

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

Contributors

Acton (London, England). Borough Council.

Publication/Creation

[1928]

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ACT 30
1927

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1927.

BOROUGH OF ACTON

Acton, W.3.

July, 1928.

To the Mayor, Aldermen and Councilors

of the

LADIES AND GENTLEMEN,

ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR 1927.

ANNUAL REPORT
OF THE
MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1927.

MUNICIPAL OFFICES,

ACTON, W.3.

July, 1928.

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

LADIES AND GENTLEMEN,

I beg to submit the Annual Report for the year 1927 on the health of the Borough, together with the work of the Public Health Department.

The Report is submitted in accordance with Circular 834 of the Ministry of Health, which requires the Medical Officer of Health to make an Annual Report up to the end of December on the sanitary circumstances, the sanitary administration, and the vital statistics of the district, and shall furnish the Minister with as many copies of such report as may be required. The Circular also indicates the lines on which the Report is to be drawn and the minimum information which it shall contain.

On the surface the vital statistics do not appear so satisfactory as those of 1926. The death-rate and the infantile mortality are higher, but both are lower than those of England and Wales, and the death-rate is lower than that of London as well. The higher death-rate is probably due partly to an altered age-incidence of the population, and on a subsequent page figures are given to show that the average age at death has been very considerably raised during the past twenty years.

The district fortunately was free of Small-Pox during the year, but the unvaccinated condition of a large portion of the population is a matter of serious and anxious import.

In 1926, 10,146 cases of Small-Pox were notified in England and Wales and in 1927, 14,769 cases were notified. It is true that most of the cases have occurred in the North of England and that the disease has been of a very mild type, but

recently the disease has made its appearance in and around London. The possibilities of the spread of the disease in a district like ours are considerable; large numbers of persons come in and go out of Acton to work every day, and it is impossible for anyone to know whether he has been in contact or not with a person actually suffering from the disease. The only prophylactic measure is vaccination. Sir George Newman stated recently, "The experience of a century in all parts of the world shows that the best practicable method yet available for stamping out Small-Pox is vaccination."

Although the notifications of Scarlet Fever and Diphtheria were higher than those of 1926, neither disease assumed formidable proportions. One death occurred from each of the diseases. The question of active immunization against these diseases cannot therefore be said to be an urgent matter. In some districts in and around London, Diphtheria has recently been prevalent in a very virulent form, and the Schick method of immunization has been in use in Holborn, Deptford, Westminster and Battersea.

The number of deaths from Tuberculosis is lower, but the number of deaths from Cancer was higher.

The following table is a summary of the vital and other statistics for the year 1927.

| | | | | |
|--|------|------|-------|-----------------|
| Area of Borough | .... | .... | .... | 2,305 acres. |
| Population (Census 1921) | .... | .... | .... | 61,299 |
| Population (Estimated 1927) | .... | .... | .... | 63,750 |
| Number of inhabited houses (Census 1921) | .... | .... | .... | 11,820 |
| Number of families or separate occupiers, (Census 1921) | .... | .... | .... | 14,941 |
| Rateable Value | .... | .... | .... | £572,863 |
| Net produce of a penny rate | .... | .... | .... | £2,386 18s. 7d. |
| Total number of Births registered | .... | .... | .... | 1,026 |
| Legitimate | .... | .... | .... | 987 |
| Illegitimate | .... | .... | .... | 39 |
| Birth-rate per 1,000 inhabitants | .... | .... | .... | 16.09 |
| Number of Deaths | .... | .... | .... | 704 |
| Death rate per 1,000 inhabitants | .... | .... | .... | 11.04 |
| Number of Women dying in or in consequence of childbirth— | | | | |
| Sepsis | .... | .... | .... | 3 |
| Other causes | .... | .... | .... | 1 |
| Maternal Mortality per 1,000 births | .... | .... | .... | 3.9 |
| Deaths of Infants under 1 year of age:— | | | | |
| Legitimate 57; Illegitimate 5 | | | Total | 62 |
| Infant Mortality per 1,000 births | .... | .... | .... | 60 |

Deaths from :—

| | |
|---------------------------------|---|
| Measles (all ages) | 0 |
| Whooping Cough (all ages) | 2 |
| Diarrhoea (under 2 years) | 7 |

POPULATION.

The Registrar General estimates the population at the end of June 1927 to be 63,750, an increase of 710 on the estimated population of 1926. The estimate of 1926 was 70 less than that of 1925; so that the population of 1927 is estimated to be 640 more than that of 1925.

At the Census of 1921 the population of the district was 61,299. The Census of 1921 was not taken as usual in April, but was postponed to June 19th. Owing to the abnormally fine weather of that year, some holiday movement was already in progress in June, and the Registrar General made certain adjustments in the population of certain districts. The adjusted figure for Acton was 62,000. The estimated increase in the population since the Census is therefore 1750.

The longer the interval which has elapsed since the Census was taken, the less reliable, of course, are the estimates of a population. As a rule the estimates of the Registrar General are more correct than the local estimates. This may seem surprising. The intimate knowledge of local facts should make the local estimates more correct than those of the Registrar General, but the general tendency of all local estimates of population is towards an over-estimation of the number.

Between the autumn of 1921 and the autumn of 1927 there was an increase of 3,684 in the number of Parliamentary electors. On the former date there were 30,350, and on the latter, 34,034.

The number of new dwelling houses erected and occupied between June 30th 1926 and June 30th 1927 is not available, but in that period 476 new houses were brought into rating as well as 22 flats and 9 houses with shops.

POOR RELIEF.

I am indebted to Mr. Harmsworth, the clerk of the Guardians, for the figures relating to Poor Law Relief. The amount of out-door relief distributed in the Parish of Acton by the Guardians during the year ended December 31st, 1927 was as follows :—

| | |
|----------------------------|----------------|
| Ordinary Relief | £5,962 14 0½d. |
| Relief to Unemployed | £444 6 3d. |
| | <hr/> |
| | £6407 0 3½d. |

There is a decrease of £1,300 as compared with 1926, and over £2,000 as compared with 1925. The most marked drop was in the relief to unemployed, but 1926 was probably abnormal, on account of the general strike.

SOCIAL CONDITIONS OF THE DISTRICT.

In the Survey Report of 1925 an account of the general and social conditions was given, and no noteworthy change has taken place. As stated in last year's report, if any change has occurred, it has been a tendency towards industrialism. In the north west ward between North Acton and West Acton Stations on the Central London Railway, dwelling houses have been erected, and also in the north-east ward in East Acton. In the extreme north of the district factories have been erected.

Most of the dwelling houses which have recently been erected consist of two reception rooms and three bedrooms. Some houses are smaller, and consist of a kitchen, living-room and three bedrooms. The size of the rooms vary, but the usual area of the bedrooms ranges from 100 to 180 square feet. In most instances, the houses are for sale and not for letting purposes.

HOSPITAL PROVISION.

General.—Acton Hospital, Gunnersbury Lane—50 beds.

Fever.—Acton Council Fever Hospital—80 beds.

Small-Pox.—Acton is one of the constituent bodies which form the Middlesex Joint Small-Pox Board.

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

Poor Law.—The Parish is part of the Brentford Poor Law Union. The Union Infirmary, named the West Middlesex Hospital is situated in Isleworth.

Child Welfare Consultation Centres.—

(a)—Church Road. (b)—Palmerston Road.

Every Monday and Wednesday afternoon at 2 p.m.

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

Day Nursery.—169 Bollo Bridge Road.

School Clinic.—Adjoining Municipal Offices.

The above are provided and maintained by the Borough Council.

Tuberculosis Dispensary.—School Clinic on Tuesday at 5 p.m. and Thursday at 10.30 a.m.

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

The two latter are provided by the Middlesex County Council.

AMBULANCE FACILITIES.

(a)—**For Infectious Cases.**—A motor ambulance is housed at the Fever Hospital for the conveyance of cases of infectious disease to the Hospital.

(b)—**For Accident and non-infectious Cases.**—The Council owns a separate ambulance for accident cases and for the removal of cases of ordinary illness. The ambulance is housed in a garage at the Fire Station and is available at all hours. During the year the ambulance was called out to 279 street accidents.

Although the ambulance was provided primarily for street accidents, there is a considerable demand for its use in the removal of cases of illness to or from hospitals, nursing homes, etc. A charge is made for the hire of the ambulance in private cases, and last year fees amounting to £92 5s. were paid for the use of the ambulance on 275 occasions.

SANITARY CIRCUMSTANCES OF THE AREA.

Water.—All the inhabited houses are supplied from the mains of the Metropolitan Water Board. There are a few deep wells in the district, but the water from these are used almost entirely for industrial and similar purposes.

Drainage and Sewerage.—By arrangement with the County Council the sewage ultimately discharges into the London sewers and is treated at the London outfalls. Storm water is filtered and emptied into the Thames at Chiswick.

Closet Accommodation.—There are no privy or earth closets in the district, and all the water closets are connected with the Council's drainage system.

