

round the subject, Guiard has to have recourse to the hypothesis that there may be supernumerary ova, and that in fact there may be anomalies in ovulation, which is more than likely. It must be remembered, also, as was pointed out by Dr. Robin in the discussion which followed the reading of Dr. Guiard's paper, that we do not know whether the maturation of the ovum (expulsion of polar cells, etc.) always occurs at a set time in reference to the escape of the ovum from the ovary. It is to be feared that Thury's law may be an uncertain guide to the anxious parents who are hoping for a son; but it can at least be tested with little trouble, for it has the merit of simplicity. It is simple, but is it sure?

THE PUBLIC HEALTH REPORT FOR THE COUNTY OF LONDON IN 1902.

MR. SHIRLEY MURPHY'S annual report is, without exception, the most important official report published yearly, not only for medical officers of health, but for all who require to consult statistics on a large number of matters affecting public health and sanitary administration. The full-page illustrations to the report enable the reader to ascertain the main vital facts with a minimum of trouble.

POPULATION.

The administrative county of London had an estimated population at the middle of 1902 of 4,579,110.

OVERCROWDING.

A very valuable comparison of the percentage of total population, living in tenements of 1, 2, 3 or 4 rooms, and of the amount of overcrowding in each of these is given, the census results of 1891 being compared with those for 1901. These figures give encouraging evidence of social improvement. Thus in London as a whole, the percentage of the population occupying tenements of one room has declined from 9.2 to 6.7, and the percentage has declined in every sanitary area. The proportion of the population occupying tenements of two rooms has declined in 23 districts and increased in 15 districts. In the whole of London the proportion of the total population living in two-roomed tenements has declined from 16.4 to 15.3 per cent. The proportion of the population living in tenements of three rooms has increased from 15.8 to 16.5, and in four rooms from 14.1 to 15.2 per cent. during the ten years. As the percentage of the total population living in tenements of not more than four rooms has declined from 55.5 in 1891 to 53.7 in 1901, the general result of the above comparison is that there is less misery as indicated by one-roomed and two-roomed dwellings.

Next, the same districts are classified in accordance with the method of the Registrar-General according as the tenements contain on an average two or more persons per room; if more than two they are regarded as overcrowded. Here again improvement is manifested. In London, as a whole, the proportion of the population living in "overcrowded" tenements declined from 19.70 to 15.97 per cent. in the ten years; and although the decline was shared by the populations of each class of tenement, it was greatest in those occupying one and two rooms. Only in three sanitary areas—those of Whitechapel, Mile-End Old Town, and St. George-in-the-East—which have been specially affected by alien immigration has there been an increase in the proportion of the total population occupying overcrowded tenements of less than five rooms, and even in these areas the proportion overcrowded in one room has declined.

MARRIAGES AND BIRTHS.

Diagrams I and II opposite p. 11 show very clearly that the curve of the birth-rate is ceasing to follow that of the marriage-rate, some recovery in the latter being associated with a steady decline in the former. We note that birth-rates are now given for each metropolitan borough in terms of the number of married women aged 15-45. This, we believe for the first time, enables the exact relative fecundity of the populations of the different boroughs to be compared. The lowest is the City of London with a birth-rate of 14.6, next come the City of Westminster, 16.6; Hampstead, 17.8; Stoke Newington, 18.7; and Kensington, 18.7; while at the other end of the scale we have Greenwich, 24.1; Bermondsey, 26.2; Bethnal Green, 27.5; and Poplar, 27.6 per 1,000 married women aged 15-45.

CORRECTED DEATH-RATES.

It is interesting to compare these birth-rates with the

death-rates, corrected for age-distribution and sex-distribution of the corresponding metropolitan boroughs. The lowest death-rates were 12.1 per 1,000 in Hampstead, 14.0 Lewisham and Stoke Newington, 14.2 Wandsworth; the highest 22.4 City of London, 23.6 Holborn, and 23.9 in Finsbury. Although low birth-rates are commonly associated with low death-rates there is no causative relationship between the two.

LOWERED DEATH-RATE.

The death-rate for males was 10.1 per cent., and for females 12.0 per cent. lower than the corresponding mean death-rates in 1881-90. This implies a saving of 9,363 lives during 1902, representing a gain to the community of 385,756 years of life capital.

"LIFE EXPECTATION" IN TWO SELECTED DISTRICTS.

The preceding may be regarded as the results for the average Londoner. But variations of social conditions and all that this implies are related to variations in the death-rate and life-expectation. This is shown by Mr. Shirley Murphy by a comparison of a short life table for Hampstead and Southwark. Confining ourselves to the statistics for males, which are probably more trustworthy than those for females, it is significant that the average male of Southwark at birth has 14.28 years less of expectation of life than the corresponding male of Hampstead. At age 20 the Southwark male has an expectation of life of 36.41 years, the Hampstead male of 44.23 years; at age 45 the corresponding figures are 18.93 and 23.81 years; and so on. From these and other figures it is clear that the conditions adversely affecting longevity in Southwark are operative to a greater or less extent throughout the whole of life. If the Hampstead figures be taken as the standard, Southwark males lose 13.0 per cent. of the period of infancy (0-5), 17.7 per cent. of the school-age period (5-15), 28.0 per cent. of the working period (15-65), and 59.1 per cent. of the period of decline (65 and upwards). It is interesting to note that the figures of the present day relating to Southwark are somewhat similar to those calculated by Dr. Farr, for St. George, Hanover Square, some sixty years ago. This, as Mr. Murphy points out, is "distinctly encouraging to further efforts in the direction of improving the standard of public health."

