers of any particular school) acting on the advice of the County School Medical Officer.

B. Exclusion of Individual Children—

- (1) May be compelled by requirement of the Sanitary Authority acting as for school closure.
- (2) May be authorised and certified by the County School Medical Officer upon certain specified grounds which shall be deemed for the purposes of the Code to be reasonable grounds.

The general effect of these conditions is to make one person, the County School Medical Officer, responsible for all school closures and all exclusions of individual children that are not compelled by formal requirement of Sanitary Authorities.

The services of the District Medical Officers of Health have been retained in their own districts for

- (1) dealing with all communicable diseases, both infectious and contagious, by school and home visits and any other measures found necessary, including exclusion and closure,
- (2) examination of a limited number of school attendance cases.

The procedure at present in force is as follows:—

A. School Closure. The District Medical Officer will still have two alternatives—

- (1) He may advise his Sanitary Authority to close a school compulsory on purely public health grounds, or
- (2) He may recommend to the County School Medical Officer the closure of a school on account of an outbreak of infectious disease and will immediately send the prescribed certificate embodying his recommendation, together with a note of the circumstances, to the County School Medical Officer, who will, if he considers advisable, countersign the certificate and forward it to the Managers.

B. Exclusion of Individual Children—

The District Medical Officer of Health may advise his Sanitary Authority to order the exclusion of one or more children on purely public health grounds.

The clause in the Code with reference to the exclusion of individual children need not be interpreted as requiring certificates for all exclusions, but as requiring formal evidence that the exclusion has been on reasonable grounds in any case of dispute.

No children belonging to a school closed by reason of an outbreak of infectious disease, should be admitted into another school during the period of closure of their own school. Cases in which such admission is sought for some special reason should be referred to the County School Medical Officer.

Ventilation, cleansing and disinfection of Schools.

These subjects may be shortly referred to here because due attention to them does much to check the spread of infection in schools, as well as to maintain the health of teachers and scholars.

Ventilation.

In addition to inlets and outlets for air in each room for ordinary purposes, it is essential to have plenty of windows that will open,

and those so arranged that a thorough current of fresh air may sweep through the whole room when they are all opened together.

Teachers should pay attention to the ordinary ventilation of their classrooms during every lesson, seeing that as many windows are kept open as can be managed without draught, and without reducing the temperature unduly. A thermometer should be hung in each classroom to be referred to for this purpose; the temperature should be maintained at an average of 55 to 60 degrees Fahrenheit.

During recreation time every window and door of the classroom should be thrown open, in order that the room may be thoroughly flushed with fresh air. In senior departments the scholars might take this duty in turn. Overcrowding interferes greatly with ventilation, and may do away with all its good effects. It would be of great advantage to hang up in each classroom a card stating the number of children allowed to be accommodated in it by the regulations of the Board of Education.

Apart from numerical overcrowding, teachers should try to avoid as far as possible too close grouping of scholars for lessons, which favours pollution of air and the spread of infection.

Cleansing.

Head Teachers have it in their power to a very great extent to secure and maintain proper cleanliness of school premises. They should at once complain to the Managers when cleansing is neglected. Teachers may also do much to ensure that sanitary conveniences shall be used in a proper manner, and to prevent the objectionable and dangerous habit of spitting about school premises and playgrounds.

All halls and classrooms should be swept daily with wet sawdust or other similar material, all windows being kept wide open during the process, and indeed as long as the rooms are not in use. All accumulation and scattering of dust should be scrupulously avoided, hence the necessity for wet rather than dry cleaning, and for doing away with all unnecessary furniture, platforms, and apparatus upon or under which dust may accumulate. Where dual desks are used it is hardly possible to move them for the daily sweepings with wet sawdust. Among such desks the floors should be sprayed or sprinkled lightly with water before being swept, and the brooms used should be damped. After the sweeping of the floors, the furniture should be damp dusted, preferably on the following morning. The efficiency of the daily cleaning will to a large extent regulate the number of floor scrubblings required during term.

During each of the three vacations the school buildings and furniture should receive a thorough cleaning: the floors should be scrubbed with soft soap and water; the walls if painted should be washed, if distempered they should be carefully swept down; all furniture and varnished woodwork should be thoroughly cleaned; the windows should be cleaned inside and out; all maps and pictures should be taken down and cleaned; all books should be beaten and dusted, and slates washed.

Disinfection.

This may be necessary after outbreaks of infectious disease in particular classrooms, or in a whole school. The rooms will be fumigated, or sprayed with disinfectant by the local Sanitary Authority, but generally speaking the thorough cleansing of a classroom is preferable to disinfection. Such cleansing should include the scrubbing of the floors, the washing of paint and the wiping of desks and other woodwork with a cloth moistened with paraffin. In addition to the measures described, distempered walls and ceilings may have to be colour-washed afresh after some outbreaks of infectious disease, and books, if old and of no great value, burned.

The advice of the County School Medical Officer or a member of his staff should be sought whenever possible.

APPENDIX Ia.

Other Notifiable Infectious Diseases.

District.	Disease.
Barnes Urban	Measles.
The Maldens and Coombe Urban ...	Measles and Chicken Pox.

APPENDIX Ib.

Infectious Diseases—Periods of Exclusion to be observed for Patients and Contacts.

