

[Report of the Medical Officer of Health for Acton].

Contributors

Acton (London, England). Borough Council.

Publication/Creation

[1933?]

Persistent URL

<https://wellcomecollection.org/works/cq6gqe6w>

License and attribution

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

Non-commercial use includes private study, academic research, teaching, and other activities that are not primarily intended for, or directed towards, commercial advantage or private monetary compensation. 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>

ANNUAL REPORT
Borough of Elton



ANNUAL REPORT

OF THE

Medical Officer of Health

TOGETHER WITH THE

Report on the Medical
Inspection of Schools

FOR THE YEAR 1932.

J. KNOWLES & CO. LTD.
PRINTERS & STATIONERS
ACTON HALL, ACTON, W.

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1932.

PUBLIC HEALTH DEPARTMENT,

MUNICIPAL OFFICES,

ACTON, W.3.

*To the Mayor, Aldermen and Councillors
of the Borough of Acton.*

LADIES AND GENTLEMEN,

I herewith submit the Annual Report required by the Ministry of Health, together with the Annual Report on the School Medical Services.

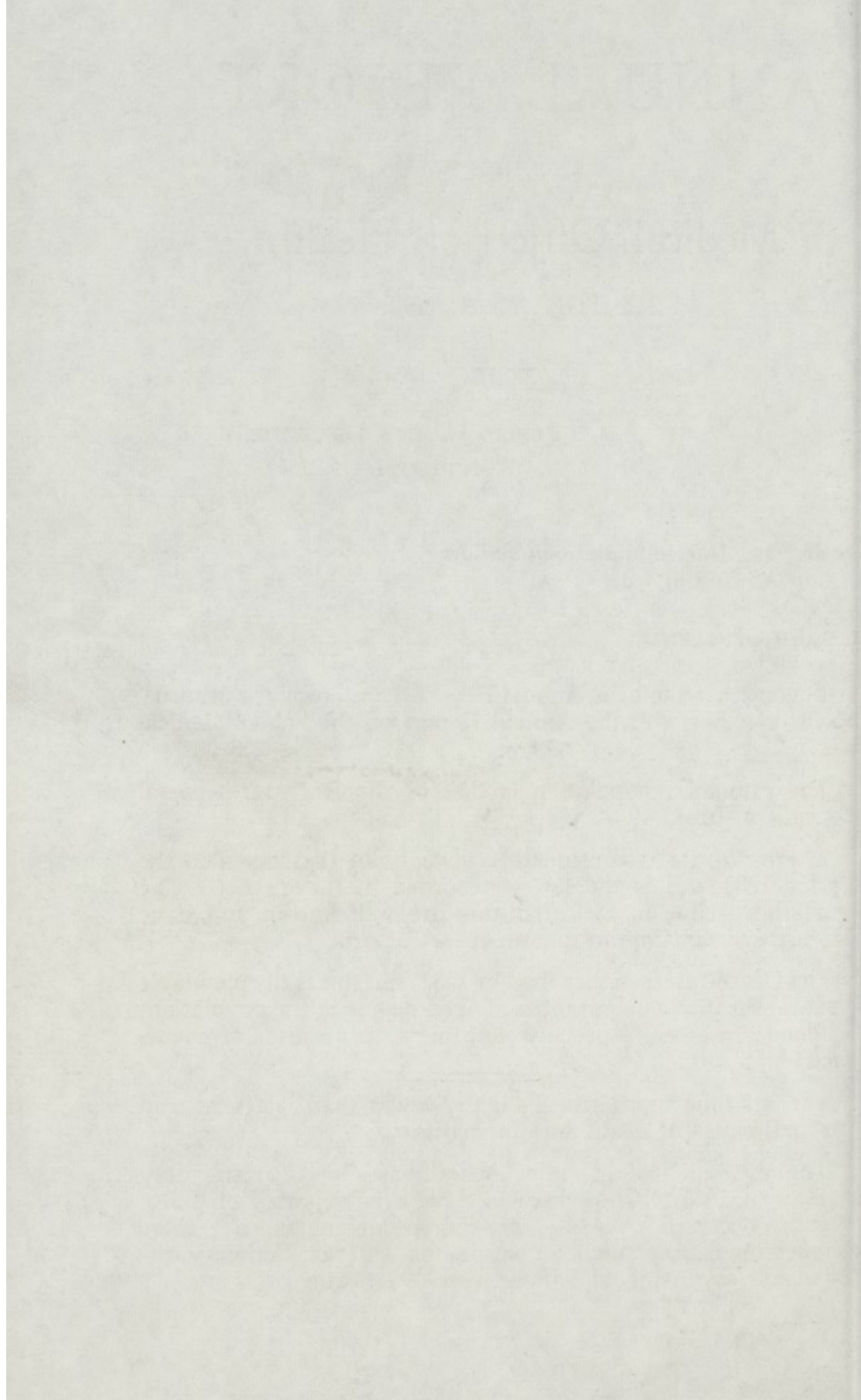
The estimated population is that of the Registrar General for the end of June, 1932.

The birth-rate is considerably lower than that given in the Report for 1931 and is the lowest recorded in the district. The causes of the decline in the Birth-rate are well known and have been discussed from time to time in these Reports.

The Death-rate is higher than in 1931, but this is the inevitable result of an ever increasing number of aged people in the population. The epidemic diseases, especially diphtheria, have also, of course influenced this rate.

The infantile mortality is slightly lower than last year and the principal cause of death was prematurity.

The incidence of all infectious diseases was considerably higher than in 1931; these diseases have been reported on fully. Two deaths occurred from Cerebro-Spinal Meningitis, but there were none from Encephalitis Lethargica or Anterior Poliomyelitis. Cancer is still increasing and there were 101 deaths.



The following is a summary of the vital and other statistics for the year 1932:—

Area of Borough	....	....	....	2,305 acres
Population (estimated midsummer 1932)	....	....	....	70,640
Population (Census 1931)	....	....	....	70,510
Number of inhabited houses (Census 1931)—figures not yet available.				
Number of inhabited houses (end of 1932) according to Rate Book	....	....	....	15,803
Number of families or separate occupiers (Census 1931)	....	....	....	figures not yet available.
Rateable Value (1st October, 1932)	....	....	....	£718,486
Net produce of a penny rate (year ending 31st March, 1932)	....	....	....	£2,793 15s. 9d.
Total number of births registered	....	....	....	970
Legitimate	....	....	....	932
Illegitimate	....	....	....	38
Birth-rate per 1,000 inhabitants	....	....	....	13.8
Number of deaths	....	....	....	786
Death-rate per 1,000 inhabitants	....	....	....	11.1
Number of women dying in, or in consequence of childbirth—				7
from sepsis	....	....	....	3
from abortion	....	....	....	—
from other causes	....	....	....	4
Maternal mortality per 1,000 births	....	....	....	7.2
Deaths of infants under 1 year of age—				60
Legitimate	....	....	....	54
Illegitimate	....	....	....	6
Infantile mortality per 1,000 births	....	....	....	62

	Total Deaths.	Death-rate per 1,000 Population.
Measles	12	.17
Whooping Cough	6	.08
Diphtheria	21	.29
Scarlet Fever	6	.08
Influenza	12	.17
Tuberculosis of Lungs	48	.68
Tuberculosis (other forms)	11	.15
Tuberculosis (all forms)	59	.83

POPULATION.

Only the preliminary results of the census have yet been received and in these the population has been estimated as 70,510.

The Registrar General estimated that the population at the end of June 1932 was 70,640 and this figure has been accepted as the basis of the population.

SOCIAL CONDITIONS OF THE DISTRICT.

There is no change in the social conditions of the district. The northern part of the district is almost entirely covered with factories.

The north-east and south-east wards are mainly residential in character, and so is the southern part of the north-west ward. In the south-west ward are situated most of the laundries in the district and the houses in this ward are small and occupied chiefly by persons of the artisan and labouring classes.

AMBULANCE FACILITIES.

The ambulance facilities are similar to those described in last year's report.

A motor ambulance is provided for the removal of infectious cases to the hospital.

There are two ambulances provided for accident and non-infectious cases. These are housed in a garage at the fire station and are available at all hours. A new ambulance was purchased by the Council in 1928, but the old one is still kept for emergencies. Last year the ambulance was called out to 393 street accidents, and on 522 occasions to private cases. Fees amounting to £103 13s. 0d. were paid for the use of the ambulance for private cases.

HOSPITAL PROVISION.

General.—The only General Hospital in the district is the Acton Hospital, Gunnersbury Lane, which has an accommodation of 62 beds.

During the year 1,298 in-patients were admitted ; this is an increase of 12 on the previous year. Of these 222 were in for only 1 day and 138 for 2 or 3 days.

The Education Committee has an agreement with the Hospital for payment for the removal of tonsils and adenoids and the patients are kept in the Hospital for at least 1 night.

7,218 out-patients were treated during the year, a decrease of 5, and the out-patient attendances were 31,442, a decrease of 168 as compared with 1931.

The Hospital supplies a great need in the District, is greatly appreciated and most of the beds are continuously occupied. Last year the average number of beds in daily occupation was 56.26 and from this figure it can be assumed that vacant beds are a rarity.

Fever.—Acton Council Fever Hospital normally contains 88 beds, but during the year this number was increased to 122 in order to cope with the epidemics of Scarlet Fever and Diphtheria.

Small-Pox.—Acton was one of the constituent bodies which formed the Middlesex Joint Small-Pox Board. Under the Provisional Order Confirmation Act of 1929, the Joint Board was dissolved from the 1st April, 1929, and the duties of the Board transferred to the Middlesex County Council.

Tuberculosis.—The Tuberculosis scheme is administered by the Middlesex County Council which has sanatoria at Clare Hall and Harefield.

Child Welfare Consultation Centres.—

- (a)—47, Avenue Road—Every Monday, Tuesday, Wednesday and Thursday afternoon at 2 p.m.
- (b)—Noel Road—Every Thursday afternoon at 2 p.m.
- (c)—East Acton—Every Thursday afternoon at 2 p.m.
- (d)—Steele Road—Every Tuesday afternoon at 2 p.m.

Ante-Natal Consultation Centre.—School Clinic every 2nd and 4th Wednesday.

Day Nursery.—169, Bollo Bridge Road.

School Clinic.—45, Avenue Road.

(The above are provided and maintained by the Borough Council).

Tuberculosis Dispensary.—School Clinic on Tuesdays at 5 p.m. and Thursdays at 10.30 p.m.

Treatment Centres for Venereal Diseases.—Various Hospitals in London.

(The two latter are provided by the Middlesex County Council).

SANITARY CIRCUMSTANCES OF THE AREA.

These have been noted in previous reports. All the inhabited houses are supplied from the mains of the Metropolitan Water Board. A few industrial works and the Public Baths obtain their water supply from deep wells.

By arrangement with the London County Council the sewerage is discharged into the London Sewers. Storm water is filtered and emptied into the Thames. All the inhabited houses are provided with water closets and are drained into the main sewerage system.

The house refuse is collected by the Council and burnt in the Destructor. Last year 19,457 tons of house refuse were collected and burnt.

PROFESSIONAL NURSING IN THE HOME.

General.—There are two district nurses employed by the Acton Hospital, who visits the homes of both the poor and those who are able to pay.

There are also nursing associations which provide nurses for different classes of cases.

Midwives.—The Supervising Authority under the Midwives Act is the Middlesex County Council and from the County Council I understand that there are 20 certified midwives practising in the Borough.

LEGISLATION IN FORCE.

The following local acts, special local orders, general adoptive acts and byelaws relating to Public Health are in force in the district.

	<i>Adopted.</i>
Infectious Diseases (Notification) Act, 1889	1889
Public Health (Amendment) Act, 1890	1890
Infectious Diseases Prevention Act, 1890	1899
Notification of Births Act, 1907	1907
Public Health Act, 1907 (Clause 50)	1921
Public Health Act, 1925 (Parts 2, 3, 4 and 5)	1926
The Acton Improvement Act, 1904	—
New Streets and Buildings	1925
Removal of House Refuse	1899
Common Lodging Houses	1898
Slaughter Houses	1924
Nuisances, &c.	1924
Offensive Trades	1903
Tents, Vans and Sheds	1906
Removal of Offensive or Noxious Matters	1908
Houses Let in Lodgings	1925
Cleansing of Cisterns	1912
Employment of Children	1920
Fouling of Footpaths by Dogs	1929
Smoke Abatement	1930

HOUSING.

There has been a good deal of discussion recently about slums and the so-called slum problem, and to those who have not studied the question closely the statements made by the different people are apt to be puzzling. On the one hand, it is freely stated that certain property is slum property and on the other it is held that we have no slums in Acton. The misconception arises from the loose way in which the term slum is used. It may be a convenient word but it is a very vague one, and it not officially recognized. There is no legal definition of a slum, and the term is excluded from Acts of Parliament. The word slum is convenient and expressive, and is used to describe a varying range of dwellings. It is important that we should discriminate between a slum and a clearance area. A clearance area will include slums, but it does not necessarily follow that the houses we regard as slums will con-

sketch a clearance or even an improvement area. Although some of the houses in our district cannot be included in a clearance area scheme, it does not follow that the conditions are satisfactory. In order to obtain a closing order we must prove that the structural condition of the house or its environment is such as to render it unfit for human habitation. Although the houses structurally may be in a fair condition the state of the houses may be deplorable, and although there may be no legal over-crowding the houses have for too many inmates for the common decencies to be observed.

In some respects the housing question in and around London differs from that in the provinces, but one aspect of the problem is common to all localities. Over-crowding has always been associated with what is called the slum problem and usually it was one of the worst features. At present I mean by the term over-crowding simply the over-crowding of people in a house, and not the over-crowding of houses on a site. This kind of over-crowding can and does occur in a house which is structurally quite fit. The solution of over-crowding is not therefore the simple matter of providing more houses. You cannot abolish over-crowding by pulling down houses which are supposed to be unsatisfactory from a structural point of view. If that could be done we should not be faced with a difficult problem. I have explained in previous reports that we have no area which could be scheduled as a clearance area or an improvement area. There were some houses which had become unfit and have been closed. There are other houses in the district which are becoming old and may have to be dealt with, but there are no areas in which a considerable number of the houses are structurally unfit for human habitation. The inhabited part of the district is comparatively new; the majority of the houses have been built within recent years; we have not received a heritage in the form of courts, narrow alleys, back-to-back houses, cellar dwellings, and other conditions which are associated with slum areas in the older industrial centres. We sometimes hear remarks from well intentioned people that they would like to blow up all the houses in certain roads. One may sympathise with the views expressed by these people and yet remain entirely sceptical of the results which would accrue from such drastic action. Over-crowding in this Borough is more a matter of economic and social factors than it is a sanitary problem, and the solution is not so simple as the pulling down of old houses and the erection of new ones. Though possibly of minor importance it may be well to define what we mean by over-crowding in a house. There are many and varied standards. The standard adopted when an attempt is made to gauge the extent of over-crowding from an examination of the Census reports is based upon the number of inhabitants occupying a room. It is assumed that a house is over-crowded if the number

of occupants exceeds two per room. It is unnecessary to point out the facilities which underlie this classification. The most important depend on the size of the room and ages of the occupants.

The standard we adopt is that contained in the Bye-Laws regulating houses let in lodgings. The Bye-laws now in force provide that a room used wholly or partly as a sleeping apartment must have 300 cubic feet of air space for every occupier over 10 years of age and 150 cubic feet for each child under 10 years of age. If the Rent Restrictions Acts lapse then the amount of cubic space for an adult will be 400 cubic feet and 200 cubic feet for a child.

Certain census figures have been published, and these throw a certain light upon the housing conditions in the district. It should be remembered that these figures refer to the district as a whole or to the wards and not to any limited areas or houses. The conditions in the whole district or in every ward may have improved but those which obtain in a limited area may have remained stationary or even deteriorated. It is interesting to note that certain conclusions which may be drawn from these figures coincide in the main with the experience of the officers of the Public Health Department. The first tables reproduced are No. 3 in the Census Reports for Middlesex, in which the population, number of private families, number of structurally separate dwellings and the rooms occupied are given.

1931.

	Private Families. Number.	Population.	Structurally separate dwellings.	Rooms occupied.	Persons per room.
Acton	18997	69145	13812	80185	0.86
N.E. Ward	6090	21889	4444	25732	0.85
N.W. Ward	4622	16388	3709	22766	0.72
S.E. Ward	4122	14745	3195	17969	0.82
S.W. Ward	4163	16123	2464	13718	1.18

1921.

Acton	14941	60490	11503	65529	0.92
N.E. Ward	4053	16007	3050	18418	0.82
N.W. Ward	3138	12142	2551	16384	0.74
S.E. Ward	3735	14982	3092	17297	0.86
S.W. Ward	4015	17359	2810	13430	1.3

An explanation is necessary of one obvious discrepancy. The tables make it appear as if the number of cases in the South West Ward was less in 1931 than in 1921, as there were only 2,464 structurally separate dwellings in 1931 compared with 2,180 in 1921. The figures in the next column contradict this assumption as the number of rooms occupied was 13,718 in 1931 compared with 13,430 in 1921. This obvious paradox probably arose from the different interpretations given by the enumerators of a structurally separate dwelling. In the report a structurally separate dwelling has been defined for the Census as any room or set of rooms intended or used for habitation, having separate access either to the street or to a common landing or staircase. Thus each flat in a block of flats is a separate unit ; a private house which has not been structurally sub-divided is similarly a single unit whether occupied by one family or by several families. Where a private house has been sub-divided into maisonettes or portions, each having its front door opening on to the street or to a common landing or staircase to which visitors have access, then each portion is treated as a separate unit.

The discrepancy is easily understood ; everyone knows that the number of houses in the South West Ward increased slightly in the intercensal period. The column in which the total number of rooms occupied is given, is therefore a safer index for comparison.

A comparison of these tables would tend to the conclusion that the housing conditions in the district as a whole have improved but that a deterioration has occurred in the North East Ward, and this is probably a correct conclusion. The number of persons per room has increased in the North East Ward from 0.82 to 0.85. This is partly due to the fact that the houses newly erected are smaller than the older ones, but it is also due to another factor. The older and larger houses are now sublet and more than one family is in occupation. We have noticed this tendency and in some instances notices have had to be served for over-crowding or some other nuisance.

The only figures which were surprising were those for the South East Ward. The number of persons per room in that Ward was 0.86 in 1921 and 0.82 in 1931. It is known that in this Ward also there has been considerable sub-letting of houses.

The numbers for the South West Ward were 1.30 in 1921 and 1.18 in 1931. Those who have had long acquaintance with housing conditions in this ward are of opinion that the conditions

throughout the ward have improved. While admitting this, it must also be conceded that in certain isolated areas, the conditions have not improved. The black spots may be more limited in extent ; some of the streets have improved very considerably in many respects ; but in certain areas the standard is still much below that which is desirable. This will become evident if we examine Table II. of the Census Reports. In this table the private families are classified by size of family, rooms occupied and density of occupation. Only a portion of the table is given, but this is the important part of it. Houses of more than 5 rooms have been omitted, as they would not appreciably affect the question of over-crowding. There were a few cases of over-crowding in the larger houses, but they were few and far between, and are not vitally important.

Number of persons in family.	Number of families occupying the rooms.				
	1	2	3	4	5
1	542 (406)	251 (146)	257 (133)	121 (66)	53 (57)
2	279 (286)	741 (461)	1494 (732)	704 (447)	499 (385)
3	123 (169)	484 (410)	1250 (900)	977 (612)	743 (589)
4	72 (65)	234 (188)	866 (737)	768 (567)	650 (588)
5	27 (12)	122 (91)	511 (563)	458 (386)	473 (462)
6	13 (5)	49 (44)	263 (353)	245 (268)	267 (301)
7	7 (1)	31 (25)	137 (213)	126 (171)	143 (176)
8	1 (1)	8 (11)	62 (121)	71 (100)	78 (130)
9	1 (1)	6 (5)	36 (48)	39 (52)	40 (69)
10		1 (1)	22 (25)	16 (29)	18 (38)
11		2 (1)	7 (7)	5 (18)	10 (16)
12			1 (3)	5 (1)	2 (4)
13			— (1)	— (1)	3 (7)
14					1 (2)
15 or over			1 —		

The figures in brackets are the corresponding numbers in 1921.

If we adopt the standard that a house is over-crowded if more than 2 persons occupy a room, the conditions in one and two roomed tenements are less favourable than in 1921 and more favourable in three-, four- and five-roomed tenements.

HOUSING.

Number of Houses erected during the year:—

(a) Total (including number given separately under (b) 186

(b) With State assistance under the Housing Acts:—

(i) By the Local Authority 8

(ii) By other bodies or persons Nil.

1. *Inspection of Dwelling-houses during the Year 1931:—*

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) 1890

(b) Number of inspections made for the purpose.... 5760

(2) (a) Number of dwelling-houses (included under sub-head (1) above, which were inspected and recorded under the Housing Consolidated Regulations, 1925 1405

(b) Number of inspections made for the purpose 4917

(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation Nil.

(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 1687

2. *Remedy for Defects during the Year without Service of formal Notices:—*

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers 1463

3. *Action under Statutory Powers during the Year:—*

A.—Proceedings under sections 17, 18 and 23 of the Housing Act, 1930:

(1) Number of dwelling-houses in respect of which notices were served requiring repairs	....	163
(2) Number of dwelling-houses which were rendered fit after service of formal notices:—		
(a) By owners	....	163
(b) By local authority in default of owners	....	Nil.

B.—Proceedings under Public Health Acts:—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	....	61
(2) Number of dwelling-houses in which defects were remedied after service of formal notices:—		
(a) By owners	....	61
(b) By local authority in default of owners	....	Nil.

C.—Proceedings under sections 19 and 21 of the Housing Act, 1930:

(1) Number of dwelling-houses in respect of which Demolition Orders were made	....	Nil.
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	....	Nil.

D.—Proceedings under section 20 of the Housing Act, 1930:—

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made		Nil.
--	------	------

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

E.—Proceedings under section 3 of the Housing Act, 1925:—

- (1) Number of dwelling-houses in respect of which notices were served requiring repairs Nil.
- (2) Number of dwelling-houses which were rendered fit after service of formal notices:—
- (a) By owners Nil.
- (b) By local authority in default of owners Nil.
- (3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close Nil.

F.—Proceedings under sections 11, 14 and 15 of the Housing Act, 1925:—

- (1) Number of dwelling-houses in respect of which Closing Orders were made Nil.
- (2) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit Nil.
- (3) Number of dwelling-houses in respect of which Demolition Orders were made Nil.
- (4) Number of dwelling-houses demolished in pursuance of Demolition Orders Nil.

TABULAR STATEMENT OF INSPECTIONS & DETAIL OF WORK CARRIED OUT BY THE SANITARY INSPECTORS.

Number of Inspections and Action Taken.

Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	....	1890
(1) Dealt with by service of Informal Notice	1463	
(2) Dealt with by service of Statutory Notice under Section 3, Housing Act 1925 and Section 17, Housing Act, 1930	....	163
(3) Dealt with by service of Statutory Notice under Public Health Acts	....	61
Premises (other than defective dwelling houses) inspected for nuisances and miscellaneous defects	....	711
(1) Dealt with by service of Informal Notice	601	
(2) Dealt with by service of Statutory Notice under Public Health Act, &c.	....	7
Reinspections subsequent to service of Notice	....	6714
Enquiry visits on notification of Infectious Disease	....	673

Number of Premises under Periodical Inspection.

Workshops and Workplaces	....	136
Bakehouses	....	29
Slaughterhouses	....	2
Public Health Urinals	....	37
Common Lodging Houses	....	1
Houses-let-in-lodgings	....	33
Butchers Shops	....	45
Fish Shops	....	29
Premises where food is manufactured or prepared	....	34
Milk Purveyors	....	116
Cowsheds	....	Nil
Piggeries	....	Nil
Rag and Bone Dealers	....	7
Mews	....	4
Schools	....	13
Show Grounds	....	Nil

Rent Restriction Act.

Number of Certificates granted		9
--------------------------------	------	---

Detail of Work carried out.