Scavenging.—The collection of House Refuse is carried out direct by the Council, and the whole of the refuse is burnt in the Council's Refuse Destructor. Last year, 16,663 tons of refuse were burnt.

PROFESSIONAL NURSING IN THE HOME.

General.—There are two district nurses employed by the Acton Hospital, one of these is primarily engaged in district

nursing, and the other is engaged to nurse patients who have been discharged from the hospital.

Midwives.—There are 14 midwives practising in the district. Unfortunately, there are a few other women, who are not registered, but who do attend confinements. It is illegal for these women to attend confinements habitually and for gain, except under the supervision of a doctor, but it is very difficult to stop the practice.

LEGISLATION IN FORCE.

The following local acts, special local orders, general adoptive acts and bye-laws 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 Preventoin Act, 1890 | 1893 |
| 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, etc. | 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 |

HOUSING.

This question has been dealt with fully in the reports of previous years, and in the main, the conditions cannot be said to have changed.

Since the war, many new industries have been started in the district, and there must necessarily be competition for a certain class of house. The people employed in the new industries which have been established naturally wish to live as near as possible to the place of their employment. They are willing to undergo some inconvenience if by that means tedious journeys night and morning can be avoided.

For economic reasons, the tenants of some of the houses are willing to sublet, even when the accommodation is not satisfactory. To this extent the difficulties of the housing question is peculiar to Acton. Otherwise the problem of housing is very similar in most districts in and around London. The supply is insufficient to allow of any free interchange of houses. Usually the requests for more housing accommodation come from the employees. But the employers are also handicapped. It is not an infrequent event for a firm to lose a good worker because the latter cannot find a house near his work and he finds travelling to his work too arduous and onerous.

SMOKE PREVENTION.

On July 1st, 1927, the new Smoke Prevention Act came into force. As far as densely populated industrial areas are concerned, atmospheric pollution constitutes an outstanding problem of sanitation which health authorities can no longer ignore. At first it seems curious that the necessity of a clean atmosphere has taken such a long time to be appreciated. The benefits of clean food and clean water were early appreciated and we have made considerable progress towards the attainment of these two goals.

The provision of uncontaminated water supplies has wiped out of existence the cholera scourges which were frequent in the earlier part of the nineteenth century. It seems almost incredible now that as late as the middle of last century in a town with a much smaller population than Acton fifteen hundred deaths occurred from cholera in the autumn of one year.

The provision of pure food supplies has undoubtedly caused the great diminution of mortality from diarrhoea and other diseases of the intestines. Medical research had shown that certain diseases were directly due to contamination of the water and food supplies and the steps undertaken to protect them were successful in reducing the mortality from those diseases. But until quite recently, no diseases could be said to be directly due to a polluted atmosphere, and even now, it is not easy to provide direct and absolute proof that the death-rate in any area is influenced by the smoke pall.

It is impossible, in the majority of cases, to point with any certainty to specific cases of disease or mortality as due to this cause. We know, of course, that during a spell of foggy weather the deaths from lung diseases and the deaths of old people rapidly increase in number.

Dr. Osborne, the Medical Officer of Health for Silford, tabulated the deaths of certain towns and he found that the

bronchitis death-rate in 1921 to 1925 for Manchester and the group of towns near Manchester, such as Salford, Blackburn, Bolton, Preston, Stockport, Burnley, Wigan, Oldham, Bury and Rochdale, is remarkably and consistently high, being in every case over 50 per cent. greater than that of the country as a whole, and in some cases nearly three times as high as that of towns like Eastbourne and Bournemouth. The bronchitis death-rate in some of these towns was nearly twice as high as that of Greater London, although the conditions in London as far as atmospheric pollution is far from satisfactory.

It has been shown that when light passes through a disperse system such as a suspension of smoke particles in the air it undergoes a scattering which is inversely proportional to the wave length of the ray. Thus the violet and ultra violet rays, which are known to be the most valuable for human health are cut off to the greatest extent by smoke. The amount of ultra violet rays received in Kingsway, London, is only about half that received in Hampstead, and probably less than a quarter of that in the country.

In Acton, we are particularly interested in the smoke problem on account of the large number of factories in the district, and the Council encouraged their Inspectors to become proficient in their duties respecting smoke prevention. Mr. Kinch and Mr. Jenkins obtained the certificate of the Sanitary Institute for Smoke Inspectors, and the Council recognised their work by increasing their salary. The Council felt that it was not sufficient for a Smoke Inspector simply to make observations of chimneys and take action against defaulters.

The Inspectors now have a knowledge of the principles which underlie combustion in the furnace, particularly the boiler furnace. In many instances, they have brought about reforms which have at once freed the chimneys from smoke nuisance and at the same time yield a handsome financial return to those who have accepted their advice.

In some instances where black smoke has been observed it is found that the boiler plant is too small, and the furnace is overloaded with fuel. When the plant is working under normal conditions with ordinary draught, the boiler is not capable of generating sufficient steam for the requirements of the factory. Instead of replacing it with a larger boiler or providing an additional one, an attempt is made to obtain the steam by means of excessive fuel; the stoker piles on the fuel and instead of keeping a fire of a normal depth of 4 to 6 inches the fire is often as much as 15 inches deep. With such a depth of fire it is impossible to obtain proper combustion, as the supply of primary air is impeded by the thickness of the fire, and the space between

the top of the fire and the crown of the furnace is insufficient to allow of the secondary air there and in the combustion chamber. Under such conditions the emission of black smoke is inevitable.

With forced draught more coal can be burnt with a normal depth of fire, but in the majority of cases which come under our notice the boilers are unsuitable for adaptation to forced draught.

In most of the large factories, mechanical stoking is in vogue, but in the smaller factories, the inspectors have been able to give a demonstratoin of the right and wrong method of hand stoking. We have come across instances where it would have paid the employers to adopt means to convince a stoker that hand firing is an art worth acquiring. We have issued and distributed the following leaflet: —

BOROUGH OF ACTON.

INSTRUCTIONS TO STOKERS.

HAND FIRING.

- (1). Fire small charges at frequent intervals.
- (2). Break coal into lumps 2" diameter.
- (3). Method of firing:—
 - (a) Spread fuel lightly over whole fire, or
 - (b) Spread along one side of furnace alternately each charge, or,
 - (c) Feed on dead-plate and push on to fire when gases have distilled by coking.
- (4). Open furnace door grids if any, for one minute after stoking to burn volatiles, if no grids, open doors.
- (5). Keep fire at even depth and without bare spots.
- (6). Do not allow all your fire to burn away before cleaning off.
- (7). Do not clean off all your furnaces at one time.
- (8). Keep steam pressure steady and do not force boiler.

I think it may be stated that the solution of industrial smoke pollution, as far as boiler furnaces are concerned, seems to be in sight.

There still remains the domestic smoke problem. People prefer the open fire and will not readily change to other methods of heating, as far as the living room is concerned. As far as the inmates of the house are concerned, the open fire is much the healthiest method of domestic heating, as it ensures thorough ventilation of the room, with warm surfaces and cool air, unlike central heating, and closed stoves, which cook the air and leave the walls and surfaces comparatively cold.

On the other hand, ordinary house coal, when burned in

the ordinary open grate, gives off volumes of unconsumed distillation products in the form of tarry smoke. This domestic smoke contains a high proportion of unconsumed tar and fine impalpable fume, both of which are destructive to our buildings and detrimental to our lungs. The high temperature which is obtained in the factory furnace burns the volatile products, and factory smoke usually contains only inorganic ash. The lower the temperature the more injurious the substances which are given off in the coal smoke, so that the worst nuisance arises when domestic fires are banked up with slack.

If we are to retain our open fires, it is, in the first place, imperative that a smokeless substitute for raw coal be found, and it is disappointing that most of the smokeless fuels on the market are comparatively expensive. With regard to the various low temperature smokeless fuels, the supply is at present comparatively small, and the price does not compare favourably in calorific value with coal.