Disease.	Patient is infectious for	Patient may resume school attendance.	Children exposed to infection to be excluded for
Diphtheria	At least 4 weeks, generally much longer. A patient should be considered infectious until three consecutive bacteriological examinations have proved the absence of the germ of the disease. No patient who has any discharge from nose or ears can be considered free from infection.	4 weeks after discharge from hospital, or receipt of medical certificate of freedom from infection. This is to enable the patient to recover strength after the illness; also to obviate as far as possible the danger of occasional protracted infection.	When the patient is removed to hospital a contact may be re-admitted into school at once, if a bacteriological examination shows the absence of diphtheria bacilli.
Scarlet Fever.	4 to 6 weeks, sometimes longer. Any patient having discharge from nose or ears must still be considered infectious, but peeling may generally be disregarded.	3 weeks after discharge from hospital, or receipt of medical certificate of freedom from infection.	7 days from date of last exposure.

APPENDIX Ib.—*continued.*

Disease.	Patient is infectious for	Patient may resume school attendance	Children exposed to infection to be excluded for
Typhoid or Enteric Fever.	6 weeks, often longer. The excretions may convey infection long after apparent recovery.	4 weeks after discharge from hospital, or receipt of medical certificate of freedom from infection.	Contacts need not be excluded
Small Pox	4 to 5 weeks; until every scab has completely disappeared.	Upon receipt of medical certificate of freedom from infection.	18 days from date of last exposure.
Measles.	3 weeks.	3 weeks from first appearance of rash.	21 days from date of onset of illness of the last patient with measles in the house.
Whooping Cough.	About 6 weeks.	When all cough has ceased, as a rule about 8 weeks from beginning.	3 weeks from date of onset of illness of last patient with whooping cough in the house.
German Measles.	About 3 weeks.	3 weeks from first appearance of rash.	Contacts need not be excluded
Chicken Pox	About 3 weeks and until every scab has disappeared.	When the skin is clear of all scabs.	Contacts need not be excluded
Mumps.	About 3 weeks.	4 weeks from the beginning.	28 days from date of onset of illness of last patient with mumps in the house.

The general principle to be observed in re-admitting into school a child who has suffered from a serious illness is that re-admission is not to be enforced until convalescence is complete.

APPENDIX Ic.

Infectious Diseases—Incubation Periods.

Disease.	*Incubation Period.
Diphtheria	1 to 7 days
Scarlet Fever	1 to 5 „
Typhoid or Enteric Fever	7 to 21 „
Small Pox... ..	12 „
Measles	10 „
Whooping Cough	10 to 15 „
German Measles	18 „
Chicken Pox	12 to 20 „
Mumps	14 to 28 „

* The period that elapses between the occurrence of infection and the onset of the first symptoms of the disease.

APPENDIX II.

TABLE I.

A.—ROUTINE INSPECTIONS.

Code Groups.	Number of children inspected.		
	Boys.	Girls.	Total.
Entrants	2,537	2,542	5,079
Intermediates	3,117	2,989	6,106
Leavers	4,793	4,673	9,466
Totals	10,447	10,204	20,651

B.—OTHER INSPECTIONS.

	Number of special inspections.	Number of re-examinations.
Boys	1,707	5,143
Girls	1,833	4,973
Totals	3,540	10,116

TABLE II.

A.—RETURN OF DEFECTS FOUND IN THE COURSE OF MEDICAL INSPECTION
IN 1923.

	Routine inspections.		Special inspections.	
	Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.	Number referred for treatment.	Number requiring to be kept under observation but not referred for treatment.
Malnutrition	53	82	21	14
Skin—				
Ringworm, Head	13	—	149	—
" Body	7	1	44	—
Scabies	16	—	25	—
Impetigo	55	6	271	1
Other diseases (non-tubercular)	62	35	313	16
Eye—				
Blepharitis	93	13	88	5
Conjunctivitis	15	—	44	1
Keratitis	1	1	1	—
Corneal opacities	4	10	1	1
Defective vision (excluding squint)	959	375	534	64
Squint	126	72	58	7
Other conditions	20	7	47	9
Ear—				
Defective hearing	93	176	58	34
Otitis media	80	33	114	13
Other ear disease	83	11	64	8
Nose and Throat—				
Enlarged tonsils	446	895	139	75
Adenoids	140	262	86	60
Enlarged tonsils and adenoids	613	302	271	43
Other conditions	21	38	65	20
Enlarged cervical glands (non-tubercular)	22	484	48	70
Defective speech	2	62	2	19
Heart and Circulation—				
Heart disease, Organic ...	31	129	6	25
" " Functional ...	10	206	6	39
Anæmia	71	39	29	17
Lungs—				
Bronchitis	60	163	24	25
Other non-tubercular diseases	5	39	3	4

TABLE II.—*Contd.*

	Routine Inspections.		Special Inspections.	
	Number referred for Treatment.	Number requiring to be kept under observation but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation but not referred for Treatment.
Tuberculosis—				
Pulmonary definite	4	1	1	—
" suspected	47	79	31	35
Non-Pulmonary—				
Glands	30	23	14	4
Spine	—	3	—	—
Hip	2	7	—	2
Other bones and joints	2	2	3	—
Skin	—	—	1	—
Other forms	—	3	1	—
Nervous system—				
Epilepsy	4	17	5	17
Chorea	3	5	11	11
Other conditions	12	20	18	20
Deformities—				
Rickets	13	41	3	5
Spinal curvature	74	55	9	16
Other forms	69	53	31	26
Other diseases and defects	142	186	312	167
Totals	3,503	3,936	2,951	873

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Code groups.	Number of children.		Percentage of children found to require treatment.
	Inspected.	Found to require treatment.	
Entrants	5,079	576	11·3
Intermediates	6,106	904	14·8
Leavers	9,466	1,738	18·4
Totals	20,651	3,218	15·6

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN.