Sanitary Dustbins provided	....	....	....	438
Yards paved or yard paving repaired	....	....	....	215
Insanitary forecourts remedied	....	....	....	34
Defective drains repaired or reconstructed	....	....	....	62
Defective soil pipes and ventilating shafts repaired or renewed	....	....	....	68
Defective fresh air inlets repaired or renewed	....	....	....	51
Defective gullies removed and replaced by new	....	....	....	67
Rain water downpipes disconnected from drain	....	....	....	10
Dishing and curb to gullies repaired and new gratings fixed	....	....	....	203
Defective W.C. pan and traps removed and replaced by new	....	....	....	62
Defective W.C. flushing apparatus repaired or new fixed....	....	....	....	303
Defective W.C. seats repaired or new fixed	....	....	....	162
Defective flush pipe connections repaired	....	....	....	74
Insanitary sinks removed or new fixed	....	....	....	46
Sink waste pipes repaired or trapped	....	....	....	127
Insanitary wall surface over sinks remedied	....	....	....	89
Ventilated food cupboards provided	....	....	....	4
Drinking water cisterns cleansed	....	....	....	205
Defective covers to drinking water cisterns repaired or new fixed	....	....	....	77
Insanitary sites beneath floors concreted	....	....	....	12
Spaces beneath floors ventilated	....	....	....	106
Dampness in walls from defective damp-proof course remedied	....	....	....	94
Dampness from defective roof, rain water gutterings, etc., remedied	....	....	....	648
Defective plastering repaired (number of rooms)....	....	....	....	392
Rooms where dirty walls and ceilings have been cleansed and redecorated	....	....	....	2473
Defective floors repaired	....	....	....	109
Defective or dangerous stairs repaired	....	....	....	30
Defective doors and windows repaired	....	....	....	285
Defective kitchen ranges and fire grates repaired	....	....	....	122
Defective washing coppers repaired	....	....	....	97
Coal cupboards provided or repaired	....	....	....	8
New W.C. apartments provided	....	....	....	5
Accumulations of offensive matter removed	....	....	....	37
Drains unstopped and cleansed	....	....	....	246
Overcrowding nuisances abated	....	....	....	15
Drains tested, exposed for examination, etc.	....	....	....	62
Smoke observations taken	....	....	....	143
Smoke nuisances abated on service of notice	....	....	....	18
Nuisances from pigs and other animals abated	....	....	....	7
Notifications of waste of water sent to Metropolitan Water Board	....	....	....	124

INSPECTION AND SUPERVISION OF FOOD.

MILK SUPPLY.

There are no cowsheds in the Borough, all the milk being produced outside.

There are 91 persons or firms retailing milk in the district under the following categories:—

	Dairymen.		Purveyors of Milk
No. with rounds <i>not</i> occupying premises in the Borough.	No. with rounds occupying prem- ises in the Borough.	No. of General shops from which milk is sold from covered pans only	No. of shops from which milk is sold in closed and un- opened recepta- cles only
4	26	24	62

Special Designated Milk.

The number of persons or firms licenced to sell Special Designated Milk are as follows:—

- 4 ' Certified '
- 6 ' Grade A (Tuberculin Tested)'
- ' Grade A '
- 11 ' Pasteurised '
- 1 ' Grade A Pasteurised '

The Council has decided to enforce strictly Article 21 of the Milk & Dairies Order of 1926. This Article requires that every milk vessel shall be thoroughly washed and cleansed and scalded with boiling water or steam before it is used again.

All new Applicants to be registered as Dairymen, will be required to instal at once an approved steam raising plant and steam chest so as to comply with the Article, and Dairymen already registered will be given a reasonable time in which to instal such apparatus.

Article 32 of the Order requires every person engaged in the conveyance or distribution of milk to use all practicable precautions for preventing the milk from being unnecessarily exposed to heat and from being contaminated by dirt, dust, rain-water or otherwise,

In an adjoining district, retailers of milk in bottles have been called upon to provide an insulated box in which to store the milk during warm weather but such an appliance is not asked for by this Council.

We have 24 general shops in which milk is being sold from pans on the counter. There are 62 other general shops in which milk is only sold in sealed bottles or cartons.

I do not think that in any of the 24 general shops in which milk is sold from pans on the counter, the conditions are entirely satisfactory, but it is difficult to prove that the public health is likely to be endangered by the methods in use. Most of these retailers would be willing to sell the milk from sealed receptacles only, if the practice were made compulsory and universal. In most of these shops in addition to the objection of the sale of other goods which create dust, the shop itself is overcrowded, and it is impossible for the premises to be kept clean and free of dust. In my opinion there are 8 of these general shops in which, under present conditions, milk should not be sold from open cans. In the present report I do not wish to deal specifically with the general shops in which milk is sold in closed receptacles, but shops in which the principal article sold is milk.

As stated there are 62 general shops which sell milk only from closed receptacles. There are 26 premises registered in or on which milk is the principal article sold, and one other purveyor resides in Acton, and sells his milk here, but the premises are situated and registered at Willesden. On one of the premises 2 persons are registered, and on another, 3 persons are registered.

In all the 26 cases, there are milk rounds, and in three cases very little milk is sold on the premises.

On all these premises milk is sold over the counter or otherwise in open pans, but although other articles are sold there, the condition of the premises is satisfactory.

There is one article of the Regulations to which I wish to call the attention of the Committee, because in the majority of instances one part of the article is now ignored.

Article 32 of the Order states that every person engaged in the conveyance or distribution of milk shall use all practicable precautions for preventing the milk from being unnecessarily exposed to heat and from being contaminated by dirt, dust, rain-water or otherwise.

In only 10 shops in the district is there a refrigerator installed in the shop and used to store milk in warm weather. In the other shops, the milk is kept on the counter. Some use muslin, others do nothing. It is for the Committee to decide what they consider to be all practicable precautions. The question will not arise until next summer.

We have made enquiries in other districts, and I may say that the practice varies very greatly in different districts. In most districts no specified method is prescribed, but in one district the installation of refrigerators in the shops is being asked for.

Periodically the question of milk comes up for debate and discussion, and, incidentally, it might be mentioned that this is not surprising. It should be remembered that milk is an important article of food; to infants it is the sole food, and to many young children it is the principal food, and should loom more in the dietary of young persons. It is almost universally admitted that the consumption of milk is too low. Milk is the most valuable of all foods. It is much less used than it should be—in this country less than in any part of the world where it is obtainable. The Scandinavian countries are well ahead of Great Britain in this matter. Because of its value as a food, dietitians are constantly advocating its increased consumption. The nutritional value of milk as a corrective to deficiencies of various types in the diet is now generally accepted. It is valuable to the adult and probably indispensable to the child. In many diets it is the chief source of the fat soluble vitamins, of protein of good quality, and of calcium salts.

If it be suggested that milk is expensive, the answer is that it is not so expensive as many other commodities (*e.g.* meat) which are considered essential by most caterers. The fact is, that no poor person should buy meat till they have afforded at least one pint per head of milk.

It is for these reasons that dieticians are persistently advocating a larger consumption of milk, and it is becoming an essential article in the diet of an increased number of individuals.

But as epidemiologists, we have to look upon another side of the question. It is an undoubted fact that milk can act as a vehicle of numerous infections; milk-spread disease is a common phenomenon. Milk probably comes next to water as a vehicle of the most extensive outbreaks of disease. Scattered throughout literature are numerous accounts of outbreaks due to a tainted milk supply.

A public water supply unquestionably reaches a larger percentage of the people than any other single potential disease vehicle, but milk follows a close second. As milk is also a natural growing medium for certain disease producing bacteria, it can be appreciated how milk-bourne epidemics occur. In the past, outbreaks of typhoid fever, scarlet fever, sore throats, etc. were traced to the milk supply. Fortunately such outbreaks have become exceedingly rare, but we occasionally have a reminder that care is still necessary.

A few years ago a sharp outbreak of para-typhoid in the west of London and in which Acton participated was traced to contaminated cream, and an extensive outbreak of sore throats in Brighton was traced to an infected milk supply. At the present time the most prominent aspect of the milk question is the prevalence of tuberculosis in milch cows. It is generally admitted that an improvement has been secured in the cleanliness of the milk supply. The risk of typhoid and scarlet fever from an infected milk supply is remote and it is possible now to feed a baby on cow's milk even in the summer without much fear of epidemic diarrhoea. It can be safely said that the markedly improved methods of production and distribution in recent years made our milk supply cleaner and safer. But whether there has been any corresponding decrease in the frequency with which milk is infected with tubercle bacilli, it is not possible to say with certainty. As the Committee was asked by a Voluntary Association to pass certain resolutions, it may be necessary to state the grounds on which this course of action is based.

In the report of the Ministry of Agriculture for 1929, it was stated that there were over two million cows and heifers in England and Wales in milk, in addition to nearly 300,000 cows in calf but not in milk and 364,763 heifers in calf. It is estimated that about 40 per cent of these are tuberculous, that is, would give a positive tuberculin test. That does not mean, of course, that the milk from 40 per cent of these contains the tubercle bacilli. The figures are important only as far as they show the magnitude of the problem. The tuberculin test is a qualitative one and not a quantitative one; it thus gives no indication of the degree of infection present, except that heavily affected animals may not re-act to the test. So great is the risk of the spread of tuberculosis in a herd from a re-actor to the tuberculin test that for practical purposes such re-actors are to be regarded as infective. In view of the high incidence of bovine tuberculosis it would obviously be futile to recommend the immediate elimination of all re-actors irrespective of whether or not they are giving tuberculous milk. All the re-actors to the tuberculin test do not give tuberculous milk, and in order to estimate the proportion of cows which are doing so, it is important

to have information with regard to the prevalence of tuberculous disease of the udder. Primary udder tuberculosis is extremely rare, and in one half of the cows found to be tuberculous on slaughter the disease is generalised in the body. Tuberculous mastitis is much commoner in older cows than in quite young animals, and it is possible that the disease is encouraged by the artificial stimulation of the mammary gland and the unnatural demands made upon it by milking. The Ministry of Agriculture conclude, from the information at their disposal, that probably from 1 to 1.5% of cows in herds in which the disease has been discovered under the operations of the Tuberculosis Order and the Milk and Dairies Acts, yield tuberculous milk. But this does not represent the proportion of tuberculous milk in any area ; this will depend very largely upon the extent to which the milk is mixed or bulked before distribution. It is calculated that between 6 and 7% of the raw milk sold in the kingdom contains living tubercle bacilli ; it should be noted that this refers to raw milk and not milk as delivered to the consumer. The latter has been treated and this will be referred to in a subsequent paragraph. Of 69,901 unselected samples of raw milk examined, 4,690 or 6.7% were found to contain living tubercle bacilli.

Certain estimates have been made of the extent of tubercle in man due to infection from milk. There are four types of tubercle bacilli—the cold-blooded, avian, bovine and human which are distinguishable from each other by certain tests.

Tuberculosis, as it affects man, is due to infection with the human and bovine types.

The infection of man with the human type occurs mainly by the respiratory tract.

Infection of man with the bovine type, on the other hand, occurs almost exclusively by the alimentary canal, and the chief vehicle is cow's milk.

Since however the type of the infecting organisms can be determined only by bacteriological methods, it follows that our knowledge of the extent of bovine infection in man rests solely on the data accumulated by the examination of specimens of tuberculous material collected either during life or after death. The process of 'typing' is arduous, time-consuming and demands considerable experience. For this reason the type of the infecting organisms is not usually determined as a routine, and the number of the determinations that have been made is not very large. It is necessary to bear this in mind when considering the estimates that have been based upon them.

It has been estimated that 4,000 fresh cases of human infection due to the bovine type of tubercle occur annually, and that in 1928 the deaths from the bovine type were approximately 2,000.

Although these facts are serious, the figures of the Registrar General suggest that the menace is a diminishing one, and that the measures already in operation have not been in vain. There has been a steady fall in the death-rate from tuberculosis, both of the pulmonary and of the non-pulmonary type, but the fall in the death-rate from that of the latter type has been much more marked than in the pulmonary death-rate. This has been noticeable in recent years and it suggests that the improvement is due to improved methods in the general production of milk. It may therefore be advisable to examine the methods which have recently been adopted and which appear to have been partially successful, because the increased fall in the non-respiratory type has been particularly noticeable since the operation of the Milk & Dairies Consolidation Act and the new Milk & Dairies Orders.

Although the Milk and Dairies (Consolidation) Act was passed in 1915, its provisions did not operate until 1925, and the Milk & Dairies Order was issued in 1922, under which the Milk, (Special Designations) Orders 1922 and 1923 were issued. Prior to these ordinances, except in the case of private Acts of Parliament, the Regulations governing the production and distribution harked back to the Dairies & Cowsheds Orders of 1885.

Before dealing with the condition of distribution, it might be well to examine the provisions of the Milk (Special Designations) Orders.

In the Order, details are set forth concerning the production and sale of four kinds of milk—Certified, Grade A (Tuberculin Tested), Grade A and Pasteurised Milk.

The highest grade of milk is the Certified Milk, but the Grade A (Tuberculin Tested) differs from it only in the kind of milk containers required. Both milks must be produced from Tuberculin Tested cows, the bacterial count is similar and the licenses to produce must be obtained from the Ministry of Health.

In the Grade A Milk, the herd is not Tuberculin Tested, but the cows must be examined every three months by a veterinary surgeon and certified free from clinical signs of Tubercle. The bacteria must not exceed 200,000 per cubic centimetre of milk.

The County Councils and County Borough Councils are the licensing authorities.

The essential condition in the matter of the treatment of Pasteurised Milk is that the milk must be held at a temperature between 145° and 150° F. for at least half an hour and cooled immediately afterwards to not more than 55° F. The prescribed conditions definitely exclude the 'flash pasteurisation' process by which milk is heated for short periods. It is illegal to use the designation 'pasteurised' in connection with the sale of milk except under the terms of licence. The ultimate object in view, of course, is the attainment of a raw milk free of the tubercle bacillus and it is only when the milk is Certified, Grade A (Tuberculin Tested), or Grade A, that object can be said to be obtained. But can that goal be attained in a reasonable time? Since 1923 when grading of milk came into operation, there has been an increase of producers of Certified Milk and Grade A (Tuberculin Tested) from 101 to 403 in 1930. By the end of 1930 about 14,300 non-reacting cattle were licensed by the Ministry of Health. But the cow population of England and Wales in 1930 was estimated at 2,674,934. Thus only about .5% of the dairy stock or 1 in 200 is guaranteed tubercle-free by the tuberculin test and the amount of milk from tubercle free herds is probably not more than .6 or .7% of the total milk supply.

The contribution of grading to the improvement of the milk supply up to the present has been almost negligible. Besides, the labouring artisan classes cannot afford to pay the price demanded. Probably in time as the benefits of healthy cattle will be appreciated, the farmers will make endeavours to own tubercle free herds, but in the immediate future others means will have to be devised. Undoubtedly the best protection is given by pasteurisation. In London most of the milk which is being sold has been treated by heat in accordance with some of the regulations of the Ministry of Health, but it is not sold as pasteurised milk. For instance, in this district, although most of the purveyors of milk sell milk which is heated, comparatively only a small portion is sold as pasteurised milk. The 8 branches of the United Dairies and the 2 branches of the Express Dairy have licences to sell Certified, Grade A (Tuberculin Tested) and pasteurised milk, 1 other has a licence to sell Certified, and 3 have a licence to sell Grade A (Tuberculin tested) and 1 has a licence to sell pasteurised milk. The importance of selling the milk as 'pasteurised' lies in the fact that unless the process is properly carried out, there are certain dangers in connection with it. For instance, if the milk is under-heated, dangerous organisms may not be destroyed, whilst, if it is over-heated, some of the Vitamins may be destroyed. It is unnecessary here to enter into the question of the effect of pasteurisation upon the nutritive value of milk, though this matter is a most important

one, and cannot be lightly dismissed. There is no evidence of loss of Vitamins A, B, D and E ; it is possible that a certain amount of loss to Vitamin C occurs. There is some small loss of the diffusible calcium content through pasteurisation.

On the whole, the evidence points to the fact that pasteurisation properly carried out, destroys the pathogenic organisms and does not materially affect the nutritive value of the milk, but once the milk has been pasteurised, it should not again be boiled or warmed above a certain point. Here lies the importance of knowing whether the milk has been pasteurised or not. The public should know whether the milk sold has been pasteurised or not, and if pasteurised, if the process has been carried out properly. It needs to be emphasized most strongly that pasteurisation is something more than a process by which the milk can be made to keep without souring for a longer time especially in the summer. It is well known that pasteurisation was adopted by the distributors of milk for the purpose of adding to its keeping properties and thus enabling it to be delivered to the consumer in a marketable condition. Some people looked upon it as a good process to prevent wastage from souring etc. of milk which was produced and handled badly. Unfortunately, this is the view which is still taken by many purveyors of milk. I was speaking to a large distributor in the district a short while ago, and he bluntly and baldly stated that heating was of use only in the summer because the milk would not otherwise keep sweet. Such things as the destruction of vitamins, interferences with calcium diffusibility and the effects of these upon children never entered his mind. From one point of view, it is fortunate that heat much above 145° Fahrenheit affects the taste, flavour and cream line. For instance at a temperature of 148° Fahrenheit the cream line is sometimes decreased by 40%, and so long as the cream line is exalted to a fetish, it is not likely that a temperature above 150° Fahrenheit will be used in pasteurising. But unless some control is exercised, a lower temperature than 145° may be used and some of the pathogenic organisms remain unaffected.

I am afraid that I have appeared to labour this question rather extensively, but I find that the question of pasteurisation is but very inadequately understood even by purveyors of milk.

The objections, of course, that will be raised to compulsory pasteurisation are two,—expense, and the tendency to delay the production of a cleaner and better milk supply.

Anything which would have a tendency to raise the price of milk must be deprecated. If there is to be an increase in the consumption of milk, the price must be kept as low as possible.

The opinion of the milk purveyors on the price which has to be paid for pasteurisation must be respected, and any figures which they may possess of the cost examined.

Although no milk is produced in the district, its production affects us very closely, though no administrative measures here can directly have any effect upon the supply. We are entitled though to give a considered opinion upon even the source of supply.

There is one aspect which concerns us in one sense more directly, and that is the retail distribution of the milk in the district.

One of the questions which periodically crops up is the desirability or otherwise of registering certain traders as purveyors of milk. Under Section 2 of the Milk & Dairies (Amendment) Act 1922, the Council has power to refuse registration, or remove from the register certain retailers of milk. The powers conferred upon the Council are vague. The section states that if the local authority is satisfied that the public health is or is likely to be endangered by any act or default of any person who is registered or seeks to be registered therein as a retail purveyor of milk, in relation to the quality, storage, distribution of milk, they may refuse to register him or remove him from the register as the case may be. It is to be observed that the act or default is not necessarily one which is against any statute, order or regulation, but simply that it may, or is likely to endanger the public health.

Some cases are easy to decide. For instance on Tuesday afternoon, September 27th, Mr. Kinch and I went to a shop and asked to see the receptacle in which the milk was kept. The milk was kept in a churn on the floor of the shop near the door without a lid or any other covering. The shop is a general shop, in which wood, and other dusty articles are sold, and the conditions were such that the public health might be endangered. The general appearance of the place was unsatisfactory. Noticing also about a dozen crates of bottles filled with milk and knowing that the trade done there was a small one, we enquired into the storage of this milk. We were told that this milk had been bought to be kept until after October 1st as there would be a rise in the price of milk after that date.

In former years we used to class the premises on or from which milk was sold as dairies and general shops. These terms are now hardly applicable. Most of those premises which we formerly registered as dairies are now general shops, from which many and diverse articles are sold. These premises differ from general shops only in the fact that milk is the principal ingredient

~~sold~~, and also the list of articles sold is not quite so comprehensive as in the smaller general shops. In several of the shops in which formerly only milk and general dairy produce were sold, such articles as sauces, vinegar, boot polish, potted meats of various brands, to mention but a few of the different commodities, are sold over the counter. This practice makes the control of milk distribution a much more difficult matter. The general shop-keeper feels that the dairyman has trespassed on his preserves, and he therefore thinks that he has to stock milk as one of his commodities. That, of course, is no concern of ours ; we are only concerned with the conditions under which milk is retailed.

BAKEHOUSES.

Of the 29 bakehouses in the Borough 5 are underground and these were licensed on the coming into force of the Factory Acta of 1901.

SMOKE INSPECTION.

Very few complaints are received with regard to smoke nuisances from Factory Chimneys. Where there is any cause for complaint a notice is at once served upon the occupier of the premises, who as a rule is very willing to carry out any suggestions which might obviate the nuisance.

In two cases where complaints had been received, it was found that the boilers were being over-loaded ; in one case the firm decided to put a second boiler into operation and in the other, a better quality of coal was obtained and more attention paid to the stoking, with the result that only occasionally are any complaints received in respect of these chimneys.

MEAT INSPECTION.

There are two slaughter-houses in the Borough, in one pigs only are slaughtered and in the other cattle and sheep only. Every carcase is thoroughly examined by a certificated Meat and Foods Inspector at the time of slaughter, and it will be seen from the accompanying table, that a considerable number of carcasses are affected with disease.

It has not been necessary to institute any Police Court proceedings for offence against persons dealing in food.

UN SOUND FOOD SURRENDERED DURING 1932.

TABLE 1.

Diseased Meat.

Tuberculosis.

PIGS.

37 Carcases with Heads.
6 Forequarters.
55 lbs. Pork.
216 Heads.
297 Plucks.
2608 lbs. Chitterlings.
2 Ribs of Pork.

CATTLE.

3 Stirks' Carcases with Offal.
6 Calves' Carcases with Offal.
2 Hindquarters of Veal.
1 Cow's Head & Tongue.
3 Stirks' Heads & Tongues.
3 Calves' Heads & Tongues.
1 set Cow's Lungs with Heart.
3 sets Stirks' Lungs with Hearts.
2 sets Calves' Lungs with Hearts.
1 Stirk's Pluck.
30 Calves' Plucks.
1 Calf's Liver.
3 Calves' Kidneys.

Parasites.

CATTLE.

1 set Cow's Lungs.
1 Cow's Liver.
2 Stirks' Livers.
2 sets Stirks' Lungs with Hearts.
1 set Calf's Lungs with Heart.

SHEEP.

19 Sheeps' Plucks.
92 sets Sheeps' Lungs.
27 Sheeps' Livers.

Pleurisy.

PIGS.

2 Forequarters.
18 lbs. Ribs of Pork.

CATTLE.

2 Calves' Carcases with Offal.
3 Forequarters of Veal.
15 Breasts of Veal.
1 Rib of Veal.
11 Calves' Plucks.
18 sets Calves' Lungs with Hearts.

SHEEP.

10 Breasts of Mutton.
6 Sheeps' Plucks.
1 set Sheep's Lungs with Heart.

Pleurisy and Dropsy.

1 Sheep's Carcase.

Suppurating Pleurisy.

3 sets Calves' Lungs with Hearts.
2 Breasts of Veal.
1 Forequarter of Veal.

Abscesses.

PIGS.

2 Legs of Pork.

CATTLE.

3 Calves' Heads.
4 Calves' Plucks.
8 Calves' Livers.

- 1 Shoulder of Veal.
- 1 piece Flank of Beef.

Pseudo-Hodgkins Disease.

- 1 Calf's Carcase with Offal.

Pneumonia.

- 4 Calves' Carcases with Offal.

SHEEP.

- 2 Sheeps' Plucks.

Actinomycosis.

CATTLE.

- 2 Stirks' Heads & Tongues.

Jaundice.

- 4 Calves' Carcases with Offal.
- 1 Calf's Pluck.

Dropsy.

- 1 Cow's Carcase with Offal.

Dropsy and Emaciation.

- 1 Cow's Carcase with Offal.
- 2 Stirks' Carcases with Offal.
- 2 Calves' Carcases with Offal.

SHEEP.

- 4 Sheeps' Carcases with Offal

Cystic.

CATTLE.

- 1 Calf's Kidney.

Adenitis.

- 6 Calves' Plucks.
- 2 Calves' Livers.

Arthritis.

- 2 Knuckles of Veal.

PIGS.

- 1 Leg of Pork.

Urticaria.

- 56 lbs. Pork and Rind.

Sarco-Sporidia.

- 1 Pig's Carcase.

Leukaemia.

CATTLE.

- 1 Calf's Carcase with Offal.

Melanosis.

- 1 Calf's Carcase with Offal.
- 2 Calves' Plucks.

Moribund.

PIGS.

- 2 Carcases with Heads.

CATTLE.

- 1 Stirk's Carcase with Offal.
- 14 Calves' Carcases with Offal.

Dead.

PIGS.

- 1 Carcase with Head.

CATTLE.

- 1 Calf's Carcase with Offal.

Cirrhosis.

CATTLE.

- 1 Cow's Liver.
- 2 Stirks' Livers.
- 2 Calves' Livers.