TABULAR STATEMENT OF INSPECTIONS AND 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) | .... | 1088 |
| (1) Dealt with by service of Informal Notice | .... | 612 |
| (2) Dealt with by service of Statutory Notice under Section 3, Housing Acts | .... | 219 |
| (3) Dealt with by service of Statutory Notice under Public Health Acts | .... | 238 |
| Premises (other than defective dwelling houses) inspected for nuisances and miscellaneous defects | .... | 863 |
| (1) Dealt with by service of Informal Notice | .... | 733 |
| (2) Dealt with by service of Statutory Notice under Public Health Act, &c. | .... | 130 |
| Reinspections subsequent to service of Notice | .... | 7936 |
| Enquiry visits on notification of Infectious Disease | .... | 323 |

Number of Premises under Periodical Inspection.

| | | |
|--------------------------|------|-----|
| Workshops and Workplaces | .... | 161 |
| Bakehouses | .... | 29 |
| Slaughterhouses | .... | 2 |
| Public Health Urinals | .... | 37 |
| Common Lodging Houses | .... | 1 |
| Houses-let-in-lodgings | .... | 26 |

| | | | | | | |
|---|------|------|------|------|------|-----|
| Butchers' Shops | .... | .... | .... | .... | .... | 42 |
| Fish Shops | .... | .... | .... | .... | .... | 28 |
| Premises where food is manufactured or prepared | .... | .... | .... | .... | .... | 33 |
| Milk Purveyors | .... | .... | .... | .... | .... | 60 |
| Cowsheds | .... | .... | .... | .... | .... | Nil |
| Piggeries | .... | .... | .... | .... | .... | Nil |
| Rag and Bone Dealers | .... | .... | .... | .... | .... | 6 |
| Mews | .... | .... | .... | .... | .... | 4 |
| Schools | .... | .... | .... | .... | .... | 11 |
| Show Grounds | .... | .... | .... | .... | .... | 1 |
| | | | | | | 441 |

Rent Restriction Acts.

| | | | | | |
|--------------------------------|------|------|------|------|----|
| Number of Certificates granted | .... | .... | .... | .... | 12 |
| Number of Certificates refused | .... | .... | .... | .... | 1 |

Detail of Work carried out.

| | | | | | |
|---|------|------|------|------|-----|
| Sanitary Dustbins provided | .... | .... | .... | .... | 492 |
| Yards paved or yard paving repaired | .... | .... | .... | .... | 133 |
| Insanitary forecourts remedied | .... | .... | .... | .... | 87 |
| Defective drains repaired or reconstructed | .... | .... | .... | .... | 63 |
| Defective soil pipes and ventilating shafts repaired or renewed | .... | .... | .... | .... | 74 |
| Defective fresh air inlets repaired or renewed | .... | .... | .... | .... | 87 |
| Defective gullies removed and replaced by new | .... | .... | .... | .... | 77 |
| Rain water downpipes disconnected from drain | .... | .... | .... | .... | 38 |
| Dishing and curb to gullies repaired and new gratings fixed | .... | .... | .... | .... | 176 |
| Defective W.C. pan and traps removed and replaced by new | .... | .... | .... | .... | 83 |
| Defective W.C. flushing apparatus repaired or new fixed | .... | .... | .... | .... | 341 |
| Defective W.C. seats repaired or new fixed | .... | .... | .... | .... | 158 |
| Defective flush pipe connections repaired | .... | .... | .... | .... | 92 |
| Insanitary sinks removed or new fixed | .... | .... | .... | .... | 145 |
| Sink waste pipes repaired or trapped | .... | .... | .... | .... | 193 |
| Insanitary wall surface over sinks remedied | .... | .... | .... | .... | 145 |
| Ventilated food cupboards provided | .... | .... | .... | .... | 8 |
| Drinking water cisterns cleansed | .... | .... | .... | .... | 238 |
| Defective covers to drinking water cisterns repaired or new fixed | .... | .... | .... | .... | 57 |
| Insanitary sites beneath floors concreted | .... | .... | .... | .... | 7 |
| Spaces beneath floors ventilated | .... | .... | .... | .... | 116 |
| Dampness in walls from defective damp-proof course remedied | .... | .... | .... | .... | 143 |
| Dampness from defective roof, rain water gutterings, etc., remedied | .... | .... | .... | .... | 722 |

| | | |
|--|------|------|
| Defective plastering repaired (number of rooms) .... | .... | 694 |
| Rooms where dirty walls and ceilings have been cleansd and redecorated .... | .... | 3908 |
| Defective floors repaired .... | .... | 163 |
| Defective or dangerous stairs repaired .... | .... | 29 |
| Defective doors and windows repaired .... | .... | 343 |
| Defective kitchen ranges and fire grates repaired .... | .... | 297 |
| Defective washing coppers repaired .... | .... | 108 |
| Coal cupboards provided and repaired .... | .... | 42 |
| New W. C. apartments provided .... | .... | 14 |
| Accumulations of offensive matter removed .... | .... | 25 |
| Drains unstopped and cleansed .... | .... | 216 |
| Overcrowding nuisances abated .... | .... | 10 |
| Drains tested, exposed for examination, etc. .... | .... | 94 |
| Smoke observations taken .... | .... | 174 |
| Smoke nuisances abated on service of notice .... | .... | 11 |
| Nuisances from pigs and other animals abated .... | .... | 7 |
| Notifications of waste of water sent to Metropolitan Water Board .... | .... | 286 |

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.

Table 7 which gives particulars of the births notified and registered, illustrates the antiquated condition of our birth registration arrangements, and the absence of any provision in these laws or in their administration for the furtherance of child welfare schemes. These laws, of course, were passed before the birth of any effective public health legislation, and they have been allowed to continue and very little attempt made to bring them into line with modern public health requirements.

Under the Notification of Births Act, a birth has to be notified within 36 hours to the Medical Officer of Health. In addition, the birth has to be registered with the local registrar of births. The birth has to be notified, and registered in the district in which a birth has taken place, and not in the district to which the birth belongs. For instance, if an Acton mother goes for her confinement to a nursing home or a maternity hospital in London, the birth is notified to the Medical Officer of Health of the Metropolitan Borough in which the institution is situated, and registered with the local registrar of births of the same area.

In the vast majority of instances, the Medical Officer of Health forwards the particulars of the birth to us, and we are enabled to visit if necessary and advise the mother. Under the

Notification of Births Act, there is a system of transfer which enables us to carry out the duties under our Maternity and Child Welfare scheme. But under the Registration of Births Act, the only intimation we receive is a slip at the end of each year from the Registrar General giving the total number of registered births belonging to the district. By deducting the number of births registered locally we ascertain the number of births which have occurred outside the district. But no particulars whatsoever is given by the Registrar General, simply the total number. As over one-sixth of our total births occur outside the district, and these mothers are usually those who need and welcome instruction, it will be gathered to what extent our work would be handicapped if the defect were not remedied through the courtesy and help of Medical Officers of Health.

The total number of births belonging to the district was 1026. This figure represents the total number of births registered during the calendar year and is corrected for inward and outward transfers. The births registered in the district was 857.

The total number of births corresponds to an annual birth rate of 16.09 per 1000 inhabitants.

Because the addresses of all the outside births are not obtainable, it is impossible to allocate the births to the several wards. The difference in numbers between the notified births and the registered births is so small that approximate figures are given for the several wards. There is a difference of 27 between the total as given by the Registrar General, and the total number of which we have particulars. The 999 births were distributed as follows :—

| | | | |
|--------------------|--------------------|--------------------|--------------------|
| <i>North-East.</i> | <i>North-West.</i> | <i>South-East.</i> | <i>South-West.</i> |
| 284 | 190 | 171 | 354 |

The birth rates per 1000 population in the different wards were as follows :—

| | | | |
|--------------------|--------------------|--------------------|--------------------|
| <i>North-East.</i> | <i>North-West.</i> | <i>South-East.</i> | <i>South-West.</i> |
| 16 | 14.5 | 11.2 | 20.2 |

39 children were born out of wedlock, which number corresponds to illegitimate birth-rate of 3.8 per cent of the total births.

DEATHS.

The total number of deaths belonging to the district was 704.

445 deaths were registered in the district ; of these 21 were deaths of non-residents.

In addition 280 deaths of residents were registered outside the district.

The 704 deaths correspond to a death-rate of 11.04 per 1000 inhabitants.

The mortality was highest in the first quarter of the year and lowest in the third quarter. In the first quarter 252 deaths occurred corresponding to a death-rate of 15.8 per 1,000 per annum.

In the other three quarters the numbers were 139, 127, and 184 respectively, which numbers correspond to 8.7; 7.9 and 11.5 per 1,000 per annum respectively. But, although the mortality was highest in the first quarter of the year, the average age at death was also highest in that quarter. The explanation, of course, lies in the fact that the more severe weather experienced in the first quarter of the year was especially fatal to old people.

The death-rate is slightly higher than that of 1926 and 1925. We are apt sometimes to forget that in recent years the age distribution of the population has considerably changed, and the continuous downward trend of the death-rate has nearly, if not absolutely come to an end. When the birth-rate was high we had a large proportion of people living in the vigorous and healthy age-periods. At the commencement of the decline in birth-rate and for some years afterwards, we had conditions which were particularly favourable to a low death-rate. These conditions have now passed, and we are entering on a period when the age constitution of the population has altered and we have a higher proportion of old people and a lower proportion of young and healthy people. These remarks are made not with the intention of discouraging or depreciating the effects of sanitary work and preventive medicine in the twentieth century. As a matter of fact, many and great advances have been made, but certain allowances should always be made for the altered age distribution of the population. If we go back only twenty years, we are confronted with certain facts which are really amazing. In spite of the increased population, there were less deaths in the 3 years 1925, 1926 and 1927 than there were in 1905, 1906 and 1907. In the earlier three years there were 2052 deaths compared with 2027 in the last three years. The average death-rate in 1905—1907 was 13.25 and in 1925—1927, it was 10.67. In these two periods although the age distribution of the population has changed, the periods are fairly comparable as a whole, because the lower proportion of young children living in 1925—1927 is counterbalanced by the higher proportion of old people in the later period. But if the death-rate of 1905—1907 had persisted in 1925—1927, about 490 more deaths would have occurred in the later period than did actually occur.