			Boys.	Girls.	Total.
partially blind	(i.) Suitable for training in a school or class for the totally blind	Attending certified schools or classes for the blind	7	1	8
		Attending public elementary schools	—	—	—
		At other institutions	—	—	—
		At no school or institution	1	2	3
	(ii.) Suitable for training in a school or class for the partially blind	Attending certified schools or classes for the blind	4	6	10
		Attending public elementary schools	9	3	12
		At other institutions	—	—	—
		At no school or institution	4	1	5
dumb and partially deaf	(i.) Suitable for training in a school or class for the totally deaf or deaf and dumb	Attending certified schools or classes for the deaf	15	13	28
		Attending public elementary schools	3	—	3
		At other institutions	—	—	—
		At no school or institution	1	1	2
	(ii.) Suitable for training in a school or class for the partially deaf	Attending certified schools or classes for the deaf	2	8	10
		Attending public elementary schools	3	2	5
		At other institutions	—	—	—
		At no school or institution	1	—	1
Mentally Defective	(i.) Feeble minded (cases not notified to the Local Control Authority)	Attending certified schools for mentally defective children	17	16	33
		Attending public elementary schools	89	66	155
		At other institutions	—	3	3
		At no school or institution	8	19	27
	(ii.) Notified to the Local Control Authority during the year	Feeble-minded	2	—	2
		Imbeciles	15	8	23
		Idiots	1	2	3
Epileptic	(i.) Suffering from severe epilepsy	Attending certified special schools for epileptics	8	8	16
		In institutions other than certified special schools	—	—	—
		Attending public elementary schools	3	1	4
		At no school or institution	3	3	6
	(ii.) Suffering from epilepsy which is not severe	Attending public elementary schools	3	9	12
		At no school or institution	3	2	5

			Boys.	Girls.	Total
Physically Defective	(i.) Pulmonary and glandular tuberculosis	At approved sanatoria or sanatorium special schools	12	19	31
		At certified residential open-air schools	—	1	1
		At certified day open-air schools ...	—	—	—
		At public elementary schools ...	61	65	126
		At other institutions	3	4	7
		At no school or institution	19	33	52
	(ii.) Delicate children (<i>e.g.</i> pre or latent tuberculosis, malnutrition, debility, anæmia, etc.)	At certified residential open-air schools	—	—	—
		At certified day open-air schools ...	—	—	—
		At public elementary schools ...	2	3	5
		At other institutions	—	—	—
		At no school or institution	—	2	2
	(iii.) Active non-pulmonary tuberculosis	At approved sanatoria or hospital schools	10	7	17
		At public elementary schools ...	—	—	—
		At other institutions	3	3	6
		At no school or institution	4	1	5
	(iv.) Crippled children (other than those with active tuberculosis), <i>e.g.</i> , children suffering from paralysis, etc. and including those with severe heart disease	At certified hospital schools ...	1	1	2
		At certified residential cripple schools	11	4	15
		At certified day cripple schools ...	3	1	4
		At public elementary schools ...	61	55	116
		At other institutions	2	—	2
		At no school or institution	19	18	37
Totals			413	401	814

TABLE IV.

GROUP I.—TREATMENT OF DEFECTS FOUND DURING 1923.

	Routine cases.			Special cases.		
	Referred for treatment.	Defects noted.		Referred for treatment.	Defects treated.	
		Under scheme of Local Education Authority.	Otherwise.		Under scheme of Local Education Authority.	Otherwise.
Malnutrition	53	42	7	21	14	4
Skin—						
Ringworm, Head ...	13	10	3	149	127	21
" Body ...	7	4	3	44	41	3
Scabies ...	16	11	3	25	24	1
Impetigo ...	55	41	10	271	265	5
Other diseases (non-tubercular)	62	38	18	313	286	20
Eye—						
Blepharitis ...	93	79	7	88	80	3
Conjunctivitis ...	15	6	7	44	38	4
Keratitis ...	1	1	1	1	1	1
Corneal opacities ...	4	2	—	1	1	—
Defective vision ...				See Group II. Table IV.		
Squint ...				47	36	8
Other conditions ...	20	12	4			
Totals			16			44
Ear—						
Defective hearing ...	93	46	20	58	28	13
Otitis media ...	80	37	17	114	76	19
Other ear disease ...	83	43	18	64	56	7
Nose and Throat—						
Enlarged tonsils ...				See Group III. Table IV.		
Adenoids ...				65	48	11
Enlarged tonsils and adenoids ...	21	7	10			
Other conditions ...				48	25	13
Enlarged cervical glands (non-tubercular)	22	9	11	2	1	1
Defective speech ...	2	2	—			
Heart and Circulation—						
Organic ...	31	1	21	6	1	4
" Functional ...	10	1	7	6	2	4
Anæmia ...	71	45	17	29	19	7
Lungs—						
Bronchitis ...	60	24	25	24	17	6
Other non-tubercular diseases ...	5	2	3	3	2	1
Tuberculosis—						
Pulmonary, Definite ...	4	—	3	1	—	1
" Suspected ...	47	1	30	31	3	18
Non-pulmonary						
Glands ...	30	4	17	14	1	11
Spine ...	—	—	—	—	—	—
Hip ...	2	—	2	3	—	3
Other bones and joints ...	2	—	2	1	1	1
Skin ...	—	—	—	1	—	1
Other Forms ...	—	—	—	—	—	—
Nervous system—						
Epilepsy ...	4	—	4	5	—	3
Chorea ...	3	—	3	11	4	5
Other conditions ...	12	3	5	18	8	9
Deformities—						
Rickets ...	13	6	2	3	1	1
Spinal curvature ...	74	26	35	9	5	4
Other forms ...	69	31	27	31	10	18
Other diseases and defects ...	142	41	47	312	217	65
Totals	1,219	574	389	1,863	1,438	294
			963			1,732