Bruised, Fractured, etc.

PIGS.

1 Pig's Carcase with Haed.
 6 Hindquarters of Pork.
 3 Legs of Pork.
 2 Shoulders of Pork.
 1 short Forequarter of Pork.
 164 lbs. of Pork.

CATTLE.

2 Calves' Carcases with Offal.
 2 lbs. Loin of Veal.
 1 Leg of Veal.
 4 Calves' Kidneys.

Congestion.

1 Calf's Pluck.

Unsound.

PIGS.

2 Pigs' Carcases.
 2 Sides of Pork.
 27 lbs. Shoulder of Pork.

CATTLE.

2 Calves' Plucks.

Other Foods.

Unsound.

3 stone Skate Wings.
 1 lb. 14 ozs. Cooked Pork.
 1 Box Cod Roe.
 1 (6 lb.) tin Corned Beef.
 6 Boxes Cod Fillets.

150 punnets Strawberries.
 75 (1-lb.) Tins Loganberries.
 1 Box Codlings.
 14 lbs. Tinned Liver.
 440 Turkeys ($2\frac{1}{4}$ tons).

TABLE II.

NUMBER OF PIGS' CARCASSES INSPECTED FROM 1st JANUARY to 31st DECEMBER, 1932, WITH
ANALYSIS OF SURRENDERS ON ACCOUNT OF DISEASE.

1932.	No. of Carcasses Inspected.	No. of Heads Diseased.	No. of Carcasses Diseased.	No. of Sides Diseased.	No. of Fore Quarters Diseased.	No. of Hind Quarters Diseased.	No. of Legs Diseased.	No. of Shoulders Diseased.	Plucks (Lungs, Livers and Hearts).	Mesenteries, Stomachs and Intestines	Pieces of Pork.
January	1285	14	1	—	2	—	1	—	39	352 lbs.	—
February	1368	9	2	—	—	—	—	—	29	256 „	100 lbs.
March	1407	14	4	—	—	1	—	2	23	208 „	94 „
April	1536	19	4	—	3	2	2	—	31	280 „	52 „
May	1264	21	3	—	—	4	1	—	19	152 „	67 „
June	940	17	5	—	—	—	—	—	19	136 „	—
July	894	24	1	2	—	—	1	—	22	208 „	14 „
August	852	17	3	—	1	—	—	—	14	128 „	—
September	1622	28	4	—	4	—	—	—	25	248 „	—
October	1675	39	5	—	1	—	1	—	26	240 „	18 „
November	1600	36	3	—	—	2	—	—	27	208 „	10 „
December	2037	32	3	—	1	—	—	—	25	216 „	—
TOTAL	16480	270	41	2	12	9	6	2	299	2632 „	355 „

BIRTHS.

Table 7 gives particulars of the births registered and notified in the district, and the births belonging to the district which have occurred and been registered outside the district.

The total number of births are those registered during the calendar year and are corrected for inward and outward transfers. This figure is obtained at the end of the year from the Registrar General, and is simply the total for the district. It does not allocate the births to the wards, and from this total it is not possible to make a ward allocation.

Last year the total number was 970 ; 483 males and 487 females, and the figure is equal to a birth-rate of 13.8 per 1,000 inhabitants. In addition 43 still births were returned as belonging to the district.

The ward allocation is made from the notifications which are received under the Notification of Births Act. The number of notifications does not exactly correspond always with the number of registrations. The births have to be notified within 36 hours, whilst a delay of 6 weeks may occur in the registration of a birth. There is not much difference in the number notified and registered in the district in the year as the births which occur towards the end of the year and are not registered until the following year are equalised by the births which have occurred towards the end of another year and have not been registered in the same year under similar conditions.

In 1931 the births numbered 1,019 corresponding to a birth-rate of 14.4. This fall in the birth-rate was discussed at length in the Annual Report for last year.

DEATHS.

483 deaths were registered in the district ; and 303 deaths of residents occurred outside the district. The total number of deaths belonging to the district is 786, which corresponds to a death-rate of 11.1 per 1,000 inhabitants.

The table giving the causes of death, age distribution, etc., is given on a later page.

Causes of Death.

The number of deaths from Cancer are again on the increase. 101 deaths occurring compared with 91 last year.

Deaths in Public Institutions.

Of the total number 386 occurred in Public Institutions and 17 in nursing homes. Of this total 263 occurred in hospitals outside and 105 in hospital in the district.

Inquests and Coroner's Inquiries.

38 inquests were held and in 26 instances the Coroner issued a certificate without an inquest after he had ordered a post-mortem examination.

INFECTIOUS DISEASES.

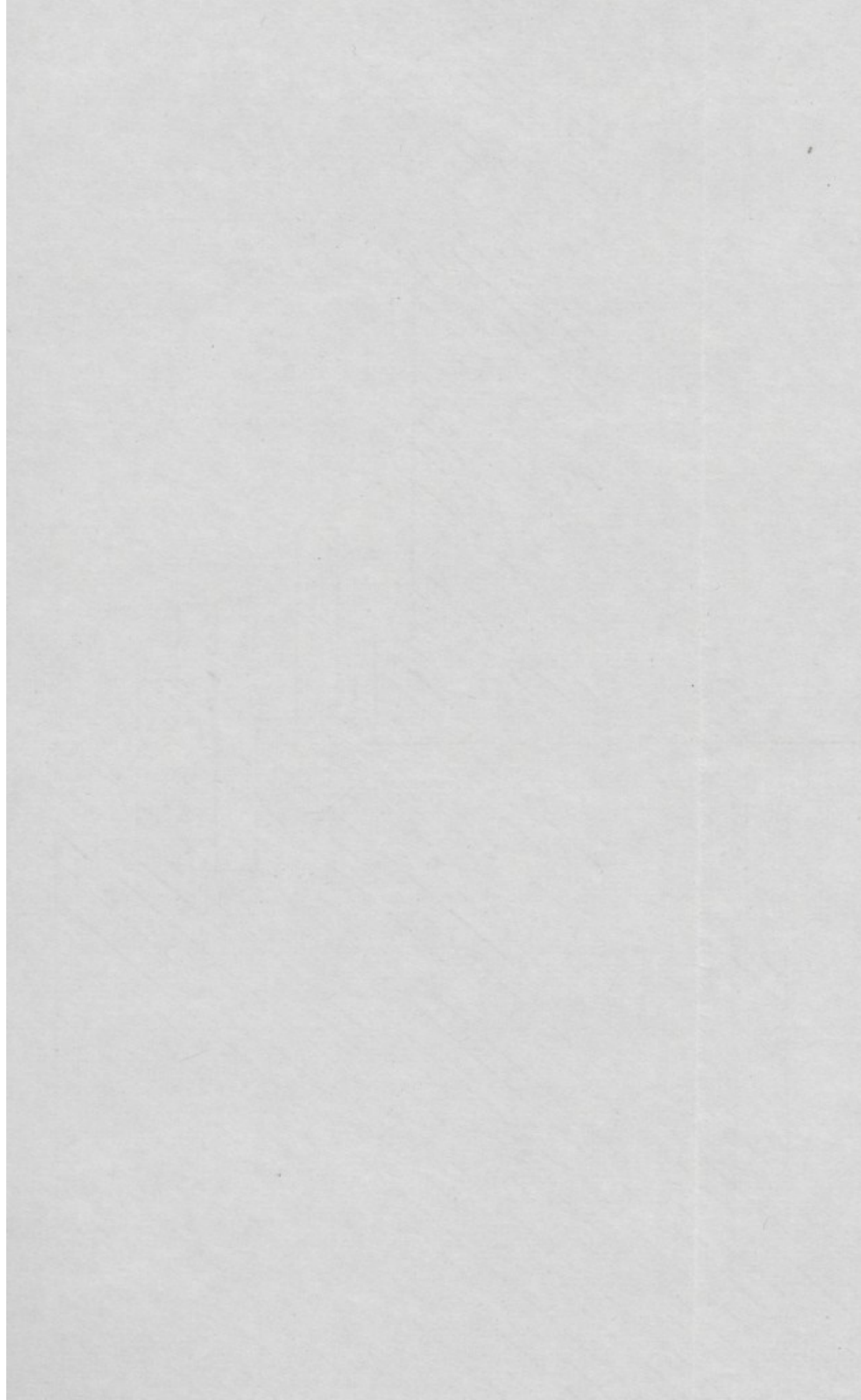
Scarlet Fever.

537 cases were notified during the year as compared with 95 cases in 1931. Reference to the following table will show that this is the highest number of cases which have occurred in any year since 1921.

Reference to the number of cases and deaths registered in the year

Year.	No. of Cases.	No. of Deaths.	Scarlet Fever, Death-rate per 1,000 population.
1890	108	3	.12
1891	63	4	.16
1892	74	—	—
1893	192	10	.39
1894	86	3	.11
1895	67	3	.1
1896	193	1	.034
1897	93	—	—
1898	167	3	.09
1899	111	2	.06
1900	243	6	.16
1901	82	2	.05
1902	109	1	.025
1903	76	2	.05
1904	129	1	.02
1905	137	2	.04
1906	170	7	.13
1907	267	6	.11
1908	484	15	.272
1909	469	16	.28
1910	109	2	.035

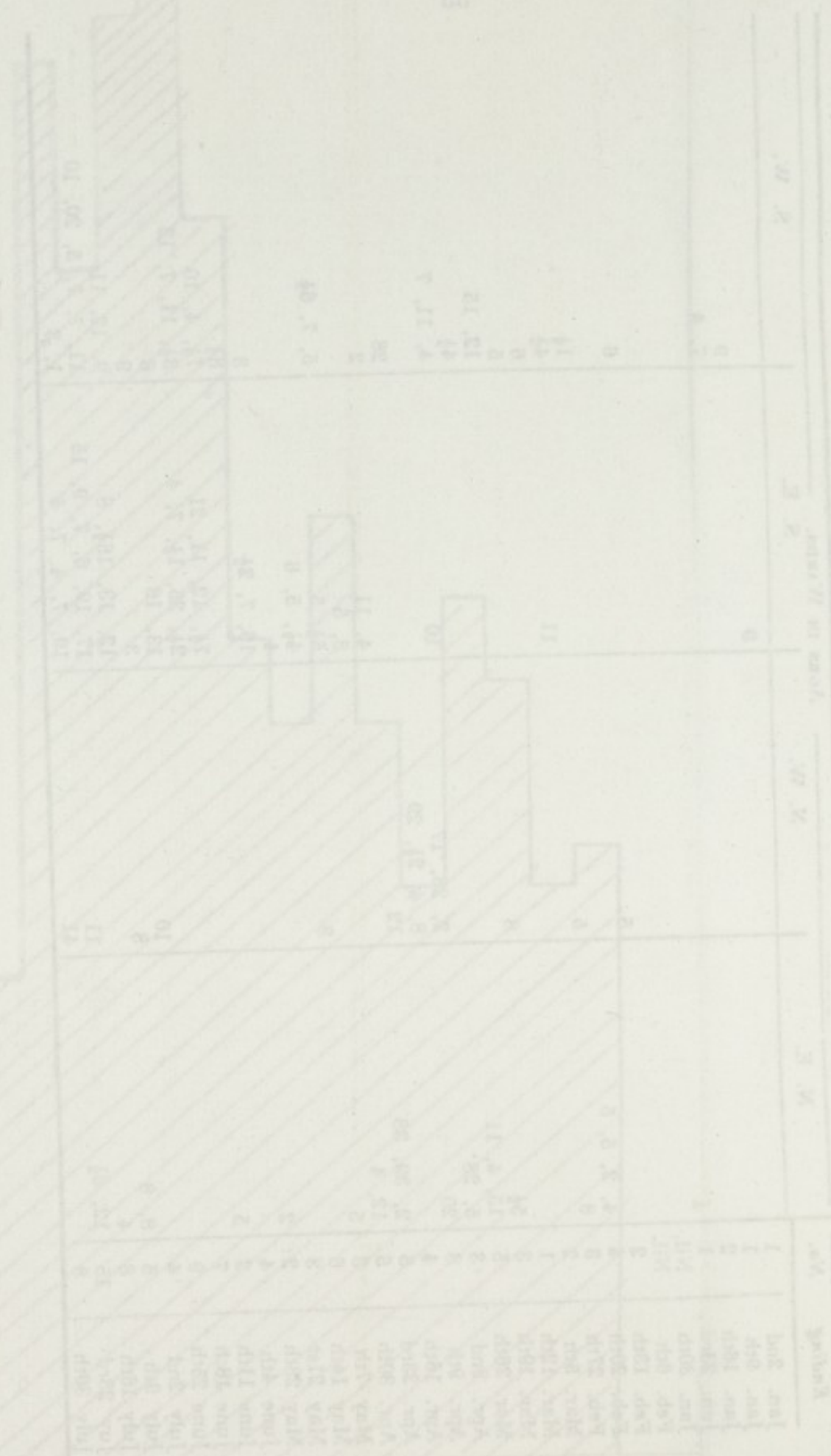
Year.	No. of Cases.	No. of Deaths.	Scarlet fever Death-rate per population
1911	234	6	.1
1912	315	1	.03
1913	80	2	.03
1914	252	1	.016
1915	163	2	.02
1916	64	1	.016
1917	45	—	—
1918	38	—	—
1919	95	—	—
1921	630	1	.00
1920	176	—	—
1922	305	3	.05
1923	160	—	—
1924	105	1	.06
1925	83	1	.06
1926	103	—	—
1927	137	1	.05
1928	243	—	—
1929	235	1	.012
1930	207	1	.02
1931	95	—	—
1932	537	5	.07



SCARLET FEVER — 1932.
(Cases in weeks, ages and wards).

Week Ending	Total No.	AGES IN WARDS.			
		N. E.	N. W.	S. E.	S. W.
Jan. 2nd	1			9	
Jan. 9th	1				9
Jan. 16th	2				7, 4
Jan. 23rd	1	4			
Jan. 30th	Nil.				
Feb. 6th	Nil.				
Feb. 13th	2		5.		6
Feb. 20th	4	4, 2, 5, 5			
Feb. 27th	3	8	5		1½
Mar. 5th	2				4½
Mar. 12th	1			11	6
Mar. 19th	3	5½	8		5
Mar. 26th	5	15, 4, 11			12, 15
Apr. 2nd	3	5, 28			4½
Apr. 9th	8	20	2, 26, 17	10	4, 11, 7
Apr. 16th	4		8, 4, 2½, 29		
Apr. 23rd	5	2, 39, 38	12		26
Apr. 30th	5	12, 4		4, 11	2
May 7th	3	5		8, 5	
May 14th	6		3	5½, 5	5, 7, 6½
May 21st	3			4½, 5, 6	
May 28th	2	2		4	
June 4th	4			16, 7, 2½	3
June 11th	2	5			8½
June 18th	7			7½, 12, 11, 21	7½, 4, 10
June 25th	9			2½, 25, 1½, 7, 4	3½, 11, 7, 12
July 2nd	4		10	13, 16	6
July 9th	5	8, 8	8	3	9
July 16th	8	4		12, 13, 16½, 8	9, 12, 11
July 23rd	15	12, 6½	11	17, 19, 6, 7, 9, 15	11, 7, 7, 5, 20, 10
July 30th	8		41	19, 7, 4, 7, 4	1, 3

Section of the ...
 (showing the ... of the ...)



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

SCARLET FEVER — 1932.
(Cases in weeks, ages and wards).

Week Ending	Total No.	AGES IN WARDS.			
		N. E.	N. W.	S. E.	S. W.
Aug. 6th	7	5	7, 4, 4, 8	8	31
Aug. 13th	6	5	1½	13, 19	27, 7
Aug. 20th	5	5		10, 18	5½, 4
Aug. 27th	12	10	2½, 6, 9, 10, 6	5	18, 3, 3, 1, 12
Sep. 3rd	19	6	8, 8, 4½	10, 8	8, 5, 5, 13, 5½, 10, 8, 16, 11, 4, 6, 5, 5
Sep. 10th	11	7	33, 11	3, 5½	11, 4, 4, 14, 13, 12
Sep. 17th	10	9			9, 1, 3, 7, 8, 25, 8, 13, 8
Sep. 24th	12	2, 6		2	21, 8, 9, 12, 3, 13, 2, 2, 11
Oct. 1st	34	13, 11, 11, 12, 11, 11, 2, 15, 9, 2	15, 6, 35, 5½, 4	7, 5, 3, 3	6, 11, 5, 2, 5, 6, 6, 4, 26, 8, 10, 22, 29, 6
Oct. 8th	29	13, 5, 10, 14, 12, 5	12, 3, 7	5, 6, 5, 20, 6, 6, 12, 5, 9	8, 11, 6, 3, 2, 8, 10, 10, 8, 6, 9
Oct. 15th	35	6, 11, 5, 11, 4, 6, 5	6, 2, 4	5, 12, 3½, 5, 8, 11, 12, 4, 8, 6, 12	2, 8, 7, 6, 10, 5, 8, 2, 1½, 11, 7, 12, 8, 10
Oct. 22nd	39	7, 7, 7, 12, 7, 15, 1½, 7, 12	13, 11	33, 8, 11, 5, 11, 27, 8	2, 5, 8, 4, 5, 6, 19, 5, 9, 32, 2, 4, 40, 2, 5, 6, 4, 8, 5, 5, 1½, 5
Oct. 29th	30	13, 6, 3, 9, 13, 9, 6	20	36, 10	8, 6, 4, 5, 4, 3, 34, 6, 8, 10, 7, 2, 6, 9, 9, 7, 9, 11, 4, 2
Nov. 5th	20	12, 12, 13, 32, 4, 12, 7	35	14, 6, 3	17, 1, 11, 22, 7, 4, 9, 4, 11
Nov. 12th	18	25, 4, 4, 11, 25, 7, 2½, 13		13, 3	12, 8, 7, 12, 5, 3, 10, 41
Nov. 19th	23	45, 28, 9, 3, 3	12, 4, 2, 11	4, 12	41, 6, 10, 10, 7, 7, 4, 20, 2, 7, 26, 6
Nov. 26th	18	9, 8, 6, 10	12, 20, 12	5, 49, 7	5, 2, 26, 3, 2, 4, 12, 12
Dec. 3rd	14	5, 8, 7		28, 8, 4, 7	5, 5, 6, 4, 8, 4, 9
Dec. 10th	21	5, 5, 13	7, 17, 14	2, 10, 34	10, 10, 6, 6, 9, 12, 10, 22, 4, 12, 3½, 5
Dec. 17th	19	8, 3, 3, 15, 10	10, 32, 7	12, 8	3, 1½, 12, 8, 13, 8, 7, 11, 11
Dec. 24th	14	5½, 7, 5, 4, 7	4, 6, 6, 2	7	7, 34, 2, 5
Dec. 31st	15	10, 22	11, 3, 7	40, 4, 1	6, 12, 5, 8, 5, 8, 17
TOTAL	537				

AGE DISTRIBUTION.

Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	Over 65
—	185	286	33	32	1	—

WARD DISTRIBUTION.

N. E.	N. W.	S. E.	S. W.
115	69	110	243

The type of the disease varied in severity and this will be referred to later on, but it is the mildness of many of the cases which is largely responsible for the increased incidence. Diagnosis is difficult in mild cases, many are overlooked and unattended, while the medical practitioner frequently hesitates to diagnose Scarlet Fever on indefinite symptoms in order to avoid putting a family to inconvenience.

For a number of years the mildness of Scarlet Fever has been a subject of comment and the opinion has been expressed that the danger to life of this disease has almost gone. It may be so, but unfortunately the weight of evidence does not justify such optimism.

It is not so much the variation in the mortality of Scarlet Fever in different countries in recent years as the past history of the disease which suggests caution in our outlook.

In 1675 Sydenham described Scarlet Fever as "an ailment, we can hardly call it more," and yet in the very year of Sydenham's death it was epidemic in London and became the severe disease of which malignant attacks were recorded. Again, that illustrious teacher Bretonneau taught that Scarlatina, which he had formerly heard spoken of as a dangerous malady, was then a mild infection, and he said that from 1799 to 1822 he did not recollect seeing a single fatal case. In 1824 an epidemic of severe type broke out in Tours and its neighbourhood and the result was that Bretonneau who had previously looked upon Scarlet Fever as a slight malady now learned to regard it as equally mortal with plague, typhus and cholera.

In 1834, Graves in referring to what he terms "the destructive epidemic of Scarlet Fever" then prevailing in Dublin, goes on to say that in September, October, November and December, 1801, Scarlet Fever committed great ravages in Dublin and

continued its destructive progress until the Spring of 1802. Then he says that for the next 27 years, epidemics of Scarlet Fever though frequent, were always of a benign type.

In 1831 however, there was a notable alteration in the character of the disease when occasional cases unexpectedly proved fatal. According to Farr, Scarlet Fever was an exceedingly fatal disease in England and Wales during the years 1848-1855.

There is no doubt that in the past, Scarlet Fever has varied greatly in severity, having been at times a benign disease and at others a very fatal one. Scarlet Fever has evidently remained a mild disease for periods amounting to about a quarter of a century and then assumed a grave form. It would seem then, that the behaviour of this disease during recent years is not unlike what has happened in the past, and consequently it would be wise to regard it with suspicion and to be on our guard.

From personal observation it appears that the type of Scarlet Fever prevalent in 1932 was less benign than in the immediately preceding years.

There were 6 deaths from the disease during the year, corresponding to a death rate of .096 per 1,000 of the population. This is the highest death rate in the Borough since 1911. 1 of the deaths occurred outside the Borough, but the other 5 occurred at the Borough Isolation Hospital.

One of these patients, a man of 29 years, was undoubtedly a true case of toxic Scarlet Fever. He was admitted to hospital in an almost moribund condition and died in three hours, and within 48 hours of the onset of illness. There was an intense dusky rash with only moderate faucial symptoms.

Another patient, a child of 18 months, was admitted on the 2nd day of illness, with a heavy rash and severe faucial symptoms. In spite of anti-scarlatinal and anti-streptococcal sera the child died on 15th day of the illness.

The third patient, a woman of 33 years, was admitted on the 3rd day of illness with a sharp attack of Scarlet Fever. She was treated with anti-scarlatinal serum but the symptoms did not abate with the disappearance of the eruption and the temperature remained up and assumed a remittent type. The possibility of a coincident typhoid infection was considered and excluded, and the patient drifted downhill until her death on 14th day from the commencement of the illness.

AGE DISTRIBUTION.

Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	Over 65
—	185	286	33	32	1	—

WARD DISTRIBUTION.

N. E.	N. W.	S. E.	S. W.
115	69	110	243

The type of the disease varied in severity and this will be referred to later on, but it is the mildness of many of the cases which is largely responsible for the increased incidence. Diagnosis is difficult in mild cases, many are overlooked and unattended, while the medical practitioner frequently hesitates to diagnose Scarlet Fever on indefinite symptoms in order to avoid putting a family to inconvenience.

For a number of years the mildness of Scarlet Fever has been a subject of comment and the opinion has been expressed that the danger to life of this disease has almost gone. It may be so, but unfortunately the weight of evidence does not justify such optimism.

It is not so much the variation in the mortality of Scarlet Fever in different countries in recent years as the past history of the disease which suggests caution in our outlook.

In 1675 Sydenham described Scarlet Fever as "an ailment, we can hardly call it more," and yet in the very year of Sydenham's death it was epidemic in London and became the severe disease of which malignant attacks were recorded. Again, that illustrious teacher Bretonneau taught that Scarlatina, which he had formerly heard spoken of as a dangerous malady, was then a mild infection, and he said that from 1799 to 1822 he did not recollect seeing a single fatal case. In 1824 an epidemic of severe type broke out in Tours and its neighbourhood and the result was that Bretonneau who had previously looked upon Scarlet Fever as a slight malady now learned to regard it as equally mortal with plague, typhus and cholera.

In 1834, Graves in referring to what he terms "the destructive epidemic of Scarlet Fever" then prevailing in Dublin, goes on to say that in September, October, November and December, 1801, Scarlet Fever committed great ravages in Dublin and

continued its destructive progress until the Spring of 1802. Then he says that for the next 27 years, epidemics of Scarlet Fever though frequent, were always of a benign type.

In 1831 however, there was a notable alteration in the character of the disease when occasional cases unexpectedly proved fatal. According to Farr, Scarlet Fever was an exceedingly fatal disease in England and Wales during the years 1848-1855.