If we compare the average age at death in 1927 with that of 1907, the contrast is still greater. In 1907, the average age

at death was only 31.88 years, whilst in 1927 the average age was 52.24 years. The expectation of life has increased over 20 years in that period. This improvement is not entirely due to the altered age-distribution of the population nor to the greatly lowered infantile mortality, because the improvement is seen in the later ages of life, although not in the same degree. Because of the success which has resulted from the work of infant life preservation, we are apt to forget sometimes the fact that the benefits accrue also in later years. A further examination of the death returns of 1907 and 1927 shows that even if we exclude the deaths under one year of age, the average age at death of the others went up 43.66 to 57.37 years. The reduction of mortality in children between 1 and 5 years of age has been even greater than the reduction which has occurred in the infantile mortality. Even if we exclude the deaths of children under 5 years of age, we find that the average age at death has gone up from 52 years in 1907 to 59.34 in 1927. The average age at death of adults has also been raised. If we take the average age at death of persons over 15 years of age, it has gone up from 58.82 years to 61 years. The following table shows the averages at death of all persons who died and of those over 1 year, 5 years, and 15 years of age in the years 1905, 1907, and 1925 and 1927.

Average age at death.

| | 1927 | 1926 | 1925 | 1907 | 1906 | 1905 |
|---------------------------|--------|-------|-------|--------|-------|-------|
| | years. | | | years. | | |
| Persons of all ages | 52.24 | 50.87 | 51.83 | 31.88 | 31.85 | 33.07 |
| Of persons over 1 year | 57.37 | 56.06 | 58.93 | 43.66 | 44.55 | 45.22 |
| " " " 5 yrs. | 59.34 | 59.25 | 61.31 | 52. | 54. | 50.92 |
| " " " 15 yrs. | 61. | 61.04 | 62.69 | 58.82 | 57.18 | 55.8 |

It will be seen from the above figures that the improvement which has taken place in the early years has also extended to the middle years of life. This improvement has taken place in respect of almost all diseases. The most notable exceptions are Heart Disease and Cancer. The deaths from these diseases have increased considerably in recent years, but the increased mortality from heart disease is probably not a real one, and the apparent increase is due to better methods of diagnosis and a more comprehensive view of heart disease. In former years, valvular disease was considered the most formidable condition in heart disease, and accounted for most of the deaths. In recent years, other conditions connected with the muscles of the heart figure largely in the causes of death from heart disease.

In connection with deaths from cancer, we should also bear in mind the altered age-distribution of the population. It is a lamentable fact that deaths from cancer have increased, and the increased mortality is not entirely accounted for by improved

methods of diagnosis. But the number of deaths from cancer now is relatively higher in persons over 65 years of age than it formerly was. In the 4 years 1906—1909, the total number of deaths from Cancer was 190; of these 74 or 38 per cent were in persons over 65 years of age. In the 4 years 1924 to 1927 the number of deaths was 357—a very large increase; of this number 165 were in persons over 65 years of age, or 46 per cent of the total.

A reference to Table I. will show a slight alteration in its arrangement. In former years there was a column showing the number of inquests which has been held. This year there is another column showing the percentage of deaths certified by the coroner after a post-mortem examination, but where no inquest had been held. The Coroners Amendment Act, 1926, came into force on May 1st, 1927, and the Act makes many far-reaching amendments relating to Coroners.

Under the Act a Coroner is empowered under certain conditions to hold an inquest without a jury. This power was first enacted by the Juries Act 1918, and continued by the Coroners Emergency Provisions Continuance Act, 1922, and by the subsequent Expiry Laws Act, until December 31st, 1927. This procedure now becomes a permanent practice.

Another innovation is the power given to the Coroner to order a post-mortem examination to be made without the necessity of a subsequent inquest. Under the Coroners Act, 1887, a post-mortem examination could only be directed if an inquest was to be held. Under the new Act the Coroner can order a post-mortem examination, and if as a result of such post-mortem examination he is satisfied that an inquest is unnecessary, he simply sends a certificate to the Registrar of Births and Deaths stating the cause of death as disclosed by the report of the post-mortem examination, and the Registrar makes an entry in the register and issues a burial certificate. The new powers obviate the necessity of holding many inquests.

Last year 26 inquests were held, and 9 deaths certified by the Coroner, after a post-mortem examination without holding an inquest. 8 of these inquests concerned persons who were non-residents. Fourteen Inquests were held on residents who had met their deaths outside the Borough, and two certified by a Coroner without an inquest.

The total number of deaths of residents and in which an inquest was held was 33, and 11 deaths were certified by a Coroner without an inquest.

Sir George Newman in his annual report to the Ministry of Health draws attention to the increasing risk of life due to motor vehicles. He states in that report that before remedies

can be considered, a detailed analysis of the causes is needed. Apart from evidence submitted to the Select Committee in Motor Traffic 15 years ago no detailed analysis is available. We do not know how many of those who lost their lives were drivers or passengers, and how many pedestrians.

Our figures, of course, are too small to be of value for the purposes above mentioned, but they may be interesting.

8 deaths belonging to the district were caused by mechanically propelled vehicles; 2 of them occurred in the district and six outside. The two which occurred in the district were both pedestrians—one was a woman of 63 years of age, and the other a man of 81 years. The former was knocked down by a motor van, and the latter by a passenger car.

Of the six residents who were killed outside, 3 were pedestrians, and 3 were either drivers or passengers. The 3 pedestrians were men of 96 years and 59 years respectively and a boy of 8 years. The two men were knocked down by passenger cars and the boy was run over by a lorry.

The three drivers or passengers were on motor cycles. One, a man of 21 years was killed in a collision between his cycle and a taxi-cab, the second a man of 38 years was crushed between his cycle and a motor car, and third a woman of 20 years was thrown off a motor cycle and run over by a charabanc.

There were also 6 deaths of non-residents in the district, of these 5 were pedestrians; 2 of these were run over by motor lorries, one, a boy of 2½ years was run over by a passenger car, one, a man of 70 years was knocked down by a tram car, and one was knocked down by a railway train. The driver who was killed was a man thrown off his motor cycle.

The age distribution, and ward distribution are given in Table III.

The death-rate in each ward was as follows:—

| <i>North-East.</i> | <i>North-West.</i> | <i>South-East.</i> | <i>South-West.</i> |
|--------------------|--------------------|--------------------|--------------------|
| 10.38 | 10.11 | 10.39 | 12.34 |

Deaths in Public Institutions.

292 deaths or 41 per cent of the total occurred in public institutions. In addition 11 deaths occurred in nursing homes.

INFANTILE MORTALITY.

62 deaths occurred in children under one year of age. This number corresponds to an infantile mortality of 60 per 1,000 births.

The infantile mortality is higher than that of 1926, but lower than the infantile mortality of the whole of England and Wales, which was 69 per 1,000 births.

The infantile mortality in London was 59 per 1,000 births. The infantile mortality in the different wards was as follows:—

| <i>North-East.</i> | <i>North-West.</i> | <i>South-East.</i> | <i>South-West.</i> |
|--------------------|--------------------|--------------------|--------------------|
| 48 | 70 | 70 | 61 |

Premature birth still figures as the principal cause of death, and 14 deaths are due to this cause. In addition there were 4 deaths from Congenital Debility, 4 from Congenital Malformation, 3 from Marasmus and 6 from injury at birth. Half the deaths were due to ante-natal or natal causes. Over a third of the infantile deaths occurred in the first week after birth. 52 of the babies were legitimate ones, and 5 of the deaths occurred in babies who were born out of wedlock.

MATERNITY AND CHILD WELFARE.

It was stated in last year's report that the Council was endeavouring to rent premises in East Acton in order to start there a child welfare centre. After many failures premises have now been obtained, and although not so convenient as we might wish to the new houses which have recently been erected, it is hoped that it will fulfil a long-felt want.

We have been apt to concentrate our energies in South Acton, and the figures show that we have been very successful in that respect. For the past few years, the infantile mortality in the south-west ward has been lower than that of some of the other wards. This, of course, is satisfactory, but it also shows, not that we should relax our efforts in the south-west ward, but that effort is necessary in other directions.

For some years, we have endeavoured to co-ordinate the work of our infant centres with that of the school medical service. Children with squint are referred to the School Ophthalmic Surgeon, tonsils and adenoids are removed at the Acton Hospital, and there is an agreement with the National Orthopaedic Hospital for the treatment of any Orthopaedic cases.

Although no special sessions are devoted by the School Dental Surgeons to expectant and nursing mothers and to children under 5 years of age, the following work was carried out in the School Clinic last year under the Maternity and Child Welfare Scheme.

| TABLE I. | | <i>Inspected.</i> | <i>Referred for Treatment.</i> | <i>Treated.</i> |
|----------|-------|-------------------|--------------------------------|-----------------|
| Mothers | ..... | 33 | 33 | 31 |
| Children | ..... | 117 | 117 | 94 |
| | | <hr/> | <hr/> | <hr/> |
| | | 150 | 150 | 125 |
| | | <hr/> | <hr/> | <hr/> |

TABLE II.