TABLE IV.—Contd.

GROUP II.—TREATMENT OF VISUAL DEFECTS FOUND DURING 1923.

Number of defects dealt with.			Number of children.			
Under the authority's scheme.	By private practitioner or hospital.	Otherwise.	For whom spectacles were prescribed.			Total.
			Under the authority's scheme.	Otherwise.	Total.	
659	123	23	485	112	597	559

In the remaining 208 cases, 18 received forms of treatment other than spectacles and in 190 cases no treatment was considered necessary.

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT FOUND DURING 1923.

Number of defects.			
Received operative treatment.			Total number treated
Under the authority's scheme.	By Private practitioner or hospital apart from authority's scheme.	Total.	
329	94	423	483

TABLE IV.—Contd.

GROUP IV.—TREATMENT OF DENTAL DEFECTS.

1. NUMBER OF CHILDREN DEALT WITH.

	Routine age groups.					Specials.	Total.
					Total.		
	5	6	7	8				12
Inspected by Dentist ...	1,773	4,177	4,846	3,807	2,055	2,126	18,784
Referred for treatment ...	793	2,204	2,922	2,449	1,181	1,463	11,012
Actually treated ...	372	968	1,339	1,265	575	2,315	6,834
Retreated (result of periodical examination)...						258	

2. PARTICULARS OF TIME GIVEN AND OPERATIONS UNDERTAKEN.

No. of half days devoted to inspection.	No. of half days devoted to treatment.	Total No. of attendances made by the children at the clinic.	No. of permanent teeth.		No. of temporary teeth.		No. of other operations.	
			Ex-traced.	Filled.	Ex-traced.	Filled.	Permanent teeth.	Temporary teeth.
1	2	3	4	5	6	7	10	11
406	1,167	8,233	1,717	2,639	12,121	784	975	613

TABLE IV.—*Contd.*

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(a) WORK OF HEALTH VISITORS.

Total number of visits to schools.	Average number of visits per school.	Total number of examinations of children in schools.	Number of children unclean.					Action taken.						Discharg'd with a caution or dismissed.		
			Clothing filthy.	Nits.	Lice.	Bodies verminous.	Total.	First warning notice issued.	Second warning notice issued.	Excluded.		No. of Prosecutions under Bye-laws.	No. fined.		Adjourned or withdrawn on improvement.	
										1st time	2nd time					3rd time
7,221	26	294,589	966	44,419	4,178	116	49,679	15,958	5,234	1,533	392	138	59	49	4	6

(b) CHILDREN CLEANSED AT BARNES CLEANSING STATION.

Number of children cleansed.			Prosecutions.		
Verminous heads.	Verminous bodies.	Total.	Number.	Result:	
				Fines imposed.	Withdrawn on improvement.
26	23	49	7	4	3

TABLE V.

NOTIFICATIONS OF INFECTIOUS DISEASES.

Disease.					Suffering.	Excluded on suspicion.	Infection at home.	Total exclusions.
Diphtheria	...	...	...	...	114	8	370	492
Scarlet fever	...	...	...	...	280	69	353	702
Enteric fever	...	...	...	...	—	—	—	—
Measles	...	...	...	...	1,686	135	906	2,727
Whooping cough	...	...	...	...	1,053	123	295	1,471
German measles	...	...	...	...	53	—	41	94
Chicken-pox	...	...	...	...	1,395	34	333	1,762
Mumps	...	...	...	...	342	27	220	589
Other	...	...	...	...	27	2	8	37
Totals	...	...	...	...	4,950	398	2,526	7,874

CONTAGIOUS DISEASES.

Disease.					Suffering.	Excluded on suspicion.	Total exclusions.
Ringworm	...	...	...	...	150	5	155
Pediculosis	...	...	...	...	4	—	4
Scabies	...	...	...	...	25	2	27
Impetigo	...	...	...	...	193	5	198
Ophthalmia	...	...	...	...	4	—	4
Other	...	...	...	...	2	—	2
Totals	...	...	...	...	378	12	390

TABLE VI.

SCHOOL CLOSURE ON ACCOUNT OF INFECTIOUS DISEASES IN 1923.