There is no doubt that in the past, Scarlet Fever has varied greatly in severity, having been at times a benign disease and at others a very fatal one. Scarlet Fever has evidently remained a mild disease for periods amounting to about a quarter of a century and then assumed a grave form. It would seem then, that the behaviour of this disease during recent years is not unlike what has happened in the past, and consequently it would be wise to regard it with suspicion and to be on our guard.

From personal observation it appears that the type of Scarlet Fever prevalent in 1932 was less benign than in the immediately preceding years.

There were 6 deaths from the disease during the year, corresponding to a death rate of .096 per 1,000 of the population. This is the highest death rate in the Borough since 1911. 1 of the deaths occurred outside the Borough, but the other 5 occurred at the Borough Isolation Hospital.

One of these patients, a man of 29 years, was undoubtedly a true case of toxic Scarlet Fever. He was admitted to hospital in an almost moribund condition and died in three hours, and within 48 hours of the onset of illness. There was an intense dusky rash with only moderate faucial symptoms.

Another patient, a child of 18 months, was admitted on the 2nd day of illness, with a heavy rash and severe faucial symptoms. In spite of anti-scarlatinal and anti-streptococcal sera the child died on 15th day of the illness.

The third patient, a woman of 33 years, was admitted on the 3rd day of illness with a sharp attack of Scarlet Fever. She was treated with anti-scarlatinal serum but the symptoms did not abate with the disappearance of the eruption and the temperature remained up and assumed a remittent type. The possibility of a coincident typhoid infection was considered and excluded, and the patient drifted downhill until her death on 14th day from the commencement of the illness.

Our 4th fatal case, a child of $5\frac{1}{2}$ years, came into hospital on the 4th day of the illness. There was profuse nasal and ear discharge, and the glands of the neck were much enlarged. The child was treated with serum on admission, but the symptoms abated only slightly and she died on the 7th day from the onset.

The last fatal case was a girl of 8 years who was admitted on the 5th day of illness. The rash had faded and the faucial symptoms were moderate but the general toxæmia was severe. Anti-streptococcal serum was given, but signs of pneumonia developed within a few days of admission and the child died on the 12th day from the onset of disease.

The child who died from the disease outside the Borough was originally a patient at the Borough Isolation Hospital. She was a girl of $5\frac{1}{2}$ years. Until the 3rd week she made uneventful progress; purpura haemorrhagica then developed and she was transferred to the London Fever Hospital for blood transfusion and operative treatment. Unfortunately the condition became very much worse and the child died.

We have been struck by the fact that the cases admitted to hospital in the early stages of the disease have made more satisfactory progress than those admitted a few days later after the onset. This is undoubtedly due to the fact that anti-scarlatinal serum is given to all but mild cases on admission to the hospital as long as they are admitted sufficiently early for the serum to be of benefit. The injection of serum is found to have a marked effect upon the course of the disease, provided that it is given sufficiently early. Complications are prevented and the stay of the patient in hospital considerably shortened. Dick testing for susceptibility to Scarlet Fever and immunisation against the disease is less commonly used than is Schick testing for Diphtheria, probably owing to the relative mildness of Scarlet Fever.

In the hospital, passive immunisation against Scarlet Fever has been of tremendous value in checking the spread of the disease when a case has arisen in one of the Diphtheria or Measles wards.

Meningococcal Meningitis.

There were only two cases of Meningococcal Meningitis notified during the year.

Encephalitis Lethargica.

There were no notifications of Encephalitis Lethargica and no deaths occurred from the disease, or other germ diseases of the central nervous system.

Small-Pox.

No cases of Small-Pox were notified during the year. Several contacts of the cases which occurred outside the district have however been notified to us and kept under supervision.

Ophthalmia Neonatorum.

5 cases of Ophthalmia Neonatorum were notified. The Council has agreement with the London County Council for the admission, if necessary, of cases into St. Margarets Hospital. Two cases were admitted under the terms of the agreement. All the cases recovered and the sight was not affected.

Whooping Cough.

During the year 6 deaths occurred from Whooping Cough. As Whooping Cough is not compulsorily notifiable, it is not easy to estimate the probable number of cases which occurred here last year.

Whooping Cough is admittedly a most difficult disease to prevent. In the early stages, it is impossible to diagnose it. The initial cough is no different from coughs from other causes to which children are liable, and the characteristic spasm and whoop do not occur until about the second week. The disease is infectious during the early catarrhal stage and opportunity for contact is abundantly afforded by the usual conditions of urban life. As far as schools are concerned the efforts to control it are almost useless. Exclusion of cases from the schools after they have become clinically manifest cannot be effective in controlling an outbreak.

It has been assumed that the epidemic cycle in Whooping Cough is due to the fact that there is some cycle of activity of the bacillus influenced by seasonal conditions. It is well known that Whooping Cough is more severe when it occurs during the winter months. This theory however is discounted by the fact that the epidemic period is not identical in different towns. Even in two areas of London streets whose populations are continually mixing with each other, the cycle can be in a different phase by several months.

When an epidemic occurs in the winter months the difficulties of treatment appear to be greater. There is no specific treatment for the disease. The results obtained from the use of the Bordet-Gengon vaccine have been unsatisfactory. The Bordet-Gengon bacillus is characterised by a signal absence of toxin formation in culture, and a remarkably low virulence towards laboratory animals. Cultures of the bacillus in strength of billions of bacteria per c.cm. have been injected into small guinea-pigs without producing untoward results. Similarly, in the use of vaccine for prophylaxis and curative action in cases of whooping cough, children have shown a remarkable tolerance for quite enormous doses of the bacillus. In view of the immunity which an attack of whooping cough confers upon a child, it is reasonable to doubt if the Bordet-Gengon bacillus is the real cause of whooping cough. It is well known that second attacks are very rare, and artificial immunisation should not therefore be difficult.

Measles.

There were 12 deaths from Measles in 1932. In the early part of the year there was an extensive outbreak of Measles, which commenced in the southern part of the district but which ultimately spread through all the wards.

When the schools re-opened after Christmas several cases of Measles were found to have occurred during the holidays. Although we are not self contained as we were formerly, and the first cases which occurred in the district were fairly easily traced, we still frequently trace the source of the infection of Measles. In this instance, though, the original case which gave rise to the present outbreak was not traced. It had been known that Measles became prevalent in London towards the end of 1931.

The administrative County of London is such a huge area that deaths from Measles appear in every weekly return of deaths. In this respect it differs from all other towns in England and Wales. In other places Measles is an explosive outbreak and then the town is entirely free of the disease for a year or two and no deaths from Measles appear in their returns.

In the autumn, London was almost entirely free from the disease, only one death being usually recorded from the disease, and on three occasions two deaths occurred in one week.

In the week ended November 14th, 6 deaths were recorded, but the number was only 2 in each of the weeks ended November the 21st and 28th. In December the number of deaths steadily increased, and in the week ended January 16th, the number was 22.

Measles may therefore be said to have been prevalent in London towards the end of 1931.

Having regard to the intercommunication between Acton and the Metropolitan Boroughs, it can easily be understood that the disease would soon be introduced here. Usually we are able to trace the first case, but in this instance we were unable to do so.

We were aware of a case in the South West Ward in December, but this child was under school age, and was probably not the source of infection of the school cases. The family came from Scotland, and the child was ill on arrival, so ill that he was confined either to bed or to the house during his stay in the district.

On the reopening of the schools after the Christmas holidays, 3 cases were reported, one from the South-East Ward, and 2 from the South West Ward. The 3 children all attended the Rothschild Infants Department, and the course of the outbreak throughout, coincided with the school distribution of the victims.

In January the cases were limited to the South West and South East Wards west of Acton Lane, and south of the North London Railway, because the children of the Rothschild Road Infants Department and Beaumont Park Infants Department were drawn from this area, and these two were the departments in which the disease first made its appearance, afterwards the outbreak spread northwards and eastwards throughout the district.

No disease observes so regular a periodicity as Measles, and once an outbreak occurs in a populous district, it is doubtful if any measures are efficient to control an epidemic. In Acton, the disease appears almost regularly every other year. Formerly, we used to have a major epidemic and a minor epidemic or as they are sometimes called an epidemic and a hypo-epidemic at regular intervals. In recent years, the epidemics do not vary much in their virulence or fatality from year to year. Although an epidemic cannot be controlled there has been a very considerable reduction in Measles mortality. Many factors have entered into the causation of this reduced fatality. Part of it is due to the lowered birth rate, though this only explains a small part of the reduced morbidity of Measles. A fuller appreciation of the causes of death in the sufferers from the disease, and an application of methods of prevention of these causes probably have had a much greater influence.

The specific cause of Measles has not been discovered ; it is probable that the disease is due to some living virus in the blood of the sufferer and is of the nature of a " filter passer." Whatever the cause—whether it be a "germ" or a " filter virus," the proper mortality from "Measles" is trivial ; nearly all the deaths occurring during the disease are due to added symbiotic infection. We may have little control over Measles, but we have considerable powers over its symbioses. These are mainly pneumococci and haemolytic streptococci, which spread by droplet infection, and whose striking distance is short. Consequently, spacing has an enormous influence on the mortality from this disease. These facts have influenced our methods of combating the disease. We have sufficient accommodation for the immediate reception of all

Many years ago, Sir Arthur Newsholme when Medical Officer of Health for Brighton, showed that terminal disinfection after Measles was useless, and few authorities now trouble to carry out the disinfection. School closure has also been given up as worse than useless. Our efforts are concentrated on preventing the mortality, rather than preventing the spread of the disease. An endeavour is made to obtain early information of all cases, and to secure good nursing. Where good nursing can be obtained in the home, this is sufficient, but in most industrial districts, this is not possible in a considerable number of cases. Most authorities now endeavour to secure the necessary treatment in hospital, where the home conditions are unsatisfactory. Unfortunately, few authorities have sufficient accommodation for the immediate reception of all cases in which the home conditions are unfavourable with the result that many sufferers are not admitted to hospital until serious complications have intervened. We were comparatively fortunate in the matter of hospital accommodation during the epidemic, but it was impossible to arrange for the immediate admission of all cases which required removal from the home.

Many of the cases admitted were suffering from broncho-pneumonia and this fact accounted for most of the deaths in hospital. The great majority of the cases in the disease did not develop complications and rapidly recovered from the disease.

Other factors have operated in reducing the mortality from Measles. Among these may be mentioned the work which is done for Child Welfare and in the School Medical Service. The Health Visitors and School Nurses endeavour to teach parents that Measles is a serious disease and that its spread and danger may be reduced by avoiding the herding together of children during an epidemic.

Moreover the advice given to mothers in the upbringing of children, the improvement in the physical condition of the children, and the care of the teeth, nose and throat which is given at clinics, have all contributed towards raising the immunity and increasing the resistance of the child to attacks of Measles and its complications.

Diphtheria.

In the year 151 cases of Diphtheria were notified and there were 21 deaths from the disease. There was a considerable increase in the number of notifications, but the most marked increase was in the number of deaths which occurred. The increased incidence and fatality were due to a most virulent type of disease which made its appearance in the early autumn.

In the early part of the year, the incidence of Diphtheria in the district was low. Up to the end of July the notifications from the different schools had been as follows:—

Berrymede	....	5
Priory	....	4
Beaumont Park	....	3
Southfield Road	....	2
John Perryn	....	2
Turnham Green R.C.	....	3
Acton Wells	....	1
Derwentwater	....	1

In the same period, 8 cases occurred in children under school age, distributed amongst the wards as follows:—

North East	North West	South East	South West
2	1	1	3

In addition, 3 cases occurred in persons over school age in the North East Ward and 1 in the South West Ward.

In August 4 cases occurred amongst school children: 2 from Beaumont Park and 1 each from the Central and Turnham Green R.C. Schools. Altogether 37 cases were notified up to the end of August and 5 deaths had occurred.

Until September the disease could be said to have followed a fairly normal course. Its incidence was slightly higher than that observed in inter-epidemic years, but there were no cases of extreme virulence in the earlier part of the year. The deaths which occurred were in young children—1 in an infant under 1 year of age, 1 in a child in his second year and 3 in children between the ages of 2 and 5 years.

Although the spread of Diphtheria in recent years has become associated with elementary schools, its fatality is still greater amongst children under 5 years of age. When extensive outbreaks occur, Diphtheria is typically a disease of schools and institutions where children are brought together at susceptible ages. But though its incidence is greatest at school ages its fatality is greater at ages under 5 years. It is not common in the first year but it becomes increasingly fatal, until the maximum morbidity is reached somewhere between the second and fifth year. The incidence declines slowly in the age group 5-10 years, after which the probability of contracting Diphtheria is small.

During the earlier part of the year, the incidence of the disease conformed with that observed in other parts of the country, but in the autumn the course of the disease was abnormal in many respects. Its age distribution was different, but its most marked characteristic was its extreme virulence.

The earlier cases all occurred among pupils attending Southfield Road Junior School. Subsequently cases of a virulent type occurred in other schools, but it is of interest that a connection between these children and those who attended Southfield Road School could be traced.

Of the two cases notified from pupils attending Southfield Road School early in the year, one had occurred in January and the other in March. Both were of a mild type and recovered. After the summer holidays, the first case was notified on September 24th, and four others were notified in September, the dates being, September 26th—2 cases, September 27th—1 case, and September 28th—1 case. From the dates of onset of the latter 4 cases, it is possible that the infection was contracted on the same date, but if it was a school infection, it was not a class infection. The children were in 5 different classes. These 5 cases were all severe, and three of them proved fatal.

In the first fortnight in October, 8 other cases occurred in the school; 7 in the Junior Department and 1 in the Infants'

Department. The infection in the case of the child in the Infants Department was probably contracted in the home, as another case occurred in the family a few days previously. The course of the disease in the Southfield Road Junior School will be referred to in a subsequent paragraph.

The other schools which suffered were the County School Rothschild Road and John Perryn Schools. It is probable that the infection in the John Perryn School was an independent one. The type was not as virulent as that in the other schools, and there did not appear to be in intimate connection between the cases. 8 cases occurred in John Perryn School, but there were no deaths.

The first case which occurred in the County School was in a boy who resided in Bedford Park, and some of the cases were similar in character to those which had occurred in Southfield Road School. The type was probably modified, because the pupils were older and it is well known that Diphtheria is more fatal in young children.

4 cases occurred in Rothschild Road Infants Department in October and 5 other cases occurred in the first fortnight in November. There is a connection between Rothschild Road School and Southfield School, the senior boys of Southfield School being recruited from the Rothschild Road Junior School.

Up to the end of the year, most of the cases of school age occurred in these schools—Southfield Road, Rothschild, John Perryn and County. 3 cases occurred among Acton girls attending Chiswick County School. These cases were also of a very virulent type.

Cases occurred amongst children under school age in other parts of the district. The ward distribution is given on another page, but this was of less importance in the incidence of the disease than the school distribution.

In the past four years outbreaks of extreme virulence have been reported not only in this country, but in other countries in Europe. In this country, outbreaks of unwonted severity have been reported from several parts, and in districts in and around London outbreaks of the severe type of Diphtheria have occurred. It has been suggested that Diphtheria generally is entering upon a more severe stage. If the disease is about to vary in virulence the first indication will be increased variation in local fatality. In the last few years, the numbers of districts which record rates higher

than the average have been increasing, and various factors have been assigned as a cause of this increased virulence. The chief causes are said to be, an increased virulence of the organism, and a lowered communal immunity. The work originating in Leeds suggests two strains of corynebacterium Klebs Loeffler. In 1931, when investigating a severe outbreak of Diphtheria in Leeds, it was ascertained that there were two kinds of Diphtheria bacilli, to which the names of Diphtheria Bacillus Gravis and Diphtheria Bacillus Mitis were given. The cultural characteristics of the two types are said to be a definite and constant, though there are intermediate types. As a result of this work it was suggested (a) that the gravis type is mainly, or even solely, associated with severe forms of Diphtheria, (b) that the mitis type causes only mild attacks, and (c) that attacks caused by the gravis strains respond less satisfactorily to the ordinary anti-toxin prepared from the Park-Williams bacillus, and that a special anti-toxin is called for.

Dr. O'Brien of the Wellcome Research Laboratories kindly examined some swabs from the most severe of our cases. 10 swabs were sent to him, and he reported that 6 were of the gravis type, 2 of the mitis type, and 2 contained bacilli of the gravis and mitis types.

Exaltation of virulence has been denied by some bacteriologists, and in an article in the British Medical Journal of November, 19th, 1932, Dr. O'Brien and his co-workers set forth the result of their experience. They stated that there is no satisfactory evidence that the gravest types of Diphtheria are generally associated solely or even mainly with the gravis types of bacillus. If gravis and mitis cultures are injected into groups of guinea pigs the two groups can be saved with equal readiness by Park 8 anti-toxin given some hours later. Guinea pigs immunised with prophylactic mixture which are impervious to human immunisation in England and which are prepared from Park 8 strain survive the injections of large doses of gravis cultures.

Bacteriologists, of course, can only determine virulence of human parasites by the reaction upon adventitious hosts. It is possible that Diphtheria may vary in virulence towards man, its natural host, and yet show no alteration in its behaviour to rabbits or guinea pigs. There is room therefore for the clinicians to express their opinion as to the character of the disease. It is impossible for the clinicians to adduce evidence which is acceptable to the pure scientist. It is always difficult to attain a reliable history in a large number of cases. This is more particularly true of the mild type of disease and of small children. But in some of these cases, we were satisfied that the history was correct and that

anti-toxin was given within 36 hours of the onset ; in spite of this the patient died. We have been used to a rapid improvement and recovery when anti-toxin is administered early, especially when the disease occurs in older children. The early cases in the autumn were in older children ; of the deaths which occurred, 2 were aged 12 years, one 11 years, one 10 years and two 8 years. As previously stated, most of these were admitted in a comparatively early stage of the disease. In these older children anti-toxin was given intravenously and in large doses. There is always a tendency to blame the therapeutic agent placed in our hands when we are face to face with an outbreak of Diphtheria, but these details are mentioned not with the object of finding fault with the anti-toxin, but to emphasize the difference in the reaction of these cases to treatment as compared with that observed in the ordinary way. It cannot be said that these children would be peculiarly liable to a fatal result if attacked by any serious illness. The children in these particular schools would compare favourably not only with the children in the other schools in the district, but with those of any elementary and secondary school in and around London. We are forced to the conclusion that in the present instance the type of the disease was a very virulent one and this virulence was probably caused by an exaltation of virulence in the germ.

The other factor which might have been operative was a low communal immunity. In the present century much attention has been paid to the study of epidemics, and the conditions under which outbreaks of infectious diseases occur, and in order to appreciate the importance of certain procedures which have been adopted to prevent Diphtheria, it is necessary to take a wider view of the subject.

Diphtheria is not a disease of modern times, but until late in the last century it was confused with other diseases. The discovery of the Klebs Loeffler bacillus in 1883-84 contributed towards the correct diagnosis of the disease. Ten years later anti-toxin was discovered and this affected mortality from the disease to an enormous extent.

From 1895 onwards, the use of anti-toxin became general and although other factors may have operated, the introduction of anti-toxin has been one of the principal factors in the reduction of the fatality. For nearly 30 years there was a continuous decline, but in the last 10 years the mortality from Diphtheria has been almost stationary. On account of the smaller population our death-rate has been different from that of the rest of the kingdom, but the tendency has been a downward one.

The following table gives the number of notifications and ~~deaths~~ deaths from Diphtheria since the adoption of the Notification of Infectious Diseases Act, 1889.

<i>Year.</i>	<i>Population.</i>	<i>Notifications.</i>	<i>Deaths.</i>
1931	70,560	61	4
1930	69,565	103	9
1929	68,600	68	1
1928	67,645	78	7
1927	66,700	69	1
1926	65,760	42	2
1925	64,845	63	1
1924	63,945	45	5
1923	62,720	61	3
1922	62,170	223	12
1921	61,299	205	16
1920	61,000	141	18
1919	61,732	54	2
1918	59,000	116	2
1917	65,219	67	3
1916	57,913	81	4
1915	58,238	78	14
1914	61,000	116	10
1913	60,000	117	8
1912	59,000	100	8
1911	58,048	115	9
1910	57,000	118	8
1909	56,000	104	22
1908	55,000	83	7
1907	53,000	63	5
1906	52,000	46	2
1905	50,000	49	4
1904	46,780	32	2
1903	43,803	22	4
1902	41,000	33	6
1901	38,373	34	4
1900	36,508	28	4
1899	34,901	49	7
1898	33,404	35	8
1897	31,952	89	28
1896	30,564	23	8
1895	27,648	32	5
1894	27,600	22	5
1893	26,000	41	2
1892	25,000	27	4
1890	23,500	14	7

Before 1905, the figures for the deaths are not strictly accurate. Since 1905, all the outside deaths have been included, but prior to that date, a complete return of the outside deaths was not available. Although I have not worked the figures as percentages of the total population, they plainly show the periodicity of the disease. In recent years Diphtheria has made its appearance in certain epidemic waves, the crests of which attain their maxima at intervals of a certain number of years, although the general tendency has been towards a diminution of the mortality. What are the factors which influence the appearance of these waves?

I have already referred to one factor which may be operative. I have mentioned the extreme virulence of the type and it is suggested that this is due to an alteration in virulence of the causal agent. This theory would account for the outbreak by the appearance of a very virulent type of bacillus, which has been mentioned in a previous paragraph as the Diphtheria Bacillus Gravis. It means that an alteration in the type of the disease has occurred in the epidemic period. During the inter-epidemic periods the disease is less potent and also less infectious, and it is suggested that this increase in potency and infectivity gives rise to the epidemic.

This factor may be operative, but a more important factor probably is the gradual accumulation of susceptible persons in the population. This factor may act over longer or shorter periods. We have an example of the shorter period in the periodicity of Measles, which in this country makes its appearance almost regularly in the large towns every 2 years. The same factor probably operates in the case of Diphtheria, but the outbreak is of a less explosive character and epidemics occur at longer intervals. It is a matter of common knowledge that any group of individuals contains susceptibles and insusceptibles or immunes. In the case of Diphtheria, the immunity is acquired by repeated exposure to diphtheria infection. If a district remains comparatively free from diphtheria for a long time, a considerable amount of susceptible material accumulates in that community, and an explosive outbreak sooner or later occurs. When the herd immunity is lowered to a certain point that community is particularly vulnerable. We do not know what rates of susceptibles cause parasitic infections to become epidemic, and it is quite possible that a slight raising or a slight lowering of susceptibles may make an enormous difference in disease incidence. The measures hitherto employed against the spread of this disease which aim at the destruction of the germ—disinfection, bacteriological search for carriers, isolation of clinical cases—have proved inadequate. In the past our mode of procedure consisted of hospital treatment of

actual cases, swabbing of contacts and the search for carriers. At the onset of an outbreak this method may prove successful in cutting it short, at any rate for a time, but when the cases are distributed throughout a school or are in different schools, the number in which diphtheria bacilli are found in the throats is so great, that isolation of all suspected cases is impossible. Our best method of success is by raising the herd immunity of the community. The problem is to render the susceptible, insusceptible. In the last annual report of the Ministry of Health, Sir George Newman states that in the case of Diphtheria this is not only feasible and practicable but eminently desirable.

As far as this district is concerned Schick-testing and active immunization are innovations, and it may be advisable to give a short account of the process. The Schick-test of susceptibility was introduced in 1913 and involves the injection into the skin of a minute dose of Diphtheria toxin diluted with saline solution. The reaction depends on the local irritant action of Diphtheria toxin when so injected. If the blood of the person injected contains an insufficient amount of anti-toxin to protect him against Diphtheria, he is liable to contract the disease if he comes in contact with another person suffering from Diphtheria. In this case he will give what is called a positive reaction. This reaction is characterised by an area of redness about half an inch or more around the site of injection. If the person tested is immune or not susceptible to diphtheria, no redness occurs and he is said to be a negative reactor.

The next step is the active immunisation of the susceptible persons or the positive reactors. Passive immunity is frequently brought about by injecting small doses of anti-toxin and this is made use of to protect children in a general hospital exposed to infection when Diphtheria occurs in a ward. Doctors also give doses of anti-toxin to other members of the family when a case has occurred in a house. This kind of immunity is called passive because the cells of the blood do not produce any anti-toxin, but the anti-toxin is introduced from without and circulates in the blood. The immunity thus conferred is transient and probably lasts only for a few weeks.