Fillings :—

| | | |
|-----------------|------|-----|
| Permanent Teeth | .... | 29 |
| Temporary Teeth | .... | 144 |
| | | 173 |

Extractions :—

| | | |
|-----------------|------|-----|
| Permanent Teeth | .... | 170 |
| Temporary Teeth | .... | 328 |
| | | 498 |

| | | |
|---------------------------------|------|-----|
| Administration of Nitrous Oxide | .... | 158 |
| Scalings | .... | 4 |
| Dentures | .... | 5 |

DAY NURSERY.

The Day Nursery is situated in Bollo Bridge Road. The Nursery is open daily except on Saturday and School holidays.

The charges for admission are 9d. a day for one child and 8d. a day each for two or more children of one family.

Last year the nursery was open on 209 days, and 3,951 whole-day and 63 half-day attendances were made.

INFECTIOUS DISEASES.

Scarlet Fever.

137 cases of Scarlet Fever were notified, and there was one death from the disease, a child of 5 months who was nursed at home.

The age-incidence and ward-distribution of the disease are given on Table 5.

Diphtheria.

69 cases of Diphtheria were notified and there was one death from the disease.

Although the number of cases was higher there was only one death, compared with 2 in 1926. During the autumn, there was an increased incidence of the disease in East Acton. At the start, the disease was limited to children attending the East Acton School, but later cases occurred amongst pupils of Acton Wells School. The Acton Wells pupils, among whom Diphtheria

at first made its appearance, were resident in East Acton, but subsequently there were cases in West Acton. The spread of the disease may probably be accounted for by the fact that Acton Wells draws its pupils from East Acton and West Acton.

On October 7th, a case of Diphtheria was notified; the child lived in East Acton and attended the East Acton School. On October 5th, in the course of the routine medical inspection at the school, one of the children had a nasal discharge and there was a history of recent sore throat. This child lived in Perryn Road. A swab was taken from the throat and it was found that the germs of diphtheria were present. On October 10th, a child under school age living at East Acton was also notified.

The district had been comparatively free of Diphtheria throughout the summer—2 cases being notified in each of the months of June, July and August and one case in September. Another feature which caused uneasiness was the fact that recently Diphtheria in a virulent form has been prevalent in certain areas of London.

In these circumstances, it was decided to extend the scope of inquiry beyond the contacts of the house, and as usual the next inquiry was directed towards the pupils attending the East Acton School.

On October 10th, an examination of the children was made at the school, and many children gave a history of recent sore throat. In the circumstances, it was decided to swab most of the children in two of the classes. 67 children were swabbed, and 4 of these were found to harbour the germs of Diphtheria. These 4 children had recently suffered from sore throats, so that it is probable they had suffered, or were suffering from a mild attack of Diphtheria.

We have been particularly fortunate in recent years, as far as Diphtheria is concerned. In 1927 there was only one death from the disease, and in 1926 there were two deaths. It is therefore possible that the Schick testing and immunization are not questions of urgent importance here. But there are ominous signs that Diphtheria of a virulent type is on the increase in London, and during the first quarter of 1928 we had 3 deaths from Diphtheria, or as many as in the two years 1926 and 1927. At present we have no exact knowledge of the determining factors which govern the prevalence and still less the type of these epidemic diseases. It is well therefore that we should be prepared and know what measures are adopted in districts where Diphtheria of a virulent type is prevalent. Immunization by means of Toxin-Antitoxin or Toxoid-Antitoxin has ceased to be experimental, and where it has been carried out, the authorities

are in every instance convinced of their value in the control of Diphtheria.

In all pioneer work, however, it is well to bear in mind that accidents may occur and have occurred, and it cannot be denied that in a very few instances certain serious results have followed the use of the immunization material. Fatal results have occurred after the use of Toxin-Antitoxin. Two accidents were reported in 1924, one in America and one in Austria. Again in 1927, two further similar occurrences occurred in Russia and China. All these were the subject of inquiry, and scientific investigation, and in each case the cause has been traced to its source.

The latest instance in which fatal results followed is that of the Bundaberg accident which occurred in January, 1928, and resulted in 12 deaths. Naturally, the occurrence was seized upon by certain organizations to bring all experimental medicine into bad repute. A thorough investigation was made of all the circumstances by a Royal Commission and a report made to the Commonwealth House of Representation in Canberra. Certain steps have been taken to eliminate possible risk in the future, and a substitute has been found for the original toxin-antitoxin. The public are now safeguarded by the Therapeutic Substances Act which came into operation last year and provides for control over such substances as Diphtheria prophylactic. Every Medical Officer of Health is anxious to rule out the possibility of accidents which can harm and hinder progress in the application of one of the most beneficent preventive measures that have appeared in recent years.

Tuberculosis.

128 cases of Pulmonary Tuberculosis and 26 cases of other forms of Tuberculosis were notified during the year; of these 88 were new cases of Pulmonary Tuberculosis, and 22 new cases of other forms of Tuberculosis.

167 cases were removed from the Register during the year, either through death, residence out of the district or reported "cured" by the Tuberculosis Officer.

At the end of the year the number of cases on the Register was :—

| <i>Pulmonary.</i> | | <i>Non-Pulmonary.</i> | | <i>Total</i> |
|-------------------|---------------|-----------------------|---------------|--------------|
| <i>Male</i> | <i>Female</i> | <i>Male</i> | <i>Female</i> | |
| 91 | 92 | 21 | 16 | 220 |

The following figures have been kindly supplied by Dr. Atkinson, the Tuberculosis Medical Officer :—

| | | | |
|----------------------------|---------------|------|----|
| New cases referred to him— | Pulmonary | .... | 46 |
| | Non-Pulmonary | | 12 |
| Number sent to Sanatoria | .... | .... | 29 |
| Number sent to Hospitals— | Pulmonary | .... | 14 |
| | Non-Pulmonary | | 13 |

Isolation Hospital.

During the year 247 cases were admitted into the Hospital compared with 200 in 1926. On January 1st, 1927, there were 25 cases under treatment and on January 1st, 1928, there were 36. 236 were discharged and there were 3 deaths.

The following is a list of cases admitted:—

| | <i>Acton</i> | <i>Wembley</i> | <i>Kingsbury</i> | <i>Total</i> |
|---------------|--------------|----------------|------------------|--------------|
| Scarlet Fever | 100 | 57 | 7 | 164 |
| Diphtheria | 64 | 9 | 2 | 75 |
| Measles | 1 | — | — | 1 |
| Others | 6 | 1 | — | 7 |
| | 171 | 67 | 9 | 247 |

Scarlet Fever.

164 cases of Scarlet Fever were admitted with no death.

Diphtheria.

75 cases of Diphtheria were admitted with 2 deaths.

Purpura.

1 death.

BACTERIOLOGICAL EXAMINATIONS, 1927.

| (a) For Diphtheria. | <i>Positive.</i> | <i>Negative.</i> |
|-------------------------------|------------------|------------------|
| Total examinations—1035 | 130 | 905 |
| Sent by Medical Practitioners | 47 | 350 |
| Sent from Isolation Hospital | 43 | 194 |
| Convalescents | 2 | 29 |
| Contacts | 12 | 212 |

Of these Positive Contacts:—

6 were Positive on the 1st occasion.

4 „ „ „ 2nd „

2 „ „ „ 3rd „

| | <i>Positive.</i> | <i>Negative.</i> |
|---------------------|------------------|------------------|
| School Sore Throats | 21 | 120 |

9 of these positive sore throats had sufficient clinical symptoms to warrant removal to Hospital.

TABLE I.

UN SOUND FOOD SURRENDERED DURING 1927.

(a) Diseased Meat.

Tuberculosis.

PORK.

| | |
|-------------------|---------------------------|
| 4 Pigs' Carcasses | 4 bellies |
| 1 side of Pork | 1,026 lbs. pieces of Pork |
| 4 Forequarters | 300 Pigs' heads |
| 2 Hindquarters | 142 Pigs' plucks |
| 1 Shoulder | 1,872 lbs. Chitterlings |

BEEF.

| | |
|--------------------------|------------------|
| 7 Ox Carcasses and Offal | 4 Ox Plucks |
| 3 Forequarters | 52 Calves Plucks |
| 1 breast | 27 Calves Livers |
| 3 Hindquarters | 1 Tripe |
| 3 loins | 2 Ox Kidneys |
| 10 Ox heads and Tongues | |

VEAL.

| | |
|-------------------|------------------------|
| 1 side with offal | 2 Thin Flanks |
| 7 Forequarters | 2 Middles |
| 1 Rib | 35 lbs. pieces of Veal |
| 3 Rumps and Loins | |

Parasites.

| | |
|---------------------|-----------------------|
| 2 sets of Ox Lungs | 203 Sheep's Livers |
| 347 Sheep's Plucks | 1 set of Goat's Lungs |
| 1,169 Sheep's Lungs | |

Pleurisy.

| | |
|--------------------------|-----------------------|
| 8 Breasts of Veal | 29 Breasts of Mutton |
| 4 Calves' Hearts | 3 Shoulders of Mutton |
| 18 sets of Calves' Lungs | |

Pyæmia.

| | |
|------------------|---------------------------|
| 1 Calf's Carcase | 1 Sheep's Carcase & Offal |
|------------------|---------------------------|

Dropsy.

| | |
|-----------------------------|--------------------|
| 19 Sheep's Carcasses | 2 flanks of Mutton |
| 7 Calves' Carcasses & Offal | |

Actinomycosis.

| | |
|------------------------|-----------------|
| 4 Ox heads and tongues | 4 Calves' heads |
|------------------------|-----------------|

Septic Pneumonia.

| | |
|-----------------------|--------------------------|
| 1 Forequarter of Veal | 2 Forequarters of Mutton |
|-----------------------|--------------------------|

Anthritis.