Name of school.	Closed.		
	From.	To.	On account of.
Winger, Oakwood District C.E. ...	23/1/23	26/2/23	Measles & influenza
Bury C.E.	8/1/23	29/1/23	Measles
" " " " " "	16/10/23	12/11/23	Scarlet fever
Haddington and Wallington, Bandon Hill C.	22/11/23	23/11/23	Disinfection (scarlet fever)
Haddington and Wallington, Bandon Hill C. Infants	16/3/23	9/4/23	Measles
Haddington and Wallington, Hackbridge C. Infants	10/9/23	8/10/23	Whooping cough
Hetchingley C. Mixed	19/11/23	7/1/24	Mumps, whooping cough
" " Infants	15/10/23	7/1/24	" "
Hamley C.E. Mixed	30/1/23	13/2/23	Whooping cough and colds
" " " " " "	14/5/23	4/6/23	Measles
" " Infants	30/1/23	13/3/23	Whooping cough
Hamley, Grafham C.E....	18/7/23	3/9/23	Whooping cough and summer holidays
Hickland C.E.	23/1/23	19/2/23	Measles and whooping cough
Horslow, Outwood C.	24/1/23	5/3/23	Measles
Hesfleet C.E.	19/1/23	12/2/23	Whooping cough
Hesfleet, West Byfleet C.	16/4/23	30/4/23	" "
Hetherham Hill C. Infants'	16/7/23	3/9/23	Measles
Hewarwood C.	8/1/23	22/1/23	"
Hewarwood, Lowfield Heath C.	30/4/23	28/5/23	"
Higham, Belmont C.	21/2/23	19/3/23	Whooping cough and chicken pox
Hilsham Common C.E.	12/6/23	2/7/23	Measles
Hertsey, Addlestone St. Paul's Infants'	23/1/23	12/2/23	Whooping cough
Hertsey, New Haw C.	12/4/23	30/4/23	" "
" " " " " "	1/5/23	14/5/23	" "
Hiddingfold C.E.	30/4/23	2/5/23	Scarlet fever
" " " " " "	28/5/23	4/6/23	Measles
Hobham, Trinity C.E.	9/1/23	29/1/23	"
Hoham C. Infants'	10/12/23	7/1/24	"
Hoham C.E.	10/12/23	7/1/24	"
Hoham, Downside C.E.	5/3/23	28/3/23	Whooping cough
Holsdon and Purley, Purley C.E. Infants'	5/2/23	5/3/23	Measles
Holsdon and Purley, Roke C.	5/3/23	9/4/23	"
Holsdon and Purley, The Reedham Orphanage C.E.	13/7/23	26/7/23	Mumps

TABLE VII.

EXAMINATION OF COUNTY SCHOLARS.

NAUTICAL.

Total number examined	...	...	...	...	13
Certified unconditionally	...	...	...	...	4
Required to obtain treatment for defects	...	...	...	...	3
Rejected	...	...	...	...	5
Postponed	...	...	...	...	1

TEACHING.

Total number examined	285
-----------------------	-----	-----	-----	-----	-----

Girls :—

Certified unconditionally	...	...	...	...	184
Required to obtain treatment for defects	...	...	...	...	32
Postponed	...	...	...	...	—
Rejected	...	...	...	...	1

Boys :—

Certified unconditionally	...	...	...	...	53
Required to obtain treatment for defects	...	...	...	...	12
Postponed	...	...	...	...	1
Rejected	...	...	...	...	2

TABLE VIII.

LIST SHOWING THE VARIOUS CLINICS IN THE COUNTY, THE TREATMENT PROVIDED THEREIN, AND THE DAYS THE CENTRES ARE OPEN FOR TREATMENT.

Clinic.	General medical.	Ophthalmic.	Dental.
Addlestone	—	4th Tuesday afternoon ...	—
Ash	—	—	2nd Wednesdays (when required). As required.
Ashtead, Council School	—	—	—
Bagshot	—	3rd Tuesday afternoon ...	—
Barnes, Technical Institute, Mortlake	Every Wednesday afternoon ...	1st & 3rd Monday afternoons ...	Every Tuesday.
Camberley, St. Michael's Church Rooms	2nd & 4th Thursday mornings ...	1st Tuesday afternoons ...	1st & 3rd Fridays.
Caterham Hill, Council School	1st & 3rd Friday mornings ...	—	—
Caterham Valley, Parish Hall, Stafford Road	3rd Wednesday morning ...	As required	2nd & 4th Thursdays.
Chertsey, Girls' Council School, Steppages	1st & 3rd Thursday mornings ...	2nd Tuesday afternoons ...	2nd & 4th Mondays.
Coulsdon, Boys' Council School, Smitham Bottom	3rd Tuesday morning	—	1st & 3rd Wednesdays.
Cranleigh, Church of England School	—	—	1st & 3rd Fridays.
Dorking, Imperial Club, West Street	2nd & 4th Thursday mornings ...	3rd Wednesday	2nd & 4th Fridays.
Egham, Technical Institute, High Street	1st & 3rd Friday mornings ...	As required	2nd & 4th Wednesdays.
Epsom, Wesleyan Church Rooms	2nd & 4th Thursday mornings ...	1st Thursday morning ...	As required.
Farnham, "Brightwells"	Every Tuesday morning	4th Friday	Mondays.
Godalming, Hughes' Church Rooms, Queen's Road	Every Friday morning	As required	1st & 3rd & 5th Tuesdays.
Guildford, 79, Stoke Road (Borough School Clinic)	2nd & 4th Monday afternoons ...	1st Wednesday	Every Thursday.
Haslemere, Senior Dept., Church of England School	3rd Thursday morning	—	2nd Friday.
Hindhead, Council School	—	—	As required.
Horley, Technical Institute	2nd & 4th Friday mornings ...	As required	4th Tuesday.
Leatherhead, The Institute, High Street	4th Friday morning	2nd Friday	3rd Friday morning.
Limpfield, Church of England School	2nd Thursday morning	As required	—
Lingfield, Church House	2nd & 4th Tuesday mornings ...	—	4th Monday.
Merton, Parish Rooms	2nd & 4th Wednesday mornings ...	1st & 3rd Thursday afternoons ...	—
Mitcham, The Dispensary, Lower Green	Every Monday morning	2nd & 4th Wednesdays ...	Every Friday and every Thursday morning.
Molesey Wesleyan Church Rooms, Manor Road	—	—	4th Tuesday.
Oxted, Church of England School	1st & 3rd Monday mornings ...	5th Wednesday (when required) ...	2nd Monday.
Reigate and Redhill S.C.C. Dispensary, 1A, Cecil Road, Redhill	—	—	2nd Tuesday.
Surbiton, adjoining Council Offices, Ewell Road	1st & 3rd Thursday mornings ...	1st & 3rd Monday mornings & 2nd & 4th Monday afternoons ...	Every Wednesday.
Sutton, Public Hall, Church Road	Every Tuesday afternoon ...	1st & 3rd Fridays	Every Wed. morning.
Walton-on-Thames, near Round Chapel, Hersham	1st & 3rd Monday mornings ...	2nd Monday mornings ...	1st & 3rd Tuesdays.
Weybridge, Technical Institute	2nd & 4th Thursday mornings ...	4th Monday mornings ...	2nd Tuesday.
Woking, Clarence Avenue	Every Wednesday morning ...	Every Tuesday morning ...	Every Thursday.