Active and prolonged immunity can only be conferred when the cells of the body manufacture anti-toxin, and this form of immunity is produced when a person suffers from the disease. This is the reason why a person rarely suffers more than once from such diseases as Measles, Scarlet Fever, Diphtheria, etc. The patient has stored in his tissues sufficient anti-body to fight the particular disease for the rest of his life. The same process can be introduced

in the case of Diphtheria without actually suffering from a clinical attack of the disease. Von Behring in 1913 suggested the use of toxin anti-toxin as an immunising agent, the toxin being sufficiently neutralised by anti-toxin to antagonise its dangerous properties. The use of toxoid-antitoxin as a prophylactic was first adopted on a large scale in 1921 in New York City. Three injections of the prophylactic are needed to develop gradually an immunity against Diphtheria. It is estimated that about 95% of the Schick-positives become Schick negatives in less than six months after inoculation. As far as this country is concerned prophylactic immunisation has only been used extensively to deal with staffs of nurses and inmates of large institutions and schools where outbreaks of Diphtheria have occurred or are likely to occur.

America and Canada are far ahead of this country in instituting general prophylactic measures against Diphtheria. An idea of the work done in the United States may be gauged by the records of Philadelphia where 364,000 children had been immunised by the end of 1929 ; the attack-rate had fallen to the low level of 0.4 per thousand inhabitants and no hospital for Diphtheria was required. In this country opposition is fairly strong and it is difficult to get people to understand the benefits of the process. Stress is laid upon the accidents which have occurred, these are admitted, but they have occurred under conditions which are not likely to occur in this country. No accidents have occurred in England. The report of the Chief Medical Officer of the Ministry of Health deals with this aspect. "As a necessary preliminary to such a process as immunisation it is necessary to be satisfied that the reagents employed will in fact effect that which is claimed for them and that they are otherwise innocuous. There is no doubt that given the safeguards now supplied by the provisions of the Therapeutic Substances Regulations, these claims have been fully substantiated as far as the immunising reagents used in this country are concerned."

Those who most appreciate the value of immunisation are by no means eager to press it unduly ; they feel that its future is assured if it is allowed to make its own way on its merit.

A report was submitted to the Health Committee and the School Management Committee and it was decided to offer immunisation to all those who desired it. As two of the schools were affected the procedure was primarily adapted to the school population. Requests were also received from parents of children in other schools for the immunisation of their children. It was therefore decided to carry out this part of the work at the School Clinic

on Saturday mornings. The Saturday morning clinic is still being carried on, but it is now attended mostly by children under school age. It was explained that if the response from Southfield Road and the County Schools was favourable, it would be impossible to carry out the Schick testing without outside assistance. A circular was issued to all the parents, and it was stated that acceptance was to be entirely voluntary, and that the immunisation could be carried out by the family doctor if the parents so desired. There were 484 acceptances from Southfield Road School, and 257 from the County School. Arrangements were made with Dr. Guy Bousfield to do the Schick test. Dr. Bousfield has probably done more Schick testing and immunisation than any other person in this country, and we were fortunate in obtaining his services. In the other schools the problem was not so urgent and Dr. Howell and myself were able to arrange to carry out the work. It is impossible at the present time to give a full report of the work done, as it is still going on. It will be more convenient to give an account of it at a later stage. It may be mentioned that up to the end of February, 1933, we had Schick tested 1,922 children and immunised partly or wholly 1,909 children.

Because of the necessity of controlling the epidemic in the schools we had to concentrate our attention very largely on the children of school age. It is recognised, though, that if preventive measures are undertaken to stamp out Diphtheria, it is essential that a large proportion of the most susceptible subjects—children of pre-school age—should be immunised. Recent work has shown that although fifty to seventy per cent. of children of school age have been protected, it was not until at least an additional thirty per cent. or more of those under five years had been immunised that any fall in the Diphtheria rate of the community as a whole was produced. If success is to be attained, our efforts must be directed towards the protection of the pre-school child who is exposed to greater risk from his higher susceptibility and from home contact with older children attending school.

The tendency recently has been to urge immunisation at an earlier age than was formerly the practice. Formerly it was usual to delay immunisation until the second year of life, but it has been found that the supposed maternal transmitted immunity in infants varies considerably during the first twelve months of life.

Compared with other districts, we must consider that our campaign has been very successful. This has been due partly to the severe type of disease which was experienced. Opposition has

of course been met, but the opposition has been due to some misunderstanding as to the object of the process, and also to a want of appreciation of the seriousness of the disease. Diphtheria has for some time been mild in character, and the fathers in particular have not been very helpful. The opposition of the fathers has arisen in many instances from their experience of inoculations in the army. Many of them state that unfavourable symptoms followed their inoculation for Typhoid and vaccination for Small-Pox. The mothers, on the other hand, have seen for themselves the freedom from pain at the inoculation and the subsequent absence of reaction. Many mothers have come to us to complain that their children could not possibly have been inoculated, because the children have not felt the prick of the needle, nor was there the slightest mark or reaction following the inoculation. It is not claimed, of course, that there is no reaction in any case. A slight redness of the arm does occasionally result and rarely a local reaction may persist for a day or two. But in the vast majority of cases, there is not the slightest local or constitutional reaction. The mothers are also more familiar with the facts connected with cases of Diphtheria which have occurred in their neighbour's homes and that the cases have occurred with a persistent regularity amongst those children whose parents had refused immunisation. The fathers, being at work, would not be so cognisant of these facts, and possibly not so appreciative of any new procedure in the prevention of the disease.

Naturally, some people confuse immunisation with vaccination against Small-Pox. One parent refused because she said that her neighbour's child had been vaccinated but in spite of this, had contracted Measles, Whooping Cough and Scarlet Fever. Many people do not appreciate that immunisation is against one particular disease, and that it has no effect upon any other disease.

Tuberculosis.

96 cases of Pulmonary Tuberculosis and 18 cases of other forms of Tuberculosis were notified during the year.

There were 48 deaths from Pulmonary Tuberculosis and 11 deaths from other forms of Tuberculosis.

The death notification interval of the 48 patients who died of Pulmonary Tuberculosis in 1932 was:—

Information from Death Returns	....	....	12
Died within 1 month after notification	....	....	7
Died between 1 and 3 months after notification	....	....	6
Died between 3 and 6 months after notification	....	....	2
Died between 6 and 12 months after notification	....	....	5
Died between 1 and 2 years after notification	....	....	6
Died between 2 and 3 years after notification	....	....	3
Died over 3 years after notification	....	....	7

On December 31st the following is a statement of the particulars appearing in the Register of cases of Tuberculosis.

	Pulmonary.		Non-Pulmonary.		TOTAL
	Males.	Females.	Males.	Females.	
Number of Cases of T.B. on the Register at the commencement of year	130	124	28	21	303
Number of Cases notified for the first time during the year	45	42	11	4	102
Number of Cases previously removed from the Register which have been restored thereto during the year	1	2	—	—	3
Number of Cases added to the Register other than by notification	4	3	1	2	10
Number of Cases removed from the Register during the year	22	21	5	2	50
Number of Cases remaining on the Register at the end of the year	158	150	35	25	368

In 1932, the Tuberculosis Officer examined 95 new cases of Pulmonary Tuberculosis and 15 new cases of Non-Pulmonary Tuberculosis. 53 patients were admitted to Sanatoria under the country scheme and 23 were admitted to Hospitals.

Age Periods.			New Cases.				Deaths.			
			Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
			M.	F.	M.	F.	M.	F.	M.	F.
0—	....	....	—	—	—	—	—	—	—	1
1—	....	....	—	—	3	1	1	—	1	1
5—	....	....	1	1	1	1	—	—	—	1
10—	....	....	—	1	1	—	—	—	—	—
15—	....	....	6	8	2	1	2	4	1	1
20—	....	....	4	16	—	—	3	4	—	1
25—	....	....	10	11	1	2	4	7	—	—
35—	....	....	9	4	2	1	3	5	—	—
45—	....	....	11	3	—	—	4	3	1	1
55—	....	....	7	2	2	—	3	2	1	1
65 and upwards	....	....	1	1	—	—	2	1	—	—
TOTALS	....	....	49	47	12	6	22	26	4	7

ISOLATION HOSPITAL.

The Acton Council Isolation Hospital contains 88 beds normally. During 1932 we had to increase these to an emergency number of 122 in order to cope with the epidemics of Scarlet Fever and Diphtheria.

758 cases were admitted during the year compared with 262 cases during 1931.

On January 1st, 1932 there were 29 cases in the hospital and on January 1st, 1933 there were 107.

The following is a list of the cases admitted for the different diseases.

		<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Measles.</i>
Acton	....	382	134	81
Wembley	....	77	25	7
Kingsbury	....	28	21	3
TOTAL		758.		

The 39 deaths were distributed as follows:—

		<i>Scarlet Fever.</i>	<i>Diphtheria.</i>	<i>Measles.</i>
Acton	....	5	20	9
Wembley	....	—	4	1
Kingsbury	....	—	—	—

A discussion on the deaths from Scarlet Fever will be found in the report on that disease.

A report on the Diphtheria epidemic is given above but the 24 deaths in hospital need some explanation.

While admitting that the type of Diphtheria was in many instances a most virulent one, yet several apparently hopeless cases which were sent in at an early stage of the disease recovered. We must, however, emphasise the fact that many of the cases were so severely ill on admission to hospital that all our efforts were almost bound to be in vain.

9 of the patients who died were admitted on or after the 4th day of disease while 4 were admitted on the 3rd day.

Under these circumstances the case mortality is bound to be extremely high whether the infecting strain of diphtheria bacillus is of exalted virulence or not.

6 patients died within 36 hours of admission to hospital and of these 1 died within an hour and 1 other within 12 hours. 2 patients died on the 2nd day, 5 between the 4th and 6th days, and 7 between the 6th and 14th days. The other 4 developed complications and died later in the course of the disease.

All were given large doses varying from 40,000 to 50,000 units of anti-toxin intravenously as a first dose together with a solution of glucose and colloidal iodine by the same route.

It is perhaps not amiss to remind practitioners of the heavy responsibility which lies upon them in waiting for the result of a swab before giving anti-toxin in a suspicious case during the present epidemic.

BACTERIOLOGICAL EXAMINATIONS.

(a) For Diphtheria.				Positive.	Negative.
Total Examinations	2245	....	....	231	2014
Sent by Medical Practitioners		....	....	97	582
do. (re-examinations)		....	....	9	167
Sent from Isolation Hospital		....	....	79	683
do. (re-examinations)		....	....	1	84
Convalescents (1st Swabs)	....	....	....	2	52
Contacts	....	....	....	33	289
do. (2nd examinations)		....	....	4	76
do. (3rd examinations)		....	....	—	16
Precautionary Swabs	....	....	....	—	26
School Sore Throats	....	....	....	6	39
(b) For Ringworm.					
Total Examinations—9	....	....	....	6	3
(c) For Tubercle.					
Total Examinations—137	....	....	....	31	106

MATERNITY AND CHILD WELFARE.

Infantile Mortality.

17 of the deaths were due to prematurity or to causes associated with prematurity. There is no material change to report upon the conditions generally.

Maternal Mortality.

7 deaths occurred in child bearing women, 4 of which occurred within the Borough and were investigated.

The first case was a woman of 32 who had received antenatal care during this her first pregnancy. Caesarean section was advised on account of a generally contracted pelvis and the patient was admitted to hospital; death occurred on the 11th day after operation; post-mortem multiple abscesses were found in the uterus.

The second case, a woman of 38 in her 2nd pregnancy was seen twice before her confinement. There was retention of the placenta and post partum haemorrhage. The patient was removed to hospital, but death took place from haemorrhage and shock.

The 3rd case was a woman of 28 who had received antenatal treatment throughout her pregnancy. The home conditions were excellent and we were satisfied that all possible precautions had been taken at the confinement, but the woman died of puerperal septicaemia.

The 4th case was a woman who had been admitted to hospital during the 6th month for severe vomiting. She remained an in-patient for 5 weeks and then returned home; 3 weeks later she was re-admitted and a healthy child was born. On the 10th day she discharged herself from hospital but had a fit on arrival at home. She was re-admitted the same day in coma, pneumonia supervened and she died 5 days later.

Of the 3 cases which died outside the Borough, 1 died during the 3rd month of uncontrolled vomiting, the 2nd of chorion epitheloma and the 3rd of puerperal sepsis.

Pre-Natal Clinic.

The clinic is held once a fortnight in the School Clinic premises in Avenue Road and Dr. Bell is in charge.

25 sessions were held with a total of 231 attendances. This does not represent the whole of the pre-natal work done. In the case of those who apply for admission to Park Royal Hospital, Dr. Bell usually sees the expectant mothers when application is first made and generally refers them to the pre-natal clinic at Park Royal Hospital.

Maternity Home.

The Council has an agreement with Middlesex County Council for the admission of maternity cases into Park Royal Hospital. The arrangements were reported fully in last year's report. During 1932 122 cases were admitted under this agreement.

Day Nursery.

The Nursery is situated in Bollo Bridge Road, and is open on five days a week.

The Nursery was open on 231 occasions, and 4,871 whole-day attendances were made.

There has been an improvement in the number of attendances this year.

Nurse Children.

At the end of the year 1931, there were 53 children and at the end of the year 1932 there were 57 children on the register, and 5 between 7 and 9 years of age.

Child Welfare Centres.

There has been no change in the arrangements for the Child Welfare Centres since last year. Seven sessions are held weekly—4 in Avenue Road, 1 each in Steele Road Mission, John Perryn School and St. Gabriel's Hall.

TABLE F.

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1932

The Mortality rates for England & Wales refer to the whole population, but for London and the towns to civilians only

	Rate per 1,000 Population		ANNUAL DEATH-RATE PER 1,000 POPULATION.										RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL DEATHS			
	Live Births.	Still- Births.	All Causes	Enteric Fever	Small Pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under 2 yrs.)	Total deaths under 1 year	Certified by Registered Medical Practitioners	Inquest Cases	Certified by Coroner after P.M. No Inquest	Uncertified Causes of Death	
England and Wales	15.3	0.66	12.0	0.01	0.00	0.08	0.01	0.07	0.06	0.33	0.54	6.6	65.	91.1	6.2	1.8	0.9	
118 County Boroughs and Great Towns, including London	15.4	0.64	12.2	0.00	0.00	0.12	0.01	0.08	0.07	0.28	0.54	8.6	70.	91.3	5.9	2.3	0.5	
126 Smaller Towns (1931 Adjusted Population, 25,000—50,000)	15.2	0.68	11.4	0.01	0.00	0.07	0.01	0.07	0.04	2.31	0.53	5.3	61.	91.9	5.8	1.3	1.0	
London	14.3	0.46	12.3	0.00	0.00	0.19	0.02	0.08	0.07	0.28	0.57	12.5	67.	89.4	6.2	4.4	0.0	
Acton	13.7	0.61	11.1	0.00	0.00	0.18	0.10	0.08	0.28	0.24	0.55	8.2	62.	91.6	5.1	3.3	0.00	

The maternal mortality rates for England and Wales are as follows:—

	Puerperal Sepsis.	Others.	Total.
per 1,000 Live Births	1.61	2.63	4.24
per 1,000 Total Births	1.54	2.52	4.06

TABLE 2.

VITAL STATISTICS FOR THE WHOLE DISTRICT DURING 1932 AND PREVIOUS YEARS

Year	Population estimated to Middle of each Year	Births		Total Deaths Registered in the District		Transferable Deaths		Nett Deaths belonging to the District			
		Nett						Under 1 year of Age		At all Ages	
		Number	Rate	Number	Rate	of Non-Resi- dents Regis- tered in the District	of Residents Registered outside Dist.	Number	Rate per 1,000 Births	Number	Rate per 1,000 inhabitants
1922	62,170	1203	19.35	404	6.50	14	214	75	62	632	10.02
1923	62,060	1171	18.57	368	5.84	11	243	77	65	599	9.50
1924	63,945	1158	18.11	448	7.01	8	235	65	56	715	11.18
1925	64,845	1047	16.15	446	6.88	18	241	80	76	669	10.32
1926	65,760	1098	16.70	422	6.42	15	250	60	55	657	9.99
1927	66,700	1026	15.60	445	6.67	21	280	62	60	704	10.55
1928	67,645	1003	14.83	479	7.08	29	244	55	55	694	10.26
1929	68,600	1026	14.96	540	7.87	21	307	85	83	826	12.04
1930	69,565	1105	15.88	440	6.33	31	284	56	50	693	9.96
1931	70,560	1018	14.43	456	6.46	35	321	62	61	742	10.52
1932	70,640	970	13.7	486	6.88	29	302	60	62	786	11.11

TABLE 3 AGES AT DEATH, AND WARD DISTRIBUTION OF DEATHS IN 1932

CAUSES OF DEATH.	AGE IN YEARS										WARD DISTRIBUTION			
	All ages	Under 1 year	1 and under 2	2 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and upwards		North East	North West	South East	South West
Measles	12	2	4	6	—	—	—	—	—	1	1	1	2	8
Scarlet Fever	6	—	1	1	2	—	2	—	—	1	3	3	1	1
Diphtheria	21	1	1	10	9	—	—	—	—	3	3	3	12	3
Whooping Cough	6	3	1	2	—	—	—	—	—	1	—	—	—	5
Influenza	12	—	1	—	—	1	3	3	4	4	5	2	2	1
Cerebro-spinal meningitis	2	1	—	—	—	—	1	—	—	—	—	—	1	1
Phthisis	48	—	1	—	—	13	19	12	3	11	6	13	18	18
Other tubercular diseases	11	1	2	—	1	3	—	4	—	5	3	—	—	3
Cancer	101	—	—	—	—	—	11	40	50	27	32	21	21	21
G. P. I. & Tabes	3	—	—	—	—	—	—	1	2	3	—	—	—	—
Rheumatic Fever	2	—	—	—	—	1	—	1	—	1	—	—	1	—
Syphilis	1	1	—	—	—	—	—	—	—	—	—	—	—	1
Diabetes	5	—	—	—	—	—	—	1	4	3	—	—	2	—
Heart Disease	95	—	—	—	1	2	8	30	54	29	28	18	20	20
Cerebral Hæmorrhage	33	—	—	—	—	—	—	6	27	11	12	4	6	6
Other circulatory diseases	54	—	—	—	—	—	—	16	38	16	17	11	10	10
Bronchitis	46	—	—	—	—	1	2	21	22	12	10	12	12	12
Pneumonia	41	9	3	2	2	1	2	12	10	11	8	10	12	12
Other respiratory diseases	5	—	—	1	—	—	3	1	—	2	2	1	—	—
Diarrhœa	8	8	—	—	—	—	—	—	—	3	—	—	—	5
Peptic Ulcer	7	—	—	—	—	—	2	3	2	2	—	—	1	4
Appendicitis	5	—	—	—	—	—	2	2	1	3	1	1	—	—
Cirrhosis of Liver	4	—	—	—	—	—	1	3	—	—	—	—	2	2
Other Liver Diseases	1	—	—	—	—	—	—	—	1	1	—	—	—	—
Nephritis	27	1	—	—	—	—	5	7	14	7	3	—	8	9
Puerperal Sepsis	3	—	—	—	—	1	2	—	—	1	—	—	1	1
Other diseases or accidents of Parturition	4	—	—	—	—	1	3	—	—	2	—	—	1	1
Prematurity &c.	27	27	—	—	—	—	—	—	—	12	5	2	2	8
Senility	95	—	—	—	—	—	—	2	93	19	31	20	25	25
Suicide	14	—	—	—	—	—	3	10	1	7	2	3	2	2
Other violent deaths	25	2	—	2	—	4	5	4	8	8	7	4	6	6
Other defined diseases	64	4	1	—	4	4	12	21	18	20	14	21	9	9
TOTALS	788	60	15	24	19	32	86	200	352	226	193	175	194	194

TABLE 4.

INFANTILE MORTALITY, 1932.

CAUSES OF DEATH.	AGES.									WARDS.			
	Total	Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	1-3 months	3-6 months	6-9 months	9-12 months	North East	North West	South East	South West
Prematurity	17	12	2	2	—	1	—	—	—	9	4	—	4
Marasmus	3	—	—	—	—	—	3	—	—	—	—	1	2
Pneumonia	7	—	—	—	—	4	1	—	2	1	2	—	3
Pyloric Stenosis	3	—	—	—	—	1	1	1	1	—	1	2	—
Swallowing vomited matter into trachea	1	—	—	—	—	—	1	—	—	1	—	—	—
Tuberculous Meningitis	2	—	—	—	—	—	1	1	—	1	—	1	1
Measles	1	—	—	—	—	—	—	—	—	—	—	1	—
Cerebro-spinal Meningitis	2	—	—	—	—	—	—	1	1	—	—	1	1
Diphtheria	1	—	—	—	—	—	1	—	—	—	—	—	1
Whooping Cough	3	—	—	—	—	—	1	—	2	1	—	—	2
Accidental suffocation in pram	1	—	—	—	—	—	1	—	—	—	—	—	1
Overlaying	1	—	—	—	—	1	—	—	—	—	—	—	1
Prolonged labour	1	1	—	—	—	—	—	—	—	—	1	—	1
Diarrhoea	8	—	2	—	—	1	3	1	1	2	1	—	5
Septic Finger toxaemia	1	—	—	—	1	—	—	—	—	—	1	—	—
Syphilis	1	—	—	—	—	1	—	—	—	—	—	—	1
Congenital Heart disease	1	1	—	—	—	—	—	—	—	1	—	—	—
Congenital Pyloric Stenosis	1	—	—	—	—	1	—	—	—	—	—	1	—
Congenital atresia of oesophagus	1	1	—	—	—	—	—	—	—	1	—	—	—
Cellulitis of scalp	1	1	—	—	—	—	—	—	—	—	—	1	—
Acute Nephritis	1	1	—	—	—	—	—	—	—	—	1	—	—
Injury at birth	1	—	—	—	—	—	1	—	—	—	—	—	1
Pemphigus Neonatorum	1	1	—	—	—	—	—	—	—	—	—	—	1
TOTALS	60	18	4	2	1	10	14	4	7	17	10	9	24

TABLE 5.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1932.

Notifiable Disease.	Cases notified in whole District. At Ages—Years.								Ward Distribution.			
	At all Ages	Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65	Over 65	North East	North West	South East	South West
Small-Pox	1	—	—	—	1	—	—	—	1	—	—	—
Scarlet-Fever	537	—	185	286	33	32	1	—	115	69	110	243
Diphtheria	151	1	47	85	12	5	1	—	38	25	31	57
Enteric Fever	1	—	—	—	—	—	1	—	—	1	—	—
Paratyphoid B.	2	—	—	—	1	—	1	—	—	2	—	—
Pneumonia	41	1	5	5	4	11	8	7	10	12	5	14
Puerperal Fever	3	—	—	—	2	1	—	—	—	1	1	1
Puerperal Septicaemia	1	—	—	—	—	1	—	—	1	—	—	—
Cerebro-Spinal Fever	2	—	1	—	1	—	—	—	1	—	1	—
Ophthalmia Neonatorum	5	5	—	—	—	—	—	—	1	1	1	2
Erysipelas	19	—	2	3	1	6	6	1	3	7	4	5
Acute Anterior Poliomyelitis	1	—	—	1	—	—	—	—	1	—	—	—
Tuberculosis (resp.)	96	—	—	4	35	35	20	2	28	22	18	28
Tuberculosis (other)	18	—	5	3	2	6	2	—	4	4	3	7
TOTALS	878	7	245	387	92	97	40	10	203	144	174	357

OPHTHALMIA NEONATORUM.

Cases.			Vision unimpaired	Vision impaired	Total Blindness	Deaths.
Notified	Treated.					
	At home.	In hospital.				
5	3	2	5	—	—	—

TABLE 6.

CASES REMOVED TO HOSPITAL.

				<i>Total Notified.</i>
Small-Pox	....	....	1	1
Scarlet Fever	....	....	382	537
Diphtheria	....	....	134	151
Enteric Fever	....	....	1	1
Paratyphoid B.	....	....	2	2
Pneumonia	....	....	14	41
Puerperal Fever	....	....	3	3
Puerperal Septicaemia	....	....	1	1
Cerebro-Spinal Fever	....	....	2	2
Ophthalmia Neonatorum	....	....	2	5
Erysipelas	....	....	7	19
Acute Anterior Poliomyelitis	....	....	1	1

TABLE 7.

BIRTHS.

LIVE BIRTHS.

			<i>Male.</i>	<i>Female.</i>
Total	....	....	483	487
Legitimate	....	....	465	467
Illegitimate	....	....	18	20

STILL BIRTHS.

Total	....	....	26	17
Legitimate	....	....	25	17
Illegitimate	....	....	1	—

NOTIFIED LIVE BIRTHS.