1 Leg of Pork

Bruising.

| | |
|----------------------------|---------------|
| 1 calf's Carcase and Offal | 1 leg of Pork |
| 1 Sheep's Carcase | |

Septicaemia.

1 Calves' carcase.

Congestion.

| | |
|------------------------------|-------------------|
| 3 Calves' carcasses & offals | 2 Calves' Kidneys |
|------------------------------|-------------------|

Immature.

1 Calf's carcase and offal

Abscess.

| | |
|--------------------------|-----------------|
| 1 Thin flank of Beef | 1 Sheep's Pluck |
| 5 Forequarters of Mutton | 1 Sheep's Head |

Fluke.

1 Sheep's Liver

Died in Transit.

1 Sheep's Carcase

Urticaria.

1 Pig's skin & back fat

(b) Other Foods.*Unsound.*

| | |
|------------------------|---------------------|
| 1½ boxes of plaice | 1 cwt. new potatoes |
| 5 stone of Roker wings | 3 kits of crabs |

TABLE II.

NUMBER OF PIGS' CARCASSES INSPECTED FROM 1st JANUARY TO 31st DECEMBER, 1927, WITH ANALYSIS OF SURRENDERS ON ACCOUNT OF DISEASE (TUBERCULOSIS).

| 1927 | 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. | Weights |
|----------------|-----------------------------|------------------------|----------------------------|------------------------|--------------------------------|--------------------------------|-----------------------|----------------------------|------------------------------------|--------------------------------------|-----------------|----------------------|
| January | 815 | 25 | 1 | — | — | — | — | 1 | 13 | 184 lbs. | 32 lbs. | Tons Cwts. Qrs. Lbs. |
| February | 699 | 28 | — | — | — | — | — | — | 37 | 336 " | — | 6 3 23 |
| March | 696 | 39 | — | — | — | — | 2 | 2 | 9 | 168 " | 35 " | 11 3 25 |
| April | 832 | 28 | — | — | — | — | — | — | 11 | 176 " | — | 8 3 14 |
| May | 756 | 40 | 1 | — | — | — | — | — | 7 | 128 " | 56 " | 5 3 23 |
| June | 718 | 14 | 1 | — | — | — | — | — | 15 | 196 " | 30 " | 10 3 8 |
| July | 463 | 17 | — | — | — | — | — | — | 10 | 104 " | — | 5 1 23 |
| August | 851 | 25 | 1 | 1 | — | — | — | — | 15 | 146 " | 10 " | 1 3 12 |
| September | 979 | 36 | — | 1 | — | — | — | — | 15 | 256 " | 123 " | 7 3 1 |
| October | 1109 | 33 | 2 | — | — | — | — | — | 15 | 152 " | — | 8 0 8 |
| November | 1220 | 29 | 1 | — | 4 | 1 | 1 | — | 15 | 146 " | 80 " | 13 0 23 |
| December | 1465 | 34 | 2 | — | 2 | — | — | — | 18 | 208 " | 8 " | 15 1 12 |
| TOTAL | 10603 | 348 | 9 | 2 | 6 | 1 | 3 | 3 | 180 | 2200 " | 374 " | 13 0 7 |

Part sent to refuse destructor.

TABLE III.

Counties from which animals were consigned, and percentage diseased (1st Jan.—31st Dec. 1927).

| County | No. of Towns from which Animals were consigned | No. of Carcases Inspected | No. of Animals Diseased | Percentage of Animals Diseased |
|----------------------|---|---------------------------------|-------------------------------|--------------------------------------|
| Bucks. | 4 | 67 | — | — |
| Cambridgeshire | 2 | 159 | 1 | .63% |
| Cardiganshire | 1 | 29 | 2 | 6.9 % |
| Dorset | 9 | 2314 | 133 | 5.74% |
| Essex | 3 | 114 | 4 | 3.50% |
| Gloucestershire | 1 | 174 | 5 | 2.87% |
| Hampshire | 16 | 988 | 33 | 3.34% |
| Ireland | 2 | 996 | 41 | 4.11% |
| Kent | 1 | 1 | — | — |
| Leicestershire | 1 | 17 | — | — |
| London 1.36% | 1 | 734 | 10 | 1.36% |
| Middlesex 1.24% | 12 | 1697 | 21 | 1.24% |
| Norfolk | 3 | 102 | 4 | 3.92% |
| Somerset | 8 | 564 | 33 | 5.85% |
| Staffordshire | 2 | 51 | 2 | 3.92% |
| Suffolk | 9 | 702 | 25 | 3.56% |
| Surrey | 7 | 320 | 4 | 1.25% |
| Sussex | 3 | 290 | 6 | 2.06% |
| Warwickshire | 1 | 1212 | 45 | 3.71% |
| Wiltshire | 2 | 61 | 2 | 3.23% |
| Yorkshire | 1 | 11 | 1 | 9.09% |
| Total | 89 | 10603 | 372 | 3.50% |

TABLE I.

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR, 1927.

Provisional figures. The rates have been calculated on a population estimated to the middle of 1927. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns. As the registration of stillbirths did not come into operation until the 1st July, 1927, no stillbirths are included).

| | Birth-rate per 1000 Total Population | ANNUAL DEATH-RATE PER 1,000 POPULATION. | | | | | | | | | RATE PER 1,000 BIRTHS | | PERCENTAGE OF TOTAL DEATHS | | | |
|--|---|---|------------------|--------------|---------|------------------|-------------------|------------|-----------|----------|--|---------------------------------|--|------------------|---|-----------------------------------|
| | | 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 | 16.7 | 12.3 | 0.01 | 0.00 | 0.09 | 0.01 | 0.09 | 0.07 | 0.57 | 0.51 | 6.3 | 69. | 91.7 | 6.6 | 0.7 | 1.0 |
| 107 County Boroughs and Great Towns, including London | 17.1 | 12.2 | 0.01 | 0.00 | 0.12 | 0.01 | 0.10 | 0.08 | 0.49 | 0.46 | 8.3 | 71. | 91.9 | 6.6 | 0.9 | 0.6 |
| 155 Smaller Towns (1921 Adjusted Population, 20,000—50,000) | 16.4 | 11.3 | 0.01 | 0.00 | 0.07 | 0.01 | 0.08 | 0.05 | 0.58 | 0.41 | 5.0 | 68. | 92.7 | 5.8 | 0.3 | 1.2 |
| London | 16.1 | 11.9 | 0.01 | 0.00 | 0.04 | 0.01 | 0.12 | 0.09 | 0.39 | 0.51 | 7.5 | 59. | 50.3 | 7.9 | 1.8 | 0.0 |
| Acton | 16.11 | 11.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.03 | 0.61 | 0.3 | 0.3 | 6.8 | 60. | 94.1 | 4.4 | 1.5 | 0.0 |

TABLE II.