TABLE IX.

CHILDREN OF SCHOOL AGE WHO RECEIVED TREATMENT IN SANATORIA
OR HOSPITALS DURING THE YEAR.

Hospital.	Male.	Female.
Alexandra Hospital for Children suffering with Hip Disease	5	4
Alton Lord Mayor Treloar Cripples' Hospital and College ...	1	4
Barnes Isolation Hospital	1	1
Brompton Hospital for Consumption	1	1
Crooksbury Sanatorium, Farnham	5	2
Fleet Church Army Sanatorium	—	1
Hale Church Army Sanatorium, Heath End	1	—
Harpenden National Children's Home	4	—
Heatherwood United Services Hospital	1	—
Northwood Mount Vernon Hospital	16	27
Royal Sea Bathing Hospital, Margate	11	6
St. Anthony's Hospital, Cheam	1	—
St. Catherine's Home, Ventnor, I.O.W.	1	1
Shropshire Orthopaedic Hospital, Oswestry	1	—
Victoria Invalid Children's Homes, Margate	1	—
Victoria Park City of London Hospital for diseases of the Chest and Heart	1	2
Wandle Valley Isolation Hospital	—	1
TOTALS	51	50

TABLE X.

PHYSICAL TRAINING CLASSES.

For Upper School Teachers:—

Dorking	...	...	...	...	...	50
Horley	...	...	...	...	...	28
Farnham	...	...	...	...	...	60

For Infant School Teachers:—

Epsom	...	...	...	...	...	36
Chertsey	...	...	...	...	...	28

COUNTRY DANCE CLASSES.

For all teachers—men and women.

Epsom, Dorking, Malden, Farnham, Horley, Chertsey,
Haslemere.

TABLE XI.

STATEMENT GIVING PARTICULARS AS TO THE NUMBER OF SCHOLARS ADMITTED TO HENLEY FORT CAMP TOGETHER WITH THE AVERAGE COST PER WEEK.

School.	Period. weeks.	No. of Scholars.		No. of Teachers	Average cost per head per week for food only.
		Boys.	Girls.		
Raynes Park Council ...	2	39	—	2	6/8
Merton C. of E. (Boys)	1	50	—	2	6/0 $\frac{3}{4}$
Thames Ditton Council	1	25	—	1	7/8 $\frac{1}{2}$
Mitcham, Singlegate Cl. (Girls)	2	—	45	3	6/5
Mortlake Central Cl. (Girls)	1	—	36	2	8/9
Barnes Central Council (Boys)	2	46	—	2	6/8
Mitcham, Singlegate Cl. (Boys)	1 $\frac{1}{2}$	42	—	2	6/5
and Mitcham, Links Council (Boys)					
Epsom Council (Boys)...	2	45	—	3*	7/2 $\frac{1}{2}$
	12 $\frac{1}{2}$	247	81	17	6/11 $\frac{3}{4}$ (average)
		328			

* One not on staff.

TABLE XII.

STATEMENT SHOWING THE SCHOOL DAYS LOST ON ACCOUNT OF CLOSURE
DUE TO INFECTIOUS DISEASES.