	Ward Distribution.				
	Total.	N. East.	N. West.	S. East.	S. West.
Total Births notified in the district	657	208	146	98	205
Notifications received from other districts	298	91	75	55	77
Births registered but not previously notified....	2	1	1	—	—
	957	300	222	153	272

NOTIFIED STILL BIRTHS.

Inside		15.	Outside		19	Total	34
--------	------	-----	---------	------	----	-------	----

NOTIFICATIONS WERE RECEIVED FROM:—

Doctors and Parents	....	....	....	685
Midwives	....	....	....	304

TABLE 8.

INFANT WELFARE CENTRES, 1932.

Number of Centres provided and maintained by the Council	4
Total number of attendances at all centres during the year:—	
(a) by children under 1 year of age	10,490
(b) by children between 1 and 5 years of age	6,668
Average attendance of children per session	53
Number of children who attended for the first time during the year:—	
(a) under 1 year of age	713
(b) between 1 and 5 years of age	272
Percentage of notified live births represented by number of children who attended a centre for the first time during the year	74.6
Children treated at Dental Clinic	196
Children treated at Ophthalmic Clinic	13
Mothers treated at Ophthalmic Clinic	2
Children treated for Enlarged Tonsils and Adenoids	4

TABLE 9.

ANTE-NATAL CLINIC.

Number of attendances by Dr. Bell	25
Number of Expectant Mothers who attended	193
Number of attendances made by Expectant Mothers	231
Mothers referred for Dental treatment at the Clinic	39
Mothers supplied with Dentures	14
Expectant Mothers to whom Dried Milk was supplied	24
Number of packets of Dried Milk supplied	283

TABLE 10.

INQUESTS.

INQUESTS—41.

Suicide	13	Fall from Motor Car	1
Run over by Motor Car	6	Accidental Burns	1
" " Motor Van	2	Found drowned	1
" " Train	2	Surgical Operation	1
" " Motor bus	1	Childbirth-retained placenta	1
" " Taxi	1	Injury at football	1
" " Motor Cycle	1	Accidental suffocation in pram	1

Motor Collision	....	1	Overlaying	....	....	1
Run over by horse drawn cart	1		Kidney disease	....	....	1
Accidental fall	....	....	2	Coal gas poisoning	....	1
Fall from Motor Cycle	....	1				

CORONER'S CERTIFICATE AFTER POST-MORTEM WITHOUT

INQUEST—26.

Pneumonia	....	....	4	Scarlet Fever	....	....	1
Thrombosis of Coronary				Nephritis	....	....	1
Artery	....	....	1	Cancer	....	....	1
Fatty Heart	....	....	1	Myocardial degeneration	....	....	5
Valvular Heart Disease	....	....	3	Cerebral Haemorrhage	....	....	1
Aortic Aneurysm	....	....	1	Intestinal obstruction	....	....	2
Aortic Stenosis	....	....	1	Acute pyelonephritis	....	....	1
Influenza	....	....	1	Swallowing vomited matter			
Coronary artery disease	....	....	1	into lachea	....	....	1

FACTORIES, WORKSHOPS AND WORKPLACES.

1.—*Inspection of Factories, Workshops and Workplaces including Inspections made by Sanitary Inspectors.*

Premises.	Inspections.	Written Notices.
(1)	(2)	(3)
Factories	103	15
(Including Factory Laundries).		
Workshops	427	12
(Including Workshop Laundries)		
Workplaces	16	Nil
(Other than Outworkers' Premises).		
Total	546	27

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

Nuisances under the Public Health Acts:—

Particulars.	Found.	Remedied.
(1)	(2)	(3)
Want of Cleanliness	29	29
Want of Ventilation	Nil	Nil
Overcrowding	Nil	Nil
Want of drainage of Floors	Nil	Nil
Other Nuisances	5	5

Sanitary Accommodation:—

Insufficient	....	10	10
Unsuitable or defective	....	28	28
Not separate for sexes	....	Nil	Nil

Offences under the Factory and Workshop Acts:—

Illegal Occupation of underground			
Bakehouses	....	Nil	Nil
Other Offences	....	Nil	Nil
		—	—
Total	....	72	72

3.—*Outwork in unwholesome premises, Section 108* Nil

STAFF.

D. J. THOMAS, M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health (Medical Superintendent of the Isolation Hospital and School Medical Officer).

NANCY G. HOWELL, M.R.C.S., L.R.C.P., D.P.H., Assistant Medical Officer of Health and School Medical Officer.

P. H. SLATER, L.D.S., School Dentist.

M. W. KINCH, M.R.San.I., Cert. of Royal Sanitary Institute; holds Meat and Smoke Certificates; Chief Sanitary Inspector (Inspector under Diseases of Animals Acts and the Rag Flock Act).

J. J. JENKINS, Cert. of Royal Sanitary Institute; holds Meat and Smoke Certificates, Sanitary Inspector (Inspector under Fabrics Misdescription Act).

E. W. BROOKS, Cert. of Royal Sanitary Institute. Sanitary Inspector.

J. J. MATTHEWS, Cert. of Royal Sanitary Institute; holds Meat Certificate, Sanitary Inspector.

Miss A. COOKSEY, A.R.San.I., Certificate of Royal Sanitary Institute. Health Visitor.

Miss J. WELSH, Certificate of Royal Sanitary Institute,
C.M.B., Health Visitor.

Miss B. G. SORLIE, S.R.N., Certificate of Royal Sanitary Institute,
C.M.B., H.V. Diploma, Health Visitor and
School Nurse.

Miss A. WOOSNAM, S.R.N., C.M.B., Health Visitor and School Nurse.

Miss B. C. BROUGHTON, S.R.N., C.M.B., H.V. Diploma, Health
Visitor and School Nurse.

W. GOODFELLOW,* A.R.San.I., Cert. of Royal Sanitary Institute ;
holds Meat Certificate, Cert. Bacteriology;
Chief Clerk.

Miss G. OVERALL,* Clerk.

Miss V. E. ARNOLD,* Clerk.

Miss D. E. BEACON, Clerk.

Miss M.J. GILFILLAN,* S.R.N., C.M.B., Matron, Isolation Hospital.

Miss F. A. CAVENDISH, Matron, Day Nursery.

G. BAKER,* Disinfector.

NOTE.—To the salaries of all the above officials excepting those
marked with an asterisk, contribution is made under the
Local Government Act, 1929.

I wish to express my appreciation and thanks to all the
members of the Public Health Department for their excellent co-
operation during the year.

I am,

Your obedient Servant,

D. J. THOMAS,

Medical Officer of Health.

ANNUAL REPORT

OF THE School Medical Officer

FOR THE YEAR, 1932

MUNICIPAL OFFICES,
ACTON, W.3.

*To the Chairman and Members of
the Education Committee.*

LADIES AND GENTLEMEN,

We beg to submit the following report upon the schools and school children of the Education Authority for the year 1932.

During the year, changes have occurred in the personnel of the School Medical Service. Dr. N. G. Howell was appointed and commenced duties on March 1st. The medical inspections for the months of January and February were carried out by Dr. L. S. Farquharson. In July, Nurse James resigned under the age limit after 23 years faithful and conscientious service, and Nurse Broughton was appointed to take her place.

Advantage was taken of this change to rearrange and to co-ordinate still further the work of the Maternity and Child Welfare and the School Medical Services. The Infant Welfare Centre at St. Gabriel's Hall, Noel Road, is now under the charge of Nurse Broughton and the entire work of home visiting is done by one person. Miss Broughton does the home visiting for Acton Wells School, and the area for which she also does the Welfare work coincides.

Miss J. WELSH, Certificate of Royal Sanitary Institute,
Nurse, Health Visitor.

Miss B. G. SORLIE, S.R.N., Certificate of Royal Sanitary Institute,
C.M.B., H.V. Diploma, Health Visitor and
School Nurse.

Miss A. WOOSNAM, S.R.N., C.M.B., Health Visitor and School Nurse.

Miss B. C. BROUGHTON, S.R.N., C.M.B., H.V. Diploma, Health
Visitor and School Nurse.

W. GOODFELLOW, * A.R.San.I., Cert. of Royal Sanitary Institute;
holds Meat Certificate, Cert. Bacteriology;
Chief Clerk.

Miss G. OVERALL, * Clerk.

Miss V. E. ARNOLD, * Clerk.

Miss D. E. BEACON, * Clerk.

To the Chairman and Members of

the Education Committee.

Miss M. J. GILFILLAN, * S.R.N., C.M.B., Matron, M.C.N.S.,
Nurse and Children.

It is a pleasure to submit the following report upon the work of the
School children of the Education Authority for the year 1932.

During the year, changes have occurred in the personnel
of the School Medical Service. Dr. M. G. Howell was appointed
and commenced duties on March 1st. The medical inspections
for the months of January and February were carried out by
Dr. L. J. Richardson. In July, Nurse James was appointed,
and Nurse Broughton was appointed to take her place.

Advantage was taken of this change to rearrange and to
re-organise the work of the Maternity and Child Welfare
Department. The Infant Welfare Committee
is now under the charge
of Nurse Broughton and the entire work of home visiting is done
by one person. Miss Broughton does the home visiting for Action
School, and the other for which she also does the Welfare
work.

Medical Officer of Health.

PUBLIC ELEMENTARY SCHOOLS WITHIN THE DISTRICT WITH
ACCOMMODATION.

<i>Name of School.</i>	<i>Dept.</i>	<i>Accommo- dation</i>	<i>Average monthly No. on Register during 1932.</i>	<i>Average attendance for Autumn term 1932.</i>
Acton Wells		Senior	320	252
		Junior	364	376
		Infants'	364	336
Beaumont Park		Senior Girls'	450	254
		Junior Girls'	450	292
		Infants'	400	256
Berrymede		Junior Boys'	640	506
		Junior Girls'	542	512
		Infants'	450	319
Central			480	402
Derwentwater		Junior Mixed	441	460
		Infants'	350	271
John Perryn		Senior	360	275
		Junior	288	332
		Infants'	336	345
Priory		Senior Boys'	500	417
		Senior Girls'	499	405
		Infants'	400	297
Rothschild		Junior Boys'	450	296
		Infants'	400	281
Southfield		Senior Boys'	415	273
		Junior Mixed	382	400
		Infants'	350	227
Turnham Green R.C.....			327	277
Acton Council Special....			68	47
			10026	8108
				6986

A comparison of this Table with that of the year 1931, will show a slight reduction in the number of children on the register and a more marked reduction in the number in average attendance. The reduction in the number of children on the register is due to the continued reduction in the birth rate. This matter has been referred to on several occasions and it is unnecessary to make any detailed observations on this aspect in the present report.

The reduction in the average attendance has been due to the outbreaks of Scarlet Fever and Diphtheria in the Autumn, and this matter will be referred to in a subsequent paragraph.

AVERAGE HEIGHT WITHOUT SHOES AND AVERAGE WEIGHT WITHOUT CLOTHES.

ANTHROPOMETRIC COMMITTEE, 1929.

MALES.

FEMALES.

<i>Age last birthday</i>	<i>Height in ins.</i>	<i>Weight in lbs.</i>	<i>Height in ins.</i>	<i>Weight in lbs.</i>
3	36.9	32.9	36.6	31.5
4	39.2	35.9	38.4	33.7
5	41.4	38.7	41.1	37.5
6	43.	41.3	42.8	40.1
7	45.4	45.4	45.1	44.1
8	47.8	51.	47.5	49.4
9	49.2	54.8	48.9	52.6
10	51.3	59.6	51.2	59.8
11	52.7	64.6	52.8	63.9
12	55.	71.6	55.6	73.9
13	56.2	76.5	56.9	79.
14	58.	86.1	58.9	88.2
15	61.8	99.3	62.3	106.8

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES.

ENTRANTS (GIRLS).	No. Examined.	YEARS OF AGE.											
		3—4			4—5			5—6			6—7		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Junior Mixed	9	...	...	...	3	40.1	36.2	3	41.9	37	3	45.8	46.3
Acton Wells Infants'	58	...	...	...	23	40.8	39.2	30	42.9	41.2	5	44.8	43.5
Beaumont Park Infants'	56	15	36.7	31.8	10	39.7	35	28	42.6	39.3	3	45.5	41.6
Berrymede Infants'	56	...	...	...	29	40.1	35.8	19	43.2	42.2	8	44.7	44.9
Derwentwater Infants'	60	...	...	...	26	39.9	38.6	25	43.4	42.8	9	45.4	46
John Perryn Infants'	49	...	...	...	18	40.4	36.4	22	42.5	39.7	9	45.1	45.6
Priory Infants'	52	...	...	...	24	40.4	36.6	23	41.9	38.2	5	43.8	38.5
Rothschild Infants'	42	12	38.4	34.8	13	40.2	37.4	11	40.2	37.5	6	44.9	45.1
Southfield Road Infants'	37	...	...	...	10	40.3	36.2	22	42.5	40.1	5	46.9	59.9
Turnham Green R.C.	8	...	...	...	5	40.9	38	1	41	34	2	47.7	46
	427	27			161			184			55		
(BOYS).													
Acton Junior Mixed	11	...	...	...	4	41.1	38.8	6	44.6	44.6	1	46.3	44.3
Acton Wells Infants'	57	...	...	...	19	41.2	37.8	28	43.7	42.7	10	45.4	46.5
Beaumont Park Infants'	51	10	37.4	31.6	15	41.3	38.3	24	42.9	41.2	2	44.9	42.8
Berrymede Infants'	61	...	...	...	33	40.4	38.6	26	42.6	39.7	2	42.7	46
Derwentwater Infants'	56	...	...	...	20	41.1	40.6	25	44	44.3	11	45.8	48.1
John Perryn Infants'	58	...	...	...	17	41.5	38.3	36	43.7	41.9	5	45	44.6
Priory Infants'	57	2	40.2	36.4	34	40.8	37.7	12	43.2	40.5	9	45.9	45.5
Rothschild Infants'	46	13	38.5	36.4	13	40.6	38.1	15	42.7	40.9	5	45.9	47.4
Southfield Road Infants'	47	...	...	...	17	41.4	40.5	23	44.7	46.1	7	46.6	50.6
Turnham Green R.C.	9	...	...	...	5	39.6	38	3	43.4	42.1	1	43	37
	453	25			177			198			53		

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES.

INTERMEDIATES. (BOYS).	No. Examined.	YEARS OF AGE.								
		7—8			8—9			9—10		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Junior Mixed	12	6	49.6	54.3	6	49.8	52.9	....	....	....
Acton Wells Junior	30	6	49.9	55.1	24	51	59.1	....	....	....
Acton Wells Infants'	25	11	49.8	56.3	14	49.8	55.5	....	....	....
Beaumont Park Infants'	3	3	49.6	55.6	....	....	....	....	....	....
Berrymede Junior Boys'	122	70	48.4	52.2	52	49.1	52.7	....	....	....
Berrymede Infants'	2	2	47.6	49.1	....	....	....	....	....	....
Derwentwater Junior	50	38	49.5	56.6	12	49.8	58.1	....	....	....
Derwentwater Infants'	1	1	51	52.8	....	....	....	....	....	....
John Perryn Junior	4	....	....	....	4	51.4	60.7	....	....	....
John Perryn Infants'	56	25	49	53.3	31	49.7	55.2	....	....	....
Priory Infants'	6	6	50.5	57.9	....	....	....	....	....	....
Rothschild Junior	72	27	49.1	54	45	49.4	55	....	....	....
Rothschild Infants'	2	2	49.2	52.6	....	....	....	....	....	....
Southfield Junior	32	16	50.1	57.7	16	50.8	58.5	....	....	....
Southfield Infants'	5	5	47.8	54.5	....	....	....	....	....	....
Turnham Green R.C.	12	4	48.2	52.7	6	49.8	55.6	2	52	63.5
	434	222			210			2		
(GIRLS).										
Acton Junior Mixed	20	7	47.7	49.5	11	49.8	53.2	2	53	59.6
Acton Wells Junior	30	9	49	51.9	20	49.4	53.1	1	55.3	65.5
Acton Wells Infants'	23	13	48.5	51.5	10	48.8	51.3	....	....	....
Beaum't Pk. Jnr. Girls'	80	56	49.2	51.2	24	49.9	52.9	....	....	....
Beaumont Park Infants'	6	6	48.5	49.5	....	....	....	....	....	....
Berrymede Junior Girls	96	57	48.1	51.8	39	46	51.7	....	....	....
Berrymede Infants'	6	6	48.7	51.8	....	....	....	....	....	....
Derwentwater Junior	53	40	49.7	55.3	13	50.6	57.9	....	....	....
Derwentwater Infants'	8	8	47.7	49.4	....	....	....	....	....	....
John Perryn Infants'	49	21	49.7	55.9	28	48.8	51.5	....	....	....
Priory Infants'	22	15	48.4	50.5	7	48.8	50.5	....	....	....
Rothschild Infants'	2	2	48.1	48.5	....	....	....	....	....	....
Southfield Junior	42	17	49.2	52.1	25	49.5	55	....	....	....
Southfield Infants'	4	4	47.3	54	....	....	....	....	....	....
Turnham Green R.C.	15	7	48.4	52.4	6	53.4	68.2	2	54.7	62.4
	456	268			183			5		

TABLE SHOWING HEIGHTS AND WEIGHTS AT DIFFERENT AGES.

LEAVER (BOYS)	No. Examined.	YEARS OF AGE.								
		12—13			13—14			14—15		
		No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.	No.	Height ins.	Weight lbs.
Acton Wells Senior	53	50	58.2	80.6	3	60.3	86.1	....	....	
Central	56	56	57.9	81.5	....	....	....	....	....	
John Perryn Snr.	56	56	58.4	81.4	....	....	....	....	....	
Priory Boys'	190	189	57	72.3	1	57	83	....	....	
Southfi'd Sr. Boys'	119	118	57.2	79.9	1	67.5	115.8	....	....	
Turnham Gn. R.C.	21	19	57.2	78.4	2	55	73.2	....	....	
	495	488			7					
(GIRLS)										
Acton Wells Senior	55	49	59.2	86.6	5	58.8	80	1	63.8	122
B'm't Pk. Sn. Girls'	118	117	58.7	78.8	1	66	115.3	....	....	
Central	55	55	59	87.7	....	....	....	....	....	
John Perryn Snr.	79	77	58.8	83.3	2	59.1	82.5	....	....	
Priory Girls'	193	192	57.7	80.3	1	56	70	....	....	
Turnham Gn. R.C.	11	11	59	88.6	....	....	....	....	....	
	510	501			9			1		

During the year, 2,754 children were examined in the various age groups prescribed by the Board of Education.

Table 2 includes a return of defects found at medical inspection. In Table 2b the number of individual children is given who were found at routine medical inspection to require treatment, excluding uncleanliness and dental defects.

A comparison of this table with that for the year 1931, will show that the percentage of children found to require treatment during 1932 is much lower than that for the previous year.

A cursory examination of the figures, and a comparison with those of former years, would make it appear that changes have occurred in the conditions which obtain among school children. This is not quite correct. It is true that small variations

do occur, but these are not so marked as the diversity of views held by the different persons who are responsible for the inspection. This becomes apparent when a comparison is made between the figures of neighbouring areas.

A few years ago we published certain figures culled from the annual reports of school medical officers of districts around London and it was interesting to note to what extent the personal factor must have entered. Some might say that there is need of accepted standards, but it is difficult to set up any standards which will be accepted by all. The widest variation was noticed in the number of children who were stated to be suffering from enlarged tonsils and adenoids and required tonsillectomy.

Tonsils and Adenoids.

During 1932, 58 children were operated on for removal of tonsils and adenoids under the Authority's scheme, as compared with 160 cases during 1931.

This great difference in the numbers needs some explanation and the time seems ripe to enunciate the principles which have guided us in the selection of cases during the present year.

It is also well to look back on some of our past cases, and to try to assess the value which the children have received from the operation.

108 cases which had been operated on under the Authority's scheme were followed up. A large number of these children were operated on at the request of the family doctor, or on the advice of one of the hospitals. The reason why the operation was considered necessary was sought, and the parents were asked whether there was any improvement in the condition for which the operation was performed.

Of the 108 cases, 37 were improved, 41 were definitely no better, 6 were worse, and in the remaining cases the parents were vague, so that in these cases there was evidently no outstanding benefit from the operation.

The first thing that strikes us in the investigation is the diversity of symptoms for which the operation was performed.

For instance, 34 children were operated on because they were subject to colds. Only 14 of these were improved in any way.

14 were operated on for tonsillitis, many of them after one attack only. 7 only, showed definite improvement and all of these were in the 11-12 age group.

11 cases were operated on for enlargement of tonsils alone, without any symptoms. In 2 of these cases the child was said to be brighter, in 7 cases no change was noticed by the parents, and the last child was definitely worse as he had frequent colds after the operation, whereas he had not suffered from colds previously. This child was found on examination to have very wide anterior nares and thus a larger air way than normal. Removal of lymphoid tissue from the post nasal space would be expected to aggravate the condition.

In 9 cases, tonsils and adenoids were removed for mouth breathing and in only 2 of these cases was any improvement seen. An interesting point in this connection is that the children in whom improvement occurred were 12 and 7 years of age respectively, while the ages of the children in whom there was no improvement ranged from 5 years down to 3 years. In the 2 older children breathing exercises had been carried out after operation, and the benefit was probably largely due to this.

3 cases were operated on for tonsillitis and discharging ears. All were improved.

1 child had suffered from rheumatism and was better after the operation.

4 children were operated on for deafness and 2 of these were definitely better.

Other reasons given for operation were, nerves, stomach trouble, and general irritability. None of the children in this group showed any improvement.

The number of cases in this investigation was not large, but the reasonable conclusion which one draws from a consideration of the cases is that removal of tonsils and adenoids without definite evidence that they are doing harm is obviously not worth the risk and unpleasantness which the child has to suffer.

Comment on the cases quoted is almost unnecessary. In many of the cases we have no proof that the tonsils and adenoids were the cause of the child's ill health and in these cases no improvement resulted.

Unfortunately, the operation has now come to be regarded by parents as almost a normal proceeding in the life of a child so that we frequently have difficulty in persuading parents that the operation is unnecessary for some trifling ill.

This year each child referred to us for operation has had a thorough examination of nose, throat and nasopharynx, and the general health, and home conditions as well have all been gone into.

Infection of the upper respiratory tract in children is extremely common, and the burden of this invasion by microbes is borne by the lymphoid or adenoid tissue, which becomes swollen temporarily. The swelling is a sign that the lymphoid tissue is needed and that it is dealing with the infection. When the infection is removed, the swelling of the adenoids will abate.

The condition usually occurs in children living under bad hygienic conditions, generally associated with overcrowding. An operation for removal of tonsils and adenoids in this type of child is obviously not going to do any good, because the enlargement is nature's attempt to deal with massive infection. It is wiser to attempt to deal with the environmental conditions of the child.

Broadly speaking, operative interference with the lymphoid tissue of the nose and throat will do good in cases where:—

- (1) It is causing difficulty in breathing through the nose,
- (2) It is definitely causing deafness,
- (3) The tonsils are diseased.

Difficulty in breathing through the nose, or mouth breathing, is one of the commonest symptoms for which children are brought along to the throat clinic.

In a large number of these children there is no sign of nasal obstruction and the condition is found to be associated with a general lack of tone. Here again operation is useless and it is our custom to suggest measures for improving the general condition together with regular breathing exercises.

Difficulty in breathing through the nose is very commonly associated with swelling of the mucous membrane lining the nasal fossae with puddling of mucus due to defective nasal hygiene, even in older school children. It is surprising how many of these children have never learnt to blow the nose properly, and what a tremendous improvement results when regular and effective nose blowing, followed by breathing exercises, is established as a daily routine. Children who are put on this treatment are asked to return at the end of a month for further examination.

Many of the children are referred to the clinic on account of frequent colds. Some of these children are found on examination to have wide anterior nares and a larger airway than usual. Here again, removal of adenoid tissue is particularly apt to aggravate the condition.

Deafness is another symptom for which operation on the nose and throat is often demanded, and this again is a condition which may be made worse by indiscriminate removal of tonsils and adenoids. If the child is deaf, and physical signs such as retraction of the drumhead are present, then a digital examination is necessary in order to find out whether adenoid growth is causing obstruction to the Eustachian tube. If this is found, the condition is usually improved if the otological adenoids only are removed leaving behind any adenoid tissue which is present in the mid line

The same consideration must be exercised over the question of the removal of the tonsils. If the tonsils are a source of sepsis they must be removed, but working on the principle that swelling of lymphoid tissue is a protective mechanism, tonsils should never be removed for enlargement alone, except in the very rare event of their causing mechanical obstruction.