VITAL STATISTICS FOR THE WHOLE DISTRICT DURING 1927 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 | | Number | Rate | Non-Residents Registered in the District | Residents Registered outside Dist. | Under 1 year of Age | | At all Ages | |
| | | Number | Rate | | | | | Number | Rate per 1,000 Births | Number | Rate per 1,000 inhabitants |
| 1922 | 62,390 | 1203 | 19.3 | 404 | 6.5 | 14 | 214 | 75 | 62 | 632 | 10.1 |
| 1923 | 62,720 | 1171 | 18.6 | 368 | 5.8 | 11 | 243 | 77 | 65 | 599 | 9.5 |
| 1924 | 62,980 | 1158 | 18.4 | 488 | 7.7 | 8 | 235 | 65 | 56 | 715 | 11.2 |
| 1925 | 63,110 | 1047 | 16.5 | 446 | 6.8 | 18 | 241 | 80 | 76 | 669 | 10.6 |
| 1926 | 63,040 | 1098 | 17.4 | 422 | 6.7 | 15 | 250 | 60 | 55 | 657 | 10.4 |
| 1927 | 63,750 | 1026 | 16.1 | 445 | 6.9 | 21 | 280 | 62 | 60 | 704 | 11.04 |

TABLE III. AGES AT DEATH, AND WARD DISTRIBUTION OF DEATHS IN 1927.

| 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 | |
| Whooping Cough | 2 | — | 2 | — | — | — | — | — | — | — | — | — | 2 | |
| Scarlet Fever | 1 | 1 | — | — | — | — | — | — | — | — | — | 1 | — | |
| Diphtheria | 1 | — | — | — | 1 | — | — | — | — | — | — | 1 | — | |
| Enteric Fever | 1 | — | — | — | — | — | 1 | — | — | — | 1 | — | — | |
| Influenza | 18 | — | 1 | — | 3 | — | 5 | 3 | 6 | 2 | 5 | 5 | 6 | |
| Encephalitis Lethargica | 1 | — | — | — | 1 | — | — | — | — | — | — | 1 | — | |
| Acute Poliomyelitis | 1 | — | — | 1 | — | — | — | — | — | 1 | — | — | — | |
| Tuberculosis of the Respiratory system | 55 | — | — | — | 4 | 14 | 25 | 12 | — | 12 | 11 | 13 | 19 | |
| Other Tuberculosis Diseases | 9 | — | — | 1 | — | 3 | 2 | — | 3 | 4 | 3 | 1 | 1 | |
| Cancer, Malignant Disease | 94 | — | — | — | — | 1 | 8 | 48 | 37 | 22 | 17 | 26 | 29 | |
| Rheumatic Fever | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Diabetes | 13 | — | — | — | — | — | 1 | 2 | 10 | 2 | 4 | 3 | 4 | |
| Cerebral Haemorrhage | 41 | — | — | — | — | 1 | 4 | 7 | 29 | 14 | 7 | 11 | 9 | |
| Heart Disease | 62 | — | — | — | 2 | 2 | 3 | 29 | 26 | 17 | 14 | 8 | 23 | |
| Bronchitis | 79 | 8 | 1 | 1 | — | — | 2 | 13 | 54 | 24 | 9 | 21 | 25 | |
| Arterio-Sclerosis | 27 | — | — | — | 1 | — | — | 10 | 16 | 10 | 7 | 9 | 1 | |
| Pneumonia | 46 | 7 | 4 | 3 | 2 | — | 5 | 12 | 13 | 11 | 9 | 8 | 18 | |
| Other Respiratory Diseases | 10 | — | — | 1 | — | 1 | 2 | 4 | 2 | 2 | 2 | 2 | 3 | |
| Ulcer of the Stomach and Duodenum | 12 | — | — | — | — | 1 | 2 | 7 | 2 | 5 | 1 | 3 | 3 | |
| Diarrhoea (under 2 years) | 7 | 7 | — | — | — | — | — | — | — | 1 | 1 | 2 | 3 | |
| Appendicitis | 4 | — | — | — | 1 | 1 | — | 1 | 1 | 2 | 1 | 1 | — | |
| Alcoholism | 1 | — | — | — | — | — | — | 1 | — | — | — | — | 1 | |
| Cirrhosis of Liver | 5 | — | — | — | — | — | 2 | 1 | 2 | — | 1 | 2 | 2 | |
| Nephritis | 18 | — | — | 2 | — | — | 1 | 5 | 10 | 5 | 8 | 1 | 4 | |
| Puerperal Sepsis | 3 | — | — | — | — | — | 3 | — | — | — | 1 | 1 | 1 | |
| Other diseases of pregnancy and parturition | 1 | — | — | — | — | — | 1 | — | — | — | — | 1 | — | |
| Congenital debility & malformation, prem. birth | 32 | 31 | 1 | — | — | — | — | — | — | 9 | 8 | 6 | 9 | |
| Suicide | 8 | — | — | — | — | — | 2 | 4 | 2 | 1 | 1 | 2 | 4 | |
| Other deaths from violence | 10 | — | — | — | — | 2 | 3 | 3 | 2 | 2 | 1 | 6 | 1 | |
| Other defined diseases | 142 | 8 | 1 | 3 | 4 | 4 | 14 | 34 | 74 | 41 | 30 | 23 | 48 | |
| Causes ill defined or unknown | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| TOTAL | 704 | 62 | 10 | 12 | 19 | 30 | 85 | 197 | 289 | 187 | 142 | 159 | 216 | |

TABLE IV.

INFANTILE MORTALITY, 1927.

| 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 |
| Scarlet Fever | 1 | | | | | | | 1 | | | | | |
| Bronchitis | 8 | | 1 | | | 3 | 1 | 2 | 1 | 1 | 1 | | 5 |
| Pneumonia | 7 | | | | | 1 | 1 | 3 | 2 | 1 | | | 4 |
| Meningitis | 1 | | | | | 1 | | | | | | | 1 |
| Convulsions | 0 | | | | | | | | | | | | |
| Diarrhoea | 7 | | | | 1 | 2 | 2 | 2 | | 1 | 1 | 2 | 3 |
| Congenital Debility and Atrophy | 4 | 2 | | | 1 | | 1 | | | 1 | 1 | 2 | |
| Congenital Malformation | 4 | 3 | | | | | | 1 | | | 2 | 1 | |
| Marasmus | 3 | | | | | 2 | 1 | | | | 1 | | 1 |
| Premature Birth | 14 | 11 | 1 | | | | 2 | | | 1 | 1 | | 1 |
| Injury at Birth | 6 | 5 | | 1 | | | | 2 | | 4 | 4 | 3 | 3 |
| Pemphigus | 1 | | | 1 | | | | | | 2 | | | 3 |
| Osteo-myelitis | 1 | | | | | | | | 1 | | | | |
| Interssusception | 1 | | | | | | | | 1 | | | | 1 |
| Other Causes | 4 | | | | 1 | 1 | 1 | | 1 | 2 | 1 | | |
| TOTAL | 62 | 21 | 2 | 2 | 3 | 10 | 9 | 9 | 6 | 14 | 14 | 12 | 22 |

TABLE - V.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1927.

| Notifiable Disease. | Cases notified in whole District. At Ages—Years. | | | | | | | | Total cases notified in Wards. | | | |
|-------------------------|---|------------|--------------|---------------|----------------|----------------|----------------|------------------------|-----------------------------------|---------------|---------------|---------------|
| | At all Ages | Under 1 | 1 to 5 | 6 to 15 | 16 to 25 | 26 to 45 | 46 to 65 | 65 and up- wards | North East | North West | South East | South West |
| Scarlet Fever | 137 | 2 | 50 | 70 | 9 | 6 | — | — | 48 | 29 | 22 | 38 |
| Diphtheria | 69 | — | 20 | 42 | 2 | 5 | — | — | 29 | 11 | 10 | 19 |
| Enteric Fever | 1 | — | — | — | — | 1 | — | — | — | 1 | — | — |
| Pneumonia | 44 | 2 | 6 | 6 | 4 | 11 | 10 | 5 | 8 | 2 | 16 | 18 |
| Puerperal Fever | 2 | — | — | — | 1 | 1 | — | — | — | 1 | — | 1 |
| Puerperal Pyrexia | 7 | — | — | — | — | 7 | — | — | 1 | 2 | 1 | 3 |
| Encephalitis Lethargica | 2 | — | 1 | — | — | 1 | — | — | — | 1 | — | 1 |
| Ophthalmia Neonatorum | 7 | 7 | — | — | — | — | — | — | 2 | 1 | — | 4 |
| Erysipelas | 24 | — | 1 | 2 | 1 | 8 | 7 | 5 | 5 | 8 | 4 | 7 |
| Typhoid | 5 | — | — | 1 | 3 | — | 1 | — | 2 | 2 | — | 1 |
| Anterior Poliomyelitis | 3 | 1 | 1 | 1 | — | — | — | — | — | 1 | 1 | 1 |
| Polio-Encephalitis | 1 | — | 1 | — | — | — | — | — | 1 | — | — | — |
| Dysentery | 1 | — | — | — | — | — | 1 | — | 1 | — | — | — |
| Post Partum Fever | 1 | — | — | — | — | 1 | — | — | — | — | — | 1 |
| Tuberculosis (Resp.) | 128 | — | — | 8 | 46 | 50 | 23 | 1 | 40 | 16 | 21 | 51 |
| Tuberculosis (Other) | 26 | — | 1 | 6 | 8 | 5 | 6 | — | 6 | 6 | 7 | 7 |
| TOTALS | 458 | 12 | 81 | 136 | 74 | 96 | 48 | 11 | 143 | 81 | 82 | 152 |

TABLE VI.