District.	1922		1923		1922 and 1923	
	No. of schools closed.	No. of school days lost.	No. of schools closed.	No. of school days lost.	No. of schools closed.	No. of school days lost.
Barnes U.D.	1	10	—	—	1	10
Beddington and Wallington U.D.	—	—	2	37	2	37
Carshalton U.D.	2	45	—	—	2	45
Caterham U.D.	—	—	1	13	1	13
Chertsey U.D.	3	77½	2	34	4	111½
Chertsey R.D.	7	85½	3	38½	8	124
Coulsdon and Purley U.D. ...	6	56	3	54	7	110
Dorking U.D.	—	—	3	43	3	43
Dorking R.D.	3	35	3	60	5	95
Egham U.D.	3	63½	2	79	5	142½
Epsom U.D.	3	56½	2	33	3	89½
Epsom R.D.	9	175	5	70	14	245
Esher and The Dittons U.D. ..	3	36	3	73	4	109
Farnham U.D.	4	53	—	—	4	53
Farnham R.D.	5	72	2	33	7	105
Frimley U.D.	4	60	1	18	5	78
Godalming M.B.	1	12½	3	68½	3	81
Godstone R.D.	11	177	14	335	17	512
Guildford R.D.	8	110½	5	82	12	192½
Ham U.D.	1	8	1	10	1	18
Hambleton R.D.	14	254	16	296	19	550
Haslemere U.D.	—	—	—	—	—	—
Leatherhead U.D.	—	—	3	46	3	46
Maldens and Coombe U.D. ...	3	27	1	13	3	40
Merton and Morden U.D. ...	—	—	3	41	3	41
Mitcham U.D.	1	10	—	—	1	10
Molesey, East and West U.D. ...	2	106	—	—	2	106
Reigate R.D.	13	151	5	106	15	257
Surbiton U.D.	—	—	—	—	—	—
Sutton U.D.	1	10	—	—	1	10
Walton-on-Thames U.D. ...	4	40½	5	94	6	134½
Weybridge U.D.	—	—	—	—	—	—
Windlesham U.D.	2	109	—	—	2	109
Woking U.D.	6	102½	1	4	6	106½
Totals	120	1,943	89	1,681	169	3,624

TABLE XIII.

NUMBER OF INDIVIDUAL CHILDREN EXCLUDED FROM SCHOOL ON ACCOUNT OF
INFECTIOUS DISEASE.

Year.	Suffering.	Suspicious.	Infection at home.	Total.
1922	6,417	402	2,670	9,489
1923	4,950	398	2,526	7,874
Totals ...	11,367	800	5,196	17,363

TABLE XIV.

CASES REFERRED TO THE N.S.P.C.C. DURING THE YEAR 1923.

No.	Reason.	Result.
(1)	Refusal to provide suitable glasses	Suitable glasses obtained.
(2)	Refusal to provide suitable glasses	Glasses found not to be absolutely necessary.
(3)	Failure to obtain treatment for enlarged heart	Promised to carry out advice given.
(4) }	Failure to obtain treatment for	Suitable glasses obtained.
(5) }	defective vision	
(6)	Refusal to obtain operative treatment for enlarged tonsils and adenoids	Willing to have the operation performed in warmer weather.
(7)	Refusal to obtain operative treatment for enlarged tonsils	Willing to obtain operative treatment, but left county before operation could be arranged.
(8)	Refusal to allow glasses to be worn	Glasses worn regularly.
(9)	Refusal to obtain treatment for enlarged tonsils and adenoids, and squint	Still refused, but in view of all the circumstances considered inadvisable to take legal proceedings.
(10)	Refusal to obtain fresh glasses ...	Glasses obtained.
(11)	Refusal to obtain urgent dental treatment	Necessary dental treatment obtained.
(12)	Refusal to obtain treatment for defective vision, enlarged tonsils and adenoids, and carious teeth.	Necessary treatment for defective vision and teeth obtained.
(13)	Failure to obtain surgical treatment for hare lip	Willing for operation to be performed—awaiting hospital bed.
(14)	Failure to remedy dirty and verminous condition	Condition remedied.
(15)	Refusal to obtain treatment for defective eyesight and lateral curvature	Parent produced certificate—no urgent need for operation.
(16)	Failure to attend school clinic and carry out Ophthalmic Surgeon's recommendation	Attended clinic and carried out recommendation.
(17)	Refusal by boy to wear the glasses prescribed	Not known—child now left school.
(18)	Failure to obtain operative treatment for enlarged tonsils and adenoids	Operative treatment performed.
(19)	Refusal to obtain treatment for defective vision	Will not provide glasses until absolutely necessary. Considered inadvisable to carry the case further.

No.	Reason.	Result.
(20)	Failure to provide treatment for impetigo	Satisfactory treatment obtained.
(21)	Failure to obtain treatment for St. Vitus Dance	Suitable treatment obtained.
(22)	Neglect to obtain treatment for defective vision	The child taken to hospital for necessary treatment.
(23)	Children badly fed and clothed, and in a very dirty and neglected condition	Parents warned, supervision followed, condition improved.
(24)		
(25)		
(26)	Persistent refusal to provide treatment for foul ear discharge	Satisfactory treatment obtained.
(27)	Failure to provide suitable glasses	By reason of poverty of the parent, glasses provided by Education Committee.
(28)	Failure to provide suitable glasses for defective vision	Glasses provided.
(29)	Failure to provide necessary treatment for defective vision and wry neck	Suitable glasses obtained. Operation for wry neck performed privately.
(30)	Failure to obtain treatment for enlarged tonsils and adenoids	Necessary treatment obtained.
(31)	Failure to provide suitable glasses	Suitable glasses provided.
(32)		
(33)	Failure to obtain treatment for defective vision	Suitable glasses provided.
(34)	Failure to provide treatment for defective vision	Suitable glasses obtained.
(35)	Failure to obtain the glasses prescribed	Willing for suitable glasses to be provided.
(36)	Persistent refusal to obtain glasses	Suitable glasses obtained.
(37)	Failure to obtain medical treatment for enlarged tonsils and adenoids	Consent to the operation being carried out—awaiting hospital bed.
(38)	Persistent refusal to obtain treatment for malnutrition and enlarged tonsils and adenoids	Suitable treatment for malnutrition obtained, and operation for removal of tonsils and adenoids performed.
(39)		
(40)	Persistent refusal to allow glasses to be worn	Glasses now worn regularly.
(41)	Would not consent to urgent operation for enlarged tonsils and adenoids	Consent given, but left county before treatment could be provided.
(42)	Refusal to obtain necessary treatment for defective vision	Suitable glasses obtained
(43)	Would not agree to necessary glasses being provided	Suitable glasses obtained.