The explanation of the reduction in the number of cases operated on this year therefore, lies in our recognising that enlargement of tonsils and adenoids are due to many different causes that enlargement may be beneficial to the child temporarily, and removal detrimental.

The number of cases remaining where the operation is needed are necessarily greatly reduced, as tonsils are only removed when diseased, and thus the lymphoid tissue of the upper respiratory tract is conserved during those years when the child most needs it.

A return of the defects found at medical inspection will be found on Table 2 at the end of the report. A full report on Malnutrition and Otorrhoea appears below.

Provision of Meals.

Early in the year, the question of feeding necessitous children in the Borough was considered. A list of children who were considered necessitous was submitted, and the children were examined at the School Clinic. Although only a small percentage of children on the list was found to be malnourished, it was decided to extend the investigation and to consider the question of malnutrition in all school children, whether necessitous or not.

167 children were reported by the Head Teachers to be in their opinion necessitous or undernourished. A few children who had been seen at the Minor Ailment Clinic, or during a routine school inspection, were added to the list. Altogether, 175 children were referred for examination.

We used as a basis the relation between the height and weight of the child, and singled out for special examination any child who fell below 7% of the standard weight for his height.

Of the 175 children who were first reported to us, 127 were weighed and measured at the Clinic, and the weight of each child was compared with the average standard normal weight for height. 4% of the children were absent from school for various reasons, so they were dealt with at the school on their return.

14 of the 127 children were found to be overweight, 7 came up to normal, 46 were less than 7% below weight, and 60 were more than 7% below weight. These 60 children were submitted to a careful physical examination to determine the cause of malnutrition. In most cases they were accompanied by a parent and a fairly accurate idea of the home conditions could be surmised.

Of the 60 children, 5 were obviously suffering from physical defects. One child was suffering from acute rheumatism, another from heart disease, 3 children had threadworms and no attempt had been made to clear up the condition.

12 of the children were well cared for and the food they had was sufficient in quantity. None of them had any physical defect to account for the failure to gain in weight. In most of them the malnutrition was undoubtedly due to faulty health and food habits, want of rest, and overfatigue either singly or combined. Many of these children from the age of 6 years onwards never went to bed until 9 or 10 o'clock at night.

Faulty food habits were found not only in this group of children, but also in many of the others, and they were practically always associated with other factors, such as over fatigue and poor mothering generally. We found that although sufficient money was spent on food, it was badly spent and full value was not obtained from the outlay.

In several cases both parents were at work, and the child had to fend for himself for the mid-day meal, which usually consisted of bread and butter. We also found that meals were served at irregular intervals, but the most important factor was the total disregard paid by the mother to food values.

One outstanding fact was that the diet of these children consisted almost entirely of articles which required no cooking. Where the mother is employed outside the home, the difficulty of providing properly cooked meals can be appreciated, but in the cases now under review no such excuse could be offered. The cause was either ignorance or laziness.

4 of the children had tea and cake for breakfast and 2 were frequently given cream cakes and custard pies at this meal. 2 others had bread and butter and fish paste habitually for breakfast. Dinner in practically all the cases consisted of either bread and butter alone, or in addition one of the following,—fish paste, tinned salmon, german sausage, or corned beef. Several of the children had bread and butter only for every meal, and this unbalanced diet would be enough to cause malnutrition, but lack of nutriment was enhanced by failure of appetite due to the monotonous dietary.

No attempt seems to have been made to vary the diet according to the seasonal supply of a particular food. At the time of year when this enquiry was begun, eggs cost less than 1d. each locally, yet in very few cases were they ever included in the diet.

Wholesome inexpensive articles of food, such as fresh herrings, were seldom found in the diet, probably because of the necessity of cooking. More than half of the undernourished children had no milk in the diet except when it was taken in tea.

In every case, the state of affairs was explained to the parents, and they were asked to co-operate with us in trying to improve the condition of the child. Suggestions were made regarding more rest for the child, the inclusion in the diet of foods of high food value, and the correction of faulty food habits, such as irregular meals, bolting of food, drinking with meals, etc., and they were urged to have physical defects, such as carious teeth, dealt with.

It was decided to provide morning milk and dinner at school to certain necessitous children, while other malnourished children were also provided with milk at school at the expense of their parents.

In no case has a child received free milk or meals without the parents being interviewed, and a thorough physical examination being carried out, and physical defects remedied. Carious teeth have been dealt with, mouth-breathers investigated and suitable treatment suggested, in fact what began as an investigation into nutrition has now grown into a nutrition Clinic in the broad sense.

In the early days of the enquiry, it was realised that the standard of weight for height could not be used as a hard and fast rule, but that the general physical condition of the child must be taken into account. We therefore began to include children who showed symptoms of fatigue, anaemia, enlarged glands in the neck, and other signs of debility.

All the children who are being provided with meals and milk, as well as all the school children who are considered to be undernourished, are weighed and measured at the Clinic once each month. Certain children have been added to those on the list of free meals from time to time, and in certain cases we have had to waive altogether the weight for height standard, and provide meals for the children temporarily, where they were obviously needed owing to lack of money in the home.

Six months after the first examination and the commencement of school meals, the children were all examined again and any progress noted. Many of the children on free meals belong to a floating population as they discontinue school meals when home circumstances improve.

We have chosen for special mention children who were under our care continuously during the first 6 months after the scheme came into operation. There were 80 such children receiving free meals and milk. In addition 2 received meals only, and 11 received milk only. 67 of these children had gained in weight satisfactorily and were better in every way.

During the August holiday, 15 children actually lost weight, but one month after recommencing meals they had all gained weight.

4 of the children had not gained weight at all. One of these suffered from a severe form of heart disease and in spite of his failure to gain there was a definite general improvement. No cause for the stationary condition could be found in the other 3 but they still went to bed far too late and fatigue was probably the cause of the failure to gain.

9 children continued to lose weight, and the reason appeared clear in most cases. 3 of them were obviously neglected. They were small children who were sent to school in a dirty and ragged condition and there was no home care. Another girl who was in a bad general condition was found to return home after her school dinner in order to run errands, and she was kept at home one day weekly for housework. Her mouth and teeth were in a very bad condition, and the mother refused dental treatment. The homes were visited and the children kept under stricter supervision, and in all cases some improvement resulted.

3 children had lost weight slightly and we could not account for the loss. The parents were very poor, but were doing their utmost for the children and were most anxious to co-operate with us. We managed to send one of these children to the sea for a fortnight during the summer and he began to improve from that time.

One child was frequently absent from school and we had some difficulty in securing a record of his weight. The last child was a girl who was receiving meals and milk and was gaining until the summer holidays. The parents refused to allow the meals when the schools re-opened.

All the children who have failed to gain, or who have lost weight, have been re-examined at intervals, and the parents interviewed at the Clinic or the home visited.

11 of the children were having milk only, as their parents were able to provide dinner. 9 of these were putting on weight, one was losing, and the weight of the other was stationary. The parents of the last 2 cases were told of this, and urged to allow the children to remain for dinner.

In 2 cases meals only were supplied, as the children could not be persuaded to drink milk at school. Both gained well.

Another child was considered to be necessitous, but the mother refused the offer of meals and milk when the scheme was started. This child however was found to have gained in weight each month, and the mother was providing meals of higher food value.

12 children were considered undernourished, but were not necessitous. The parents were interviewed individually, and the diet, food habits, and health habits of the child discussed. In many cases, diets of higher food value were suggested, defects were corrected, and more rest at home, and sometimes also at school, was advised.

Our efforts were evidently responded to, for all these children gained weight steadily and were better in every way.

During the year, 155 children received milk and dinners. 3 children received dinners only, and 12 received milk only.

Each malnourished child is weighed monthly and a record kept. Any loss of weight, or failure to gain is noted, and the child is brought up for review again.

The meals are prepared at the various Cookery Centres at the schools by the Domestic Science Mistresses and their pupils, and our acknowledgements and thanks are due to these Mistresses for their interest, enthusiasm, and very hard work, without which the working of the scheme would have been impossible.

Below we give a list of the Centres at which meals are provided, together with the number of meals and the number of bottles of milk supplied during the year.

Number of Free Meals supplied at the Various Centres—January to December, 1932.

Acton Wells	644	Priory	1869
Beaumont Park	2647	Southfield	880
Central	761		
John Perryn	2568	Total	9369

Number of bottles of Milk supplied at the Schools.

Acton Wells Senior	81	John Perryn Junior	797
Acton Wells Junior	242	John Perryn Infants	1100
Acton Wells Infants	438	Priory Boys	327
Beaumont Pk. Senr. Girls	223	Priory Girls	304
Beaumont Pk. Junr. Girls	219	Priory Infants	270
Beaumont Pk. Infants	308	Rothschild Junior	90
Berrymede Junior Boys	626	Rothschild Infants	350
Berrymede Junior Girls	1344	Southfield Infants	5
Berrymede Infants	2094	Turnham Green R.C.	425
Central	104		
Derwentwater Junior	111		
Derwentwater Infants	186	Total	10,353
John Perryn Senior	709		

Otorrhoea.

During the year, 77 children were examined at the Clinic on account of ear disease. In the majority of cases the children were sent up to the Clinic on account of discharging ears, the discharge being due to disease of the middle ear.

An analysis of the figures will give a clear idea of the conditions found, and the treatment which was considered appropriate.

5 of the cases were acutely ill with middle ear disease at the first attendance. In 2 of these cases the infection had already spread to the mastoid and an immediate operation was necessary. These cases were referred to the family Doctor, and through him to Hospital, where they were operated on. The other 3 cases were sent home, and the parents advised to call in a doctor. All these cases were cured.

The remaining cases were all cases of middle ear disease and there was a perforation in the drum head. Our method of dealing with these cases needs a little explanation.

We are convinced that the most important point in the treatment of these ear conditions is the attention given to the external auditory meatus during the first week of the discharge. The influence that care of the external auditory meatus has upon the middle ear is indirect.

(1) The removal of discharge from the meatus leaves room for fresh discharge to take its place.

(2) The toilet of the meatus prevents the secondary infection of the middle ear by the organisms present in the external ear.

Inflammation of the middle ear becomes chronic when a second microbe gets in, and the most frequent source of this secondary infection is from the skin of the external ear. The organisms require moisture in which to grow, and their growth is prevented by keeping the skin of the external ear dry and free from discharge. This part of the treatment then, depends on getting the ear dry and keeping it so.

It was decided to make each child over 7 years of age take a part in the treatment of his ear disease. It was uphill work and occasionally disheartening, but the results have justified our faith in the intelligence of the school child, and confirmed our views on the cause of the chronicity, in many cases, of middle ear disease.

58 cases were referred to the Clinic for treatment. Each child over 7 years was taught to make mops for himself by twiddling pieces of cotton wool firmly round special sticks, and then by means of these mops to dry his ear thoroughly. He was also told to do this at home at least 4 times a day, scrubbing his hands before and after dealing with his ears, and burning the mops after they had been used.

There was a little difficulty in getting the scheme to work at first, chiefly because the children did not want to be bothered, and in some cases because the parents were afraid of the child doing some damage to his ears.

At first, the ears of these children were examined ~~twice~~ each week at the Clinic, and very soon they understood that ~~they~~ were expected to come up with no discharge in their ears at all. A few children who were rather refractory were made to come ~~daily~~ and in 2 or 3 cases we had to ask one of the parents to come ~~along~~ in order to explain the matter to them and insist on the ~~treatment~~ being carried out. Finally the scheme was firmly established.

58 cases attended the Clinic for treatment. 5 cases were acute as mentioned above and were referred elsewhere. 11 were fresh cases of transient ear discharge which cleared up very quickly on routine treatment. In 32 cases the ear discharge had been present from a week to 3 months. In 5 of these cases there was a considerable degree of external otitis and the ear ~~disease~~ ceased very soon after this condition had been cured.

The method of dealing with these cases was as follows. On the first attendance at the Clinic, the ear was cleaned out with a little peroxide of hydrogen for the purpose of examining the drum head. The condition of the drum head was noted on the medical card. The ear was then dried out with a little methylated spirit and the external meatus lightly coated with Ung. Hyd. Ox. Flav. B.P. The child was then instructed in mopping his ear and was given some of the special sticks to take home. This procedure was followed on each subsequent visit of the child to the Clinic and the improvement noted until finally the child was discharged. The 32 cases were cured.

There were 11 old cases in whom the discharge had been present for over 6 months. These in turn were made to come up daily for a week, some of them for longer until they were well on the way to recovery and were carrying out the treatment faithfully.

3 of the children were too young to treat themselves and were done by their parents. One child had a large polypus protruding through the perforation in the drum head and was referred to Hospital for curettage.

4 of the cases had a severe and offensive external otitis which appeared to be chiefly responsible for the discharge and they cleared up on the routine treatment of dry mopping but with the Ox Flav. applied 4 times daily.

In one child who was very resistant and had a large old perforation, we instilled silver nitrate once daily for 3 days and then carried on with the routine treatment. The discharge ceased and the perforation is practically healed.

In one child removal of Tonsils and Adenoids was considered necessary in view of their unhealthy nature.

All these cases are now well.

10 cases still continue to have ear discharge. 6 of these cases are probably due wholly to neglect. They are very young children and attend the Clinic only occasionally and always have to be fetched. Their ears are always in an extremely dirty condition. The parents have been visited time and again, but improvement only results for a short time. In 3 cases the perforation in the drum head is small and there is insufficient drainage from the middle ear. A secondary paracentesis would probably help in clearing these cases, and in one of them removal of Tonsils and Adenoids has also been suggested but the parents refused the operation. We do not feel justified in suggesting further operative measures until secondary paracentesis has been performed.

The last case is a small boy who is now nearly well. He is a child whom we had difficulty in getting along to the Clinic. On examination he was found to have a piece of paper firmly wedged against the drum head causing irritation and infection.

On the whole these results are satisfactory considering the short time that the scheme has been in operation. We were helped of course, to a very large extent, by the fine summer. The parent of every child attending the Ear Clinic was asked to send the child out into the sunshine as much as possible, and to see that the child ran about, in order to improve the circulation. Many of them responded by allowing sun bathing.

Our thanks are due to the teaching staff who have given us every assistance. We realise how trying it must be to allow a child to miss a class daily for a week in order to come to the Clinic, but we believe that in treating these cases intensively from the beginning we are preventing the chronic ear case which is a constant source of offence in a classroom.

RETURN OF EXCEPTIONAL CHILDREN.

On Table 3 is given a return of all exceptional children in the area. The figures in many instances are the same as those given in last year's report, but the following notes give further information on the cases.

Multiple Defects.

One boy who is mentally defective and is also suffering from tuberculosis of the bones of foot and hand, is resident in the Stanmore branch of the Royal National Orthopaedic Hospital. The second boy, who is also a mental defective, suffers from deformity of the spine and chest, and birth palsy. He is in attendance at the Acton Special (M.D.) School. The third case, a girl, is blind and mentally defective. She was at Swiss Cottage Blind School, but was discharged from there on account of her mental defect and an increasing tendency to fits. She has been notified to the Board of Education, and is now awaiting admission to a suitable school or home.

Blind.

Two boys attend schools maintained by the London County Council. One boy suffering from a high degree of myopia attends a private school, another boy suffering from optic atrophy attends Southfield Senior Boys' School, while a third partially blind child, a girl, is being taught at home.

Deaf.

One girl is at Oak Lodge Residential School, and 2 others attend the Ackmar Road Special School. Two boys who have recently attained the age of 7 years, are still in attendance at elementary schools but are awaiting admission to a special school.

Epileptics.

One boy was in December at the Lingfield Colony for Epileptics. This child has given us a great deal of trouble, and one month after admission to Lingfield his mother removed him and refused to allow him to return. Arrangements have now been made for the child to be taught at home. Another severe case, a girl, is at home awaiting admission to the Colony.

Two mild cases, a boy and a girl, are in attendance at the ordinary elementary schools.

Tuberculosis.

Two children, a boy and a girl, suffering from active pulmonary tuberculosis are respectively at Harefield and at

Brompton. Two boys suffering from tubercular glands are at public elementary schools. One boy suffering from abdominal tuberculosis is at a sanatorium at Lymington, while three boys suffering from tuberculosis of bones and joints, are at certified Hospital schools at Margate. One girl who has been at the Treloar Cripples' Home at Alton is now at home.

Crippled Children.

One girl is at St. Mary's Home, Dover. Two boys and one girl attend Physically Defective Schools maintained by the London County Council. Seven boys and three girls with a minor degree of deformity attend the public elementary schools, and 1 girl with severe birth palsy is being retained in an Infants' department until a transfer can be arranged to a P.D. School.

Heart Disease.

Two boys and two girls are at Certified Hospital Schools. One girl is at home, under the care of the family doctor.

DEFECTS TREATED.

Report of the School Oculist.

The work of the Ophthalmic Clinic has been carried on regularly during the year. Last year the Board of Education circulated a report of the Committee of Inquiry into problems connected with the prevention of defective eyesight in school children. As an initial attempt to deal with the large amount of work involved, we suggested that a more thorough and searching eye test at the routine medical inspection should be made, and that the younger children should have their vision tested more regularly.

These recommendations have resulted in a considerable increase of work at the Ophthalmic Clinic. Over 100 more children have been examined than in the previous year, the parents advised as to the care of their eyes, and, where necessary, glasses prescribed. These extra examinations have been mainly among the younger children and the parents have been asked to return with the children to the Clinic for re-examination sooner than formerly. Treatment at any early age is most necessary in the prevention of serious defects of vision in later life.

In addition, 7 cases of external eye disease have been continuously treated at the Clinic, one being sent into the West Middlesex Hospital for more thorough treatment than was possible at home.

Two mothers from the Welfare Centres have been examined and glasses provided, and 13 babies from centres have been treated, mainly for early squint.

(Sd.) G. BANHAM.

REPORT OF THE SCHOOL DENTAL SURGEON.

8,261 school children were examined during the year, and 5,036 of these were referred for treatment.

These figures show an increase on last year. The number of cases actually treated has, however, decreased. Probably the chief factor governing this decrease was a change in the scale of charges which increased the payment for the bulk of our patients, with the effect of slightly raising the number of refusals, although these are fewer than in 1930. I understand that steps are being taken to remedy this.

The epidemics of Scarlet Fever and Diphtheria had also an unfortunate influence on the attendance for treatment.

In spite of this however, the number of permanent fillings has increased, showing that more conservative work is being done on the permanent dentition. The average number of extractions per child remains about the same.

It is gratifying to note that the percentage of children who do not require treatment, shows an increase of about 2% on 1931.

The number of parents present at inspections is increasing, and in some districts the general condition of the childrens' mouths is improving considerably.

Treatment for mothers and infants from the Welfare Centres has been continued throughout the year, and there is a slight increase in the number of mothers and a decrease in the number of infants dealt with.

The following are the figures for the Welfare work:—

Number of mothers examined	....	....	39
" " " referred for treatment	....	....	39
" " " treated	....	....	49
" " infants examined	....	....	171
" " " referred for treatment	....	....	114
" " " treated	....	....	147
" " Temporary Fillings	....	....	25
" " " Extractions	....	....	360
" " Permanent Fillings	....	....	21
" " " Extractions	....	....	296
" " Dressings—Permanent teeth	....	....	13
" " " Temporary teeth	....	....	28
" " Scalings and Gum Treatment	....	....	9
" " Anaesthetics (N20)	....	....	191
" " Dentures supplied	....	....	14
" " Attendances	....	....	281

The usual lectures have been given at the Welfare Centres, and the attendances were better than in the previous year.

I should like to add a word of warm appreciation of the indispensable help and co-operation of the Head Teachers and the Clinic staff.

(*Sd.*) P. H. SLATER

CONTROL OF INFECTIOUS DISEASES.

There was a marked increase in the incidence of most of the infectious diseases. A fuller report upon these diseases will be found in the report of the Medical Officer of Health, but certain details which concern the attendance at the schools more directly, are given here.

It is disappointing that so little progress can be reported in the prevention of outbreaks of infectious diseases in schools. it is true that we have modified our methods, and by such means we have reduced the mortality from the diseases but with the possible exception of Diphtheria and Small-pox, we have not discovered the means of preventing the spread of the principal infectious diseases in the schools.

During the early part of the year, there was an outbreak of Measles in our districts, and it is doubtful if our efforts were in any way successful in limiting the spread of the epidemic. We have gained considerable knowledge of the epidemiology of the disease, and as a result we have avoided many of the mistakes which were formerly made. We have given up school closure, as we know that such a procedure is useless. Even when it is resorted to, it was more for financial reasons than with any hope of ending an outbreak. An epidemic may be slowed down in its progress, but it cannot be definitely stopped.

An epidemic of Measles begins when sufficient children have accumulated who have not previously had the disease. It was formerly thought that the outbreak terminated when this surplus of susceptibles has been depleted, but this is doubtful, or at any rate, it does not follow that the depletion occurs because all the susceptibles have suffered from an attack of Measles. An epidemic of Measles may result in a transient immunization of some of the contacts, which may last about a year, whilst it is known that a clinical attack usually confers immunity for a lifetime.

Our methods depend upon an appreciation of the importance of these facts. Most of the children in the Junior and Senior departments have already suffered from an attack of Measles, and we find that the disease does not spread in these departments. Junior and Senior contacts who have had Measles are not excluded from school attendance, and so we are able to concentrate our attention on the Infants' departments.

The earlier cases were reported in January, 1932. On the re-opening of the schools after the Christmas holidays three cases were reported, one from Silver Crescent, one from Kingswood Road, and one from Weston Road. All attended the Infants' department of the Rothschild Road School, and had been taken ill towards the end of December, the rash in one of the cases appearing on December 28th, and in the other two on January 1st.

From the distribution of the 3 cases and the history, the source of the infection would probably be in school, but on enquiry no children had been absent with any suspicious symptoms in the week ending December 19th, which would be the period of infection of the 3 cases.

In the second week in January two other cases occurred, both children lived in Antrobus Road, and were pupils at Rothschild Infants' School. These two cases, though, were not infected in school, as the probable date of infection would be the last few

days of December, or the early days of January, *i.e.*, during the school holidays. They were instances of home infection and were possibly infected by one of the 3 cases previously mentioned. Although the case was not traced, it appears probable that a mild unrecognised case occurred in the school during the week ending December 19th, and that the 3 cases which occurred in the holidays were the first crop. The first crop thus falling during the vacation, it was hoped that the second crop would not be a heavy one, and that an epidemic would be postponed for a few months.

Other cases however were reported in Rothschild Infants department, and in the week ending January 23rd, several cases occurred in Beaumont Park Infants department. During the Spring Term the outbreak spread to other schools, and before the end of the Summer all the schools had been attacked.

Whooping Cough was also prevalent during the year, but its greatest incidence was a little later than that of Measles. The serious aspect of the disease is still under-rated by the public, and very little attention has been paid to the disease in the field of public health.

At ages 0-5 years, Whooping Cough took fifth place during the decade 1921-30 in the list of causes of mortality. More school time is lost through Whooping Cough than through Measles, but more important than this, is the toll of impaired physique and the cardiac damage which cannot even be estimated. A question of educational interest is the possibility of psychological trauma in severe cases to which attention has recently been drawn. It is possible that the incessant terrifying paroxysms with their sense of impending suffocation may have a lasting effect upon the child.

Diphtheria.

In the Annual Health Report will be found an account of the outbreak of Diphtheria which occurred in the Autumn of the year. It is now recognised that Diphtheria is a disease which is largely associated with school life.

The usual swabbing of contacts and isolation of the patients was followed, but it was decided to offer immunisation to all those who desired to avail themselves of this method of protection.

A start was made in Southfield School and the following tables give the result of the Schick testing in the Southfield Road departments.

SOUTHFIELD SENIOR BOYS.

	Year	1a	1b	1c	2a	2b	3a	3b	Total
Positive		12	9	8	5	3	9	4	50
Negative		8	15	7	14	7	7	9	67
Total tested		20	24	15	19	10	16	13	117

Age groups of boys tested.

	Years	11	12	13	14	
Positive		23	14	9	4	
Negative		24	26	15	2	=57.2% Negative.

SOUTHFIELD JUNIOR MIXED.

	Standard	1	1b	2	2a	2b	3	3a	3b	4a	Total
Positive		27	15	21	23	23	27	21	19	20	196
Negative		3	4	9	8	6	2	5	8	13	58
Total tested		30	19	30	31	29	29	26	27	33	254

Age groups.