CASES REMOVED TO HOSPITAL.

| | N. East. | N. West. | S. East. | S. West. | Total. |
|-------------------------|----------|----------|----------|----------|--------|
| Scarlet Fever | 28 | 20 | 19 | 34 | 101 |
| Diphtheria | 24 | 11 | 10 | 18 | 63 |
| Pneumonia | 2 | — | 1 | 2 | 5 |
| Encephalitis Lethargica | — | — | 1 | — | 1 |
| Anterior Poliomyelitis | — | — | — | 1 | 1 |
| Amoibic Dysentery | 1 | — | — | — | 1 |
| Polio Encephalitis | 1 | — | — | — | 1 |
| Paratyphoid Fever | 1 | 1 | — | — | 2 |
| Puerperal Fever | 1 | 2 | 1 | 3 | 7 |
| Erysipelas | 2 | 3 | 1 | 2 | 8 |
| | 60 | 37 | 33 | 60 | 190 |

TABLE VII.

BIRTHS.

| | Male | Female | | |
|--|---------|------------|---------|-------|
| Total Births | 536 | 490 | | |
| Legitimate | 514 | 473 | | |
| Illegitimate | 22 | 17 | | |
| <i>Ward distribution of Births notified in the District.</i> | | | | |
| N. East. | N. West | S. East | S. West | Total |
| 226 | 166 | 141 | 314 | 847 |
| <i>Outside births notified.</i> | | | | |
| N. East. | N. West | S. East | S. West | Total |
| 46 | 24 | 24 | 36 | 130 |
| <i>Births registered but not previously notified.</i> | | | | |
| N. East. | N. West | S. East | S. West | Total |
| 12 | 0 | 6 | 4 | 22 |
| <i>Still Births.</i> | | | | |
| Inside 21. | | Outside 7. | | |
| Notifications were received from:— | | | | |
| Doctors and Parents | | 663 | | |
| Midwives | | 342 | | |

TABLE VIII.

INFANT WELFARE CENTRES, 1927.

| | |
|---|-------|
| Health Visitors' Attendances | 199 |
| Number of Children who attended | 1623 |
| Number of attendances by children | 13112 |
| Number of children under one year of age | 678 |
| Number of children over one year of age | 945 |
| Children who attended the Clinic for the first time | 723 |
| Children treated at Dental Clinic | 94 |
| Children treated at Ophthalmic Clinic | 11 |
| Children treated for Enlarged Tonsils and Adenoids | 16 |

ANTE-NATAL CLINIC.

| | | | |
|---|------|------|-----|
| Number of Attendances by Dr. Bell | .... | .... | 23 |
| Number of Expectant Mothers who attended | .... | .... | 93 |
| Number of attendances made by Expectant Mothers | .... | .... | 141 |
| Mothers referred for Dental Treatment at Clinic | .... | .... | 31 |
| Mothers supplied with Dentures | .... | .... | 5 |
| Midwives fees paid | .... | .... | 2 |
| Expectant Mothers to whom Dried Milk was supplied | .... | .... | 33 |
| Number of packets of dried milk supplied | .... | .... | 374 |

INQUESTS, ETC.

Inquests held—33.

Causes of death :—

| | | | | | |
|------------------------------------|------|------|------|------|---|
| Suicide | .... | .... | .... | .... | 8 |
| Knocked down by motor-car or cycle | .... | .... | .... | .... | 8 |
| Heart Disease | .... | .... | .... | .... | 4 |
| Gastric Ulcer | .... | .... | .... | .... | 1 |
| Pneumonia | .... | .... | .... | .... | 1 |
| Accidental fall | .... | .... | .... | .... | 1 |
| Injury to finger | .... | .... | .... | .... | 1 |
| Accidental Explosion | .... | .... | .... | .... | 1 |
| Want of attention at birth | .... | .... | .... | .... | 1 |
| Gunshot wound | .... | .... | .... | .... | 1 |
| Syncope | .... | .... | .... | .... | 1 |
| Cerebral Hæmorrhage | .... | .... | .... | .... | 1 |
| Tubercular Glands of Neck | .... | .... | .... | .... | 1 |
| Accidental Burns | .... | .... | .... | .... | 1 |
| Found Drowned | .... | .... | .... | .... | 1 |
| Over-exertion on a full stomach | .... | .... | .... | .... | 1 |

Coroners certificate with Inquest—11.

| | | | | | |
|--------------------|------|------|------|------|---|
| Heart Disease | .... | .... | .... | .... | 7 |
| Cancer | .... | .... | .... | .... | 1 |
| Pneumonia | .... | .... | .... | .... | 1 |
| Arterio-scherris | .... | .... | .... | .... | 1 |
| Pulmonary Embolism | .... | .... | .... | .... | 1 |

TABLE IX.

FACTORIES, WORKSHOPS AND WORKPLACES.

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

| | Premises. (1). | | Inspections. (2). | Number of Written Notices. (3). |
|--|-------------------|------|----------------------|---------------------------------------|
| Factories (Including Factory Laundries). | | | 83 | 27 |
| Workshops (Including Workshop Laundries). | | | 318 | 15 |
| Workplaces (Other than Outworkers' premises). | | | 4 | — |
| Total | | | 405 | 42 |

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

| | Particulars. (1). | | Found. (2). | Remedied. (3). |
|--|---|------|----------------|-------------------|
| Nuisances under the Public Health Acts :— | | | | |
| | Want of Cleanliness | .... | 26 | 26 |
| | Want of Ventilation | .... | Nil | Nil |
| | Overcrowding | .... | Nil | Nil |
| | Want of drainage of floors | .... | Nil | Nil |
| | Other nuisances | .... | 6 | 6 |
| Sanitary Accommodation :— | | | | |
| | Insufficient | .... | 4 | 4 |
| | Unsuitable or defective | .... | 6 | 6 |
| | Not separate for sexes | .... | — | — |
| Offences under the Factory and Workshop Acts :— | | | | |
| | Illegal occupation of underground Bakehouses | .... | Nil | Nil |
| | Other Offences | .... | Nil | Nil |
| Total | | | 42 | 42 |

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

HOUSING.

Number of houses erected during the year :—

| | | |
|---|------|-----|
| (a) Total (including numbers given separately under (b) ) | .... | 309 |
| (b) With State assistance under the Housing Acts :— | | |
| (i) By the Local Authority | .... | nil |
| (ii) By other bodies or persons | | nil |

Note.

Exact figures not yet available, see Population Report

1.—UNFIT DWELLING HOUSES.

Inspection.

| | | | | | |
|--|------|------|------|------|-------|
| (1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) | .... | .... | .... | .... | 1,088 |
| (2) Number of dwelling houses which are inspected and recorded under the Housing (Inspection of District) Regulations, 1910, of the Housing Consolidated Regulations, 1925 | .... | .... | .... | .... | 850 |
| (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 | .... | .... | .... | .... | 831 |

2.—REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

| | | | | |
|---|------|------|------|-----|
| Number of defective dwelling houses rendered fit in consequence of informal action taken by the Local Authority or their Officers | | | | 612 |
|---|------|------|------|-----|

3.—ACTION UNDER STATUTORY POWERS.

A.—*Proceedings under Section 3 of the Housing Act, 1925.*

| | | | | |
|--|------|------|------|-----|
| (1) Number of dwelling houses in respect of which notices were served requiring repairs | .... | .... | .... | 219 |
| (2) Number of dwelling houses which were rendered fit after the service of formal notices :— | | | | |
| (a) by owners | .... | .... | .... | 219 |
| (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 |
|-----|--|----------|

B.—Proceedings under Public Health Acts.

- | | | |
|-----|--|----------|
| (1) | Number of dwelling houses in respect of which notices were served requiring defects to be remedied | 238 |
| (2) | Number of dwelling houses in which defects were remedied after service of formal notices :— | |
| (a) | by owners | 238 |
| (b) | by local authority in default of owners | Nil |

C.—Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925.

- | | | |
|-----|--|----------|
| (1) | Number of representations made with a view to making of Closing Orders | Nil |
| (2) | Number of dwelling houses in respect of which Closing Orders were made | Nil |
| (3) | Number of dwelling houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit | Nil |
| (4) | Number of dwelling houses in respect of which Demolition Orders were made | Nil |
| (5) | Number of dwelling houses demolished in pursuance of Demolition Orders | Nil |
-

STAFF TO WHOSE SALARY CONTRIBUTION IS MADE
UNDER THE PUBLIC HEALTH ACTS OR BY
EXCHEQUER GRANTS.

There has been no change in the 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).
- M. W. KINCH. Member of the Royal Sanitary Institute, holds
Meat Certificate; Senior Sanitary Inspector.
(Inspector under Animals Acts and the Rag
Flock Act).
- J. J. JENKINS Cert. Sanitary Institute; holds Meat Certifi-
cate. Sanitary Inspector. (Inspector under
Fabrics Mis-description Act).
- E. W. BROOKS. Cert. Sanitary Institute. Sanitary Inspector.
- J. J. MATTHEWS. Cert. Sanitary Institute. Sanitary Inspector;
holds Meat Certificate.
- Miss A. COOKSEY. Certificate Sanitary Institute. Health Visitor.
- Miss J. WELSH. Certificate Sanitary Institute, C.M.B., Health
Visitor.
- Mrs. LIGHT. Clerk.

I have again to thank all the members of the Public Health
Department for ungrudging assistance during the year.

I am,

Your obedient servant,

D. J. THOMAS.