TABLE XV.

GROUP I.—TREATMENT OF MINOR AILMENTS, WHETHER FOUND DURING 1923
OR PREVIOUSLY.

	Defects Treated.		
	Under Scheme of Local Education Authority.	Otherwise.	Total.
Malnutrition	65	12	77
Skin—			
Ringworm, Head	138	25	163
" Body	45	8	53
Scabies... ..	35	4	39
Impetigo	308	15	323
Other Diseases (non-Tubercular)	324	46	370
Eye—			
Blepharitis	168	15	183
Conjunctivitis	48	12	60
Keratitis	2	1	3
Corneal Opacities	3	—	3
Defective Vision	} See Group II.		
Squint			
Other Conditions	51	13	64
Ear—			
Defective Hearing	84	38	122
Otitis Media	117	39	156
Other Ear Disease	137	33	170
Nose and Throat—			
Enlarged Tonsils	} See Group III.		
Adenoids			
Enlarged Tonsils and Adenoids			
Other Conditions		60	26
Enlarged Cervical Glands (non-Tubercular)	39	33	72
Defective Speech	4	1	5
Heart and Circulation—			
Heart Disease, Organic	2	36	38
" " Functional	4	17	21
Anæmia	72	29	101
Lungs—			
Bronchitis	42	35	77
Other non-Tubercular Diseases	4	4	8

					Defects Treated.		
					Under Scheme of Local Education Authority.	Otherwise.	Total.
Tuberculosis—							
Pulmonary, Definite	...	...	...	...	—	5	5
" Suspected	...	...	...	...	5	55	60
Non-Pulmonary—							
Glands ...	...	...	...	...	5	30	35
Spine ...	...	...	...	...	—	—	—
Hip ...	...	...	...	...	—	3	3
Other Bones and Joints	...	...	...	...	—	5	5
Skin ...	...	...	...	...	1	—	1
Other Forms ...	...	...	...	...	1	1	2
Nervous System—							
Epilepsy ...	...	...	...	...	—	7	7
Chorea ...	...	...	...	...	5	9	14
Other Conditions	...	...	...	...	13	21	34
Deformities—							
Rickets ...	...	...	...	...	7	3	10
Spinal Curvature	...	...	...	...	33	48	81
Other Forms ...	...	...	...	...	47	48	95
Other Diseases and Defects	...	...	...	...	269	139	408
Totals					2,138	816	2,954

NOTE.—This Table includes defects found both on routine and on special inspection.

TABLE XV.—Contd.

GROUP II.—TREATMENT OF VISUAL DEFECTS, WHETHER FOUND DURING 1923 OR PREVIOUSLY.

Number of defects dealt with.				Number of children.					
Under the authority's scheme.	By private practitioner or hospital.	Otherwise.	Total.	For whom spectacles were prescribed.			Who obtained spectacles.		
				Under the authority's scheme.	Otherwise.	Total.	Under the authority's scheme.	Otherwise.	Total.
1,374	197	42	1,613	996	183	1,179	984	184	1,168

In the remaining 434 cases 58 received forms of treatment other than spectacles, and in 376 cases no treatment was considered necessary.

GROUP III.—TREATMENT OF DEFECTS OF NOSE OR THROAT, WHETHER FOUND DURING 1923 OR PREVIOUSLY.

Number of defects.			
Received operative treatment.			Total number treated.
Under local authority's scheme.	By private practitioner or hospital apart from authority's scheme.	Total.	
939	233	1,172	1,263

1.2632

0.1

1.172

2.118

0.103

TABLE III.

Comparison of the results of treatment of patients with the following conditions:

No. of patients	Age	Sex	First condition		Second condition		Third condition	
			Number	Percentage	Number	Percentage	Number	Percentage
100	50	M	100	100	100	100	100	100

In comparing the results of treatment of patients with the following conditions, the results are given in percentages.

TABLE IV.—Comparison of results of treatment of patients with the following conditions:

No. of patients	Age	Sex	First condition		Second condition		Third condition	
			Number	Percentage	Number	Percentage	Number	Percentage
100	50	M	100	100	100	100	100	100

THE
LIBRARY OF THE
MUSEUM OF NATURAL HISTORY
AND
ZOOLOGY
OF THE
CITY OF LONDON
1871

KNAPP, DREWETT & SONS, LTD.,
PRINTERS,
KINGSTON-ON-THAMES,
AND 30, VICTORIA STREET, WESTMINSTER, S.W.

S.C.C. 1777A.