	Years	7	8	9	10	11	Total	
Positive		38	46	46	60	6	196	
Negative		5	15	12	20	6	58	=22.8% Negative.

SOUTHFIELD INFANTS.

	Class	1	2	3	4	5	Total
Positive		23	17	14	22	19	95
Negative		7	5	3	1	1	17
Total tested		30	22	17	23	20	112

Age groups.

	Years	4	5	6	7	Total	
Positive		17	31	41	6	95	
Negative		1	2	10	4	17	=15.1% Negative.

The results obtained were very similar to those obtained in other districts. The number of positive re-actors gradually diminished as the ages of the children increased. In the Infants department the percentage of positive re-actors is so high as to render it almost unnecessary to carry out the test. In some districts the preliminary Schick-testing of children under 7 years of age has been abandoned.

In spite of the suggestion that the immunisation could be arranged for privately, only 14 took advantage of the opportunity.

The first immunisation was given on the 17th October, the second on the 2nd November, and the third on the 30th November. It is satisfactory to note that in no instance did any of the pupils who were immunised in the school suffer any adverse reaction, local or constitutional.

Although protection is not expected until a certain period has elapsed after the 3rd immunisation, there have been only 6 cases of Diphtheria notified from the school, and these have all been pupils who were absent at that time or whose parents objected to immunisation.

The pupils at the Acton County School were Schick Tested on November 14th and 16th. It was hoped that the work at the County School would be done by the County Council, but the County Authorities stated that the responsibility was not theirs. The Ministry of Health expressed the opinion that the responsibility lay upon the local sanitary authority. The results in the County School were as follows:—

COUNTY SCHOOL.

	Form	1	1b	2a	2b	3a	3b	4a	4b	5	6	Total
Positive		12	12	15	15	13	17	11	15	27	4	141
Negative		14	18	9	9	9	9	13	8	18	9	116
Total tested		26	30	24	24	22	26	24	23	45	13	257

Age groups.

	Years	11	12	13	14	15	16	17	Total
Positive		11	39	25	31	14	17	4	141
Negative		16	30	15	24	16	11	4	116 = 45.1% neg.

The next school dealt with was the Derwentwater Infants' and Junior departments. Five cases of Diphtheria occurred in October and November in the Infants' department and one in the Junior department.

In the Derwentwater Infants' department, it was not considered necessary to Schick test the children, and 109 pupils received the first immunising dose on November 15th. The second immunisation took place on November 27th, and the third on December 20th. The Derwentwater Junior department was Schick tested on 26th November and the immunisations were given on December 6th, and 20th, and January 26th, 1933.

The following is the table of the Derwentwater Junior results of Schick testing:—

DERWENTWATER JUNIOR.

Standards	1a	1b	2a	2b	3a	3b	4a	4b	5a	5b	Total
Positive	15	11	12	14	9	14	11	13	14	15	128
Negative	7	9	10	11	12	9	9	12	9	8	96
Total tested	22	20	22	25	21	23	20	25	23	23	224

Age Groups.

Years	7	8	9	10	11	Total
Positive	26	28	42	25	7	128
Negative	17	20	30	21	8	96 = 42.8% Negative.

The next school dealt with was the John Perryn. In September 2 cases occurred in the John Perryn Infants', in October one, and one in the Senior department. In November 2 cases occurred in the Infants', 1 in the Junior, and 3 in the Senior. In December 2 cases occurred in the Senior department. The first inoculation took place on the 19th December, the second on the 27th January, 1933, and the third on the 24th February, 1933. Since December we have only had one case from the John Perryn School. This was in a child who had received one inoculation. The disease was mild and the patient was soon out of hospital.

The Schick test results at John Perryn Junior are given below:—

JOHN PERRY JUNIOR.

	Standards	1a	1b	2a	2b	2c	3a	3b	3c	Total
Positive		18	11	13	9	5	15	5	6	82
Negative		5	10	4	6	9	10	11	9	64
Total tested		23	21	17	15	14	25	16	15	146

	Age Groups	8	9	10	11	Total
Positive		27	26	27	2	82
Negative		13	20	25	6	64 = 43.8% Negative.

In the Rothschild Infants' School the children were not immunised at the School, but about 50 of them came to the Clinic and were immunised there before the Christmas holidays. 4 cases of Diphtheria had occurred there in October, 7 in November, and one in December. 4 cases which occurred in Rothschild Infants' department during February, 1933, were among children whose parents had refused immunisation in the Autumn. 2 of these proved fatal. One case occurred in this school in November in which the child had received one immunisation. The case was a very severe one but the child recovered. Immunisation was again offered at Rothschild Infants' department in February 1933, and larger numbers of parents took advantage of this offer. At the same time Schick testing and immunisation took place in the Junior department.

In Beaumont Park, 2 cases occurred in September, 1 in October, and 1 in November. In January 1933, 3 cases occurred, and Schick testing and immunisation commenced on the 6th February.

In Turnham Green R.C. School, one case occurred in October, one in November, and 2 cases early in the New Year. Schick testing and immunisation took place in March.

In the Junior departments of Berrymede School, one case occurred in October and one in November, and in the Infants' department, one case in November, and one in January, 1933. Schick testing and inoculation was commenced at this school in February.

It was not possible in 1932 to arrange for the work in all the schools, but many requests were received from parents that their children should be Schick tested and immunised. It was therefore decided to carry out the work for these, and also children from the Welfare Centres, on Saturday mornings at the School Clinic, and at these sessions 228 children were Schick tested, and 800 immunisations were given.

The following table gives the school distribution of Schick testing and immunisation. It has not been possible to tabulate the results as they stood on the 31st December, but these figures show the amount of work done up to mid-February.

<i>School.</i>	<i>Schick Schick tested.</i>	<i>Positive re-actors.</i>	<i>Number of attendances for</i>		
			<i>1st Inoc.</i>	<i>2nd Inoc.</i>	<i>3rd Inoc.</i>
Acton Wells Senior	3	1	1	1	1
Acton Wells Infants	2	2	7	7	5
Beaumont Pk. Senr. Girls	9	6	7	6	4
Beaumont Pk. Junr. Girls	122	52	52	10	6
Beaumont Pk. Infants	3	1	77	11	8
Berrymede Junior Boys	195	90	72	5	5
Berrymede Junior Girls	182	83	80	5	5
Berrymede Infants	1	1	107	1	—
Central	5	4	5	3	3
Derwentwater Junior	242	135	136	130	121
Derwentwater Infants	1	—	130	128	122
John Perryn Senior	2	2	3	1	1
John Perryn Junior	166	93	86	69	2
John Perryn Infants	4	2	202	147	4
Priory Girls	4	3	3	2	2
Priory Infants	4	4	7	6	6
Rothschild Junior	137	63	61	8	8
Rothschild Infants	32	23	77	45	33
Southfield Senior Boys	129	56	55	55	52
Southfield Junior	264	206	198	195	188
Southfield Infants	121	104	107	102	86
Turnham Green R.C.	1	—	1	1	—
Acton County	269	151	138	133	126
Chiswick County	4	3	3	2	2
Other Schools	19	18	6	4	4
Welfare Children	1	—	142	107	83
Scarlet Fever Patients in Isolation Hospital	—	—	146	128	103
	1922	1102	1909	1312	980

It will therefore be seen that up to the 18th February, 1922 children had been Schick tested. Of these 1102 were positive, and 820 were negative re-actors.

Of these 1102,—36 refused inoculation or went to their own doctors, leaving 1066 whom we immunised. 21 refused the second inoculation, and 16 refused the third. In addition, 843 children were immunised without the preliminary Schick testing.

Distribution of Diphtheria.

The school distribution of cases of Diphtheria was as follows:

Acton Wells	3	Rothschild	15
Beaumont Park	11	Berrymede	6
Central	2	Southfield	24
Derwentwater	7	Turnham Gn. R.C.	6
John Perryn	12		—
Priory	3		89
			—

55 Diphtheria patients, and 225 contacts were examined before their return to school.

Scarlet Fever.

There was a considerable increase in the incidence of Scarlet Fever during the year. The cases were distributed as follows:—

Acton Wells Mixed	2	Rothschild	55
Acton Wells	9	Berrymede	56
Beaumont Park	87	Southfield	30
Central	15	Turnham Gn.R.C.	16
Derwentwater	31	Acton Special	1
John Perryn	24		—
Priory	35		361
			—

274 Scarlet Fever convalescent patients, and 795 contacts were examined before returning to school.

EMPLOYMENT OF CHILDREN.

The following Tables give the number of children employed in the various registered occupations.

TABLE SHOWING THE NUMBER OF CHILDREN ATTENDING ACTON SCHOOLS EMPLOYED IN THE VARIOUS REGISTERED OCCUPATIONS AS ON THE 31st DECEMBER, 1932.

SCHOOL.	Delivering Goods or Parcels		Delivering Newspapers		Delivering Milk		TOTALS	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Acton Wells	1	....	13	....	2	....	16	....
John Perryn	3	....	2	....	1	....	6	....
Central	5	....	15	....	6	....	26	....
Acton County	3	....	5	....	4	....	12	....
Roman Catholic	....	....	2	....	....	....	2	....
Southfield	16	....	20	....	1	....	37	....
Beaumont Park	....	....	....	1	....	....	....	1
Priory	29	....	28	....	13	....	70	....
TOTALS	57	....	85	1	27	....	169	1

TABLE SHOWING THE NUMBER OF CHILDREN EMPLOYED OUTSIDE SCHOOL HOURS AS ON
31st DECEMBER, 1932.

SCHOOL.	REGISTERED OCCUPATIONS IN ACTON.		
	Ages. 12 — 13	Ages. 13 — 14	TOTALS 12 — 14
Acton Wells	6	10	16
John Perryn	1	5	6
Central	10	16	26
Acton County	2	10	12
Roman Catholic	1	1	2
Southfield	13	24	37
Beaumont Park	1	—	1
Priory	24	46	70
TOTALS	58	112	170

TABLE SHOWING THE DISTRIBUTION OF ALL CHILDREN EMPLOYED DURING THE PERIOD 1st JANUARY, 1932, TO 31st DECEMBER, 1932.

SCHOOL.	BOYS									GIRLS		
	John Perryn	Acton Wells	Central	Priory	Southfield	Roman Catholic	Acton County	Others	Special	Totals	Beaumont Park	Totals
(1)—REGISTERED OCCUPATIONS :—												
(a) Carrying or delivering goods or parcels	5	3	12	53	31	1	6	5	....	116	....	....
(b) Delivering newspapers	3	19	32	50	35	5	8	10	....	162	1	1
(c) Delivering Milk	3	3	7	18	5	....	6	3	1	46	....	....
(2)—EMPLOYED IN OTHER AREAS :—												
TOTALS	11	25	51	121	71	6	20	18	1	324	1	1
CORRESPONDING FIGURES FOR 1931	9	25	57	142	93	8	16	16	....	366	....	....

EXAMINATION OF TEACHERS AND OFFICE STAFF.

7 Candidates were examined during 1932.

CONVALESCENT HOMES AND COUNTRY HOLIDAYS.

14 children (of whom 2 were granted free places), were sent to the Middlesex Edward VII. Memorial Hostel, Bexhill.

MOTHERCRAFT CLASSES.

The schools which sent classes to the Day Nursery were as follows:—

Acton Wells	....	6	Priory	....	....	5
Beaumont Park	....	6	Turnham Green R.C.			2
Central	....	5				—
John Perryn	....	5			Total	29
						—

MEDICAL INSPECTION RETURNS.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections:—

Entrants	....	....	....	....	858
Second Age Group	....	....	....	....	890
Third Age Group	....	....	....	....	1006
				TOTAL	2754

Number of other Routine Inspections 22

B.—OTHER INSPECTIONS.

Number of Special Inspections	....	....	....	2479
Number of Re-Inspections	....	....	....	2297
			TOTAL	4776

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1932.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS.		SPECIAL INSPECTIONS.	
	No. of Defects.		No. of Defects.	
	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment.	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment.
(1)	(2)	(3)	(4)	(5)
Malnutrition	26	85	176	4
Skin:—				
Ringworm: Scalp	1	—	9	—
Body	1	—	28	—
Scabies	6	—	32	—
Impetigo	6	—	401	—
Other Diseases (Non-Tuberculous)	10	—	103	—
Eye:—				
Blepharitis	15	—	86	—
Conjunctivitis	2	—	34	—
Keratitis	—	—	1	—
Corneal Opacities	—	—	1	—
Defective Vision (excluding Squint)	108	—	78	—
Squint	9	—	10	—
Other Conditions	2	—	56	—
Ear:—				
Defective Hearing	9	—	—	—
Otitis Media	11	—	5	—
Other Ear Diseases	7	1	91	10
Nose and Throat:—				
Enlarged Tonsils only	—	—	—	8
Adenoids only	—	—	—	4
Enlarged Tonsils and Adenoids	42	3	15	4
Other Conditions	2	—	16	201
Enlarged Cervical Glands Non-Tuberculous)	—	89	—	5
Defective Speech	4	—	—	—
Heart and Circulation:—				
Heart Disease: Organic	—	8	—	—
Functional	—	37	—	—
Anaemia	—	9	—	1
Lungs:—				
Bronchitis	—	3	—	1
Other Non-Tuberculous Diseases....	—	8	—	—

TABLE II.—Continued.

DEFECT OR DISEASE.	ROUTINE INSPECTIONS.		SPECIAL INSPECTIONS.	
	No. of Defects.		No. of Defects.	
	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment.	Requiring Treatment	Requiring to be kept under observation, but not requiring Treatment.
<i>Tuberculosis :—</i>				
Pulmonary :				
Definite	—	—	3	—
Suspected	—	3	—	—
Non-Pulmonary :				
Glands	—	—	2	—
Spine	—	2	—	—
Hip	—	—	1	—
Other Bones and Joints	—	—	—	—
Skin	—	—	—	—
Other Forms	—	—	1	—
<i>Nervous System :—</i>				
Epilepsy	—	2	—	—
Chorea	2	1	—	—
Other Conditions	—	1	—	—
<i>Deformities :—</i>				
Rickets	—	13	—	—
Spinal Curvature	—	3	—	—
Other Forms	—	11	—	—
Other Defects and Diseases (excluding Uncleanliness and Dental Diseases)	6	35	998	—

B.—NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

GROUP	NUMBER OF CHILDREN		Percentage of Children found to require Treatment
	Inspected	Found to require Treatment.	
1	2	(3)	(4)
<i>CODE GROUPS :—</i>			
Entrants	858	55	6.4%
Second Age Group	890	86	9.6%
Third Age Group	1006	79	7.8%
Total (Code Groups)	2754	220	7.9%
Other Routine Inspections	22	—	—

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

	Boys.	Girls.	Total.
Multiple Defects	2	1	3
BLIND —(including partially blind):			
Suitable for training in a School for the totally blind:			
At Certified Schools for the Blind	2	—	2
At Public Elementary Schools	—	—	—
At other Institutions	—	—	—
At no School or Institution	—	—	—
Suitable for training in a School for the partially Blind:			
At Certified Schools for the Blind or Partially Blind	—	—	—
At Public Elementary School	1	—	1
At other Institutions	1	—	1
At no School or Institution	—	1	1
DEAF —(including deaf and dumb and partially deaf):			
Suitable for training in a School for the totally deaf or deaf and dumb:			
At Certified Schools for the Deaf	—	3	3
At Public Elementary Schools	2	—	2
At other Institutions	—	—	—
At no School or Institution	—	—	—
Suitable for training in a School for the partially deaf:			
At Certified Schools for the Deaf or Partially Deaf	—	—	—
At Public Elementary Schools	—	—	—
At other Institutions	—	—	—
At no School or Institution	—	—	—
MENTALLY DEFECTIVE:			
Feeble-minded:			
At Certified Schools for Mentally Defective Children	26	16	42
At Public Elementary Schools	—	—	—
At other Institutions	—	—	—
At no School or Institution	—	—	—
Notified to the Local Mental Deficiency Authority during the year	—	—	—
EPILEPTICS:			
Suffering from severe epilepsy:			
At Certified Schools for Epileptics	1	—	1
At Certified Residential Open Air Schools	—	—	—
At Public Elementary Schools	—	—	—
At other Institutions	—	—	—
At no School or Institution	—	1	1
Suffering from epilepsy which is not severe:			
At Public Elementary Schools	1	1	2
At no School or Institution	—	—	—
PHYSICALLY DEFECTIVE:			
Active pulmonary tuberculosis (including pleura and intrathoracic glands):			
At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	1	1	2
At Certified Residential Open Air Schools	—	—	—
At Certified Day Open Air Schools	—	—	—
At Public Elementary Schools	—	—	—
At other Institutions	—	—	—
At no School or Institution	—	—	—

Quiescent or arrested pulmonary tuberculosis (including pleura and intrathoracic glands):

At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	....	—	—	—
At Certified Residential Open Air Schools	....	—	—	—
At Certified Day Open Air Schools	....	—	—	—
At Public Elementary Schools	....	1	3	4
At other Institutions	....	1	—	1
At no School or Institution	....	—	—	—

Tuberculosis of the peripheral glands:

At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	....	—	—	—
At Certified Residential Open Air Schools	....	—	—	—
At Certified Day Open Air Schools	....	—	—	—
At Public Elementary Schools	....	2	—	2
At other Institutions	....	—	—	—
At no School or Institution	....	—	—	—

Abdominal tuberculosis:

At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	....	1	—	1
At Certified Residential Open Air Schools	....	—	—	—
At Certified Day Open Air Schools	....	—	—	—
At Public Elementary Schools	....	—	—	—
At other Institutions	....	—	—	—
At no School or Institution	....	—	—	—

Tuberculosis of bones and joints (not including deformities due to old tuberculosis):

At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	....	4	1	5
At Public Elementary Schools	....	—	—	—
At other Institutions	....	—	—	—
At no School or Institution	....	—	1	1

Tuberculosis or other organs (skin, etc.):

At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	....	—	—	—
At Public Elementary Schools	....	—	—	—
At other Institutions	....	—	—	—
At no School or Institution	....	—	—	—

Delicate Children, i.e., all children (except those included in other groups) whose general health renders it desirable that they should be specially selected for admission to an Open Air School:

At Certified Residential Cripple Schools	....	—	—	—
At Certified Day Cripple Schools	....	—	—	—
At Certified Residential Open Air Schools	....	—	—	—
At Certified Day Open Air Schools	....	—	—	—
At Public Elementary Schools	....	6	11	17
At other Institutions	....	—	—	—
At no School or Institution	....	—	—	—

PHYSICALLY DEFECTIVE (continued):

Crippled Children (other than those with active tuberculous disease) who are suffering from a degree of crippling sufficiently severe to interfere materially with a child's normal mode of life::

At Certified Hospital Schools	....	....	—	—	—
At Certified Residential Cripple Schools	....	....	—	1	1
At Certified Day Cripple Schools	....	....	2	1	3
At Certified Residential Open Air Schools	....	....	—	—	—
At Certified Day Open Air Schools	....	....	—	—	—
At Public Elementary Schools	....	....	7	4(1)	11(1)
At other Institutions	....	....	—	—	—
At no School or Institution	....	....	1	2	3

Children with heart disease, i.e., children whose defect is so severe as to necessitate the provision of educational facilities other than those of the public elementary school:

At Certified Hospital Schools	....	....	2	2	4
At Certified Residential Cripple Schools	....	....	—	—	—
At Certified Day Cripple Schools	....	....	—	—	—
At Certified Residential Open Air Schools	....	....	—	—	—
At Certified Day Open Air Schools	....	....	—	—	—
At other Institutions	....	....	—	—	—
At no School or Institution	....	....	—	1	1

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31st DECEMBER, 1932.
Treatment Table.

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which see Group V.)

DISEASE OR DEFECT.	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)
SKIN:			
Ringworm-Scalp	4	—	4
Ringworm-Body	22	6	28
Scabies	29	3	32
Impetigo	378	15	393
Other skin disease	94	6	100
(External and other, but excluding cases falling in Group II.).			
MINOR EYE DEFECTS	177	2	179
MINOR EAR DEFECTS	105	2	107
MISCELLANEOUS (e.g., minor injuries, bruises, sores, chilblains, etc.).	948	50	998
TOTAL	1757	84	1841

GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I.).

DEFECT OR DISEASE.	No. of Defects dealt with.			
	Under the Authority's Scheme	Submitted to refraction by private practitioner or at hospital, apart from the Authority's Scheme	Otherwise	Total
(1)	(2)	(3)	(4)	(5)
Errors of Refraction (including Squint) (Operations for squint should be recorded separately in the body of the Report)	426	11	—	437
Other Defect or Disease of the Eyes (excluding those recorded in Group I.).	7	—	—	7
TOTAL	433	11	—	444

Total number of children for whom spectacles were prescribed—

(a) Under the Authority's Scheme	....	....	....	329
(b) Otherwise	....	....	....	11

Total number of children who obtained or received spectacles—

(a) Under the Authority's Scheme	....	....	....	329
(b) Otherwise	....	....	....	11

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.
NUMBER OF DEFECTS.

Received Operative Treatment.			Received other forms of Treatment	Total number treated
Under the Authority's Scheme, in Clinic or Hospital	By Private Practitioner or Hospital, apart from the Authority's Scheme	Total		
(1)	(2)	(3)	(4)	(5)
59	5	64	—	64

TABLE IV.—Continued.

GROUP IV.—DENTAL DEFECTS.

1) Number of Children who were:—		(2) Half-days devoted to:—	
(a) Inspected by the Dentist:		Inspection	56
Aged:		Treatment	421
5— 673		Total	477
6— 818		(3) Attendances made by children for treatment	3822
7— 768		(4) Fillings:—	
8— 891		Permanent teeth	1703
9— 976		Temporary teeth	59
Routine Age Groups		Total	1762
10— 974		(5) Extractions:—	
11— 1029		Permanent teeth	770
12— 963		Temporary teeth	4018
13— 610		Total	4788
14— 193		(6) Administrations of general anaesthetics for extractions	2178
Total		7895	
Specials		366	
Grand Total		8261	
(b) Found to require treatment		5036	
Actually treated		2811	
		(7) Other operations:—	
		Permanent teeth	136
		Temporary teeth	133
		Total	269

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

Average number of visits per school made during the year by the School Nurses		12
Total number of examinations of children in the Schools by School Nurses		18301
Number of individual children found unclean:—		
Vermin and Nits		86
Slightly infested		597
Number of children cleansed under arrangements made by the Local Education Authority		2
Number of cases in which legal proceedings were taken:—		
(a) Under the Education Act, 1921.		—
(b) Under School Attendance Byelaws		—

STATEMENT OF THE NUMBER OF CHILDREN NOTIFIED DURING
THE YEAR ENDED 31st DECEMBER, 1932, BY THE LOCAL
AUTHORITY TO THE LOCAL MENTAL DEFICIENCY AUTHORITY

Total number of children notified 11

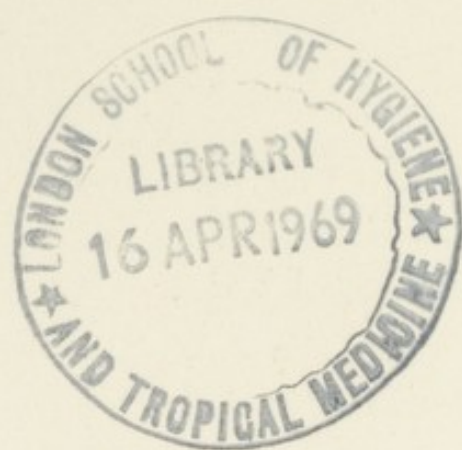
Analysis of the above Total.

DIAGNOSIS.				Boys. Girls.		
1.	(i) Children incapable of receiving benefit or further benefit from instruction in a Special School :					
	(a)	Idiots	....	....	2	1
	(b)	Imbeciles	....	....	2	1
	(c)	Others	....	....	—	—
	(ii) Children unable to be instructed in a Special School without detriment to the interests of other children :					
	(a)	Moral defectives	....	....	—	—
	(b)	Others	....	....	—	—
2.	Feeble-minded children notified on leaving a Special School on or before attaining the age of 16				1	—
3.	Feeble-minded children notified under Article 3, <i>i.e.</i> , "special circumstances" cases				—	—
4.	Children who in addition to being mentally defective were blind or deaf				—	1
GRAND TOTAL				....	5	6

We are,

Your obedient servants,

D. J. THOMAS,
N. G. HOWELL.



W1/69