The significance of the comparative life-expectations for Hampstead and Southwark would be missed, were we not to note that over 70 per cent. of the Southwark population are housed in tenements of less than five rooms, as compared with less than 30 per cent. of the Hampstead population thus housed; while nearly 10 per cent. of the Southwark population live in one-roomed tenements as compared with a little over 2 per cent. in Hampstead. It is significant, also, that 22.35 per cent. of the population of Southwark were occupying tenements of less than five rooms which were overcrowded (more than two per room); while only 6.37 per cent. of the population of Hampstead occupied overcrowded tenements.

INFANTILE MORTALITY.

The deaths under 1 year of age per 1,000 births were 139 in London, varying from 87 in Hampstead and 117 in Marylebone to 149 in Kensington, 154 in Finsbury, 155 in Bethnal Green, 166 in Southwark, and 174 in Shoreditch.

SMALL-POX.

In 1902 a considerable epidemic of small-pox occurred in London, causing a death-rate of 0.28 per 1,000—higher than that of any other town except West Ham, which was 0.54. It is unnecessary to follow the steps of the history of the spread of this disease as narrated in Mr. Murphy's report, but a few remarks on the account of the administrative measures taken to minimize its spread are desirable. The failure to diagnose the disease, and particularly its confusion with chicken-pox, were a frequent cause of spread. The supervision of persons exposed to small-pox was one of the main difficulties. Apart from economic difficulties, the impracticability of the wholesale quarantining of all persons exposed to infection when small-pox is widely distributed is obvious. Thus in four boroughs there were 1,093 cases of small-pox and 13,259 contacts. The Local Government Board takes the view that in most instances it meets the requirements of the case if dwellings and personal apparel are properly disinfected, if the contacts are so far as practicable vaccinated, and in any case examined carefully day by day towards the end of the second week from their exposure to infection. The system of paying for quarantine of contacts seems to have been adopted

largely in Poplar, where 660 cases of small-pox occurred and £1,089 was expended on the supply of food to persons kept in their homes. Statistics are given of the effect of vaccination in diminishing the incidence of small-pox on contacts; the effect varying in accordance with the promptitude of the vaccination. It is noteworthy that the source of infection could not be discovered in more than one-third of the total cases of small-pox, and that in a large number of other instances cases of small-pox were not recognized until after immediate vaccination was unavailable as a means of preventing infection. Attention has previously been drawn in these columns to the excessive prevalence of small-pox among sanitary inspectors and disinfectors. In this report the evidence as to these and as to the experience of nurses in the metropolitan small-pox hospitals is summarized with the usual result, that neglect of revaccination is shown to be the cause of such cases of small-pox as occurred.

CHICKEN-POX.

From February, 1902, to January, 1903, this disease was added to the schedule of notifiable diseases in London. During this time the cases notified numbered 5.9 per 1,000 of the population per annum. The seasonal curve of this disease appears closely to resemble that of measles, there being a maximum in June and a second maximum at the end of November. More male than female cases occurred at all ages together. The greatest incidence of attack, as in scarlet fever and diphtheria, was upon the age of 4-5. The high case-rate at the age 0-1 distinguishes it from other notifiable diseases.

MEASLES.

The death-rate from this disease was 0.51 per 1,000, and a diagram representing the incidence of mortality from this disease since 1841 shows no indication that the disease is becoming less fatal. Out of corresponding statistics for 10 foreign capitals, 3 had in 1902 a higher death-rate from measles, namely, at St. Petersburg 0.52, Amsterdam 0.88, and Rome 0.94. In London the highest death-rates from measles were 1.16 in Fulham and 1.17 in Bermondsey; the lowest 0.20 in Lewisham and 0.10 in Stoke Newington.

SCARLET FEVER.

The death-rate from this disease was only 0.12 per 1,000, and the case-rate varied from 2.1 in Kensington and in Shoreditch to 5.1 in St. Pancras and Battersea.

DIPHTHERIA

caused a death-rate of 0.25 per 1,000, having steadily declined since the maximum year, 1893. In New York the corresponding death-rate was 0.56, in St. Petersburg 0.68, in Brussels it was only 0.11. In London the case-rate from diphtheria varied from 1.0 per 1,000 in Kensington, 1.2 in Hampstead to 3.1 in Wandsworth, 3.5 in St. Pancras, and 3.7 in the City of London. Reference is made to the importance of the action taken by Dr. Kerr, the Medical Officer of the London School Board, in securing co-operation between local medical officers of health and himself in the examination of school children both at home and at the school, and of the free use of the laboratory in the diagnosis of atypical cases of this disease.

WHOOPIING-COUGH.

Whooping-cough, unlike measles, shows signs of a declining mortality, the death-rate from this disease in 1902 having been only 0.40 per 1,000 as compared with a mean death-rate of 0.69 in 1881-90. Whooping-cough is still much more fatal than in any of the chief European capitals or in New York.

ENTERIC FEVER.

Enteric fever caused a death-rate of 0.12 per 1,000 in 1902. The case-rate from this disease varied from 0.4 in Lewisham, Hammersmith, and Stoke Newington to 1.2 in Poplar and 1.3 in Shoreditch. The connexion of polluted shellfish with the causation of enteric fever receives considerable attention in this report, and it is satisfactory to find that the investigation of this vehicle of infection is becoming increasingly practised.

PHTHISIS.

It is unnecessary to summarize statistics as to other diseases except phthisis, which happily is receiving each year more attention as a disease concerning which active preventive measures are applicable. The death-rate from this disease was 1.60 per 1,000, varying from 0.35 in Hampstead, 0.90 in Wandsworth, and 1.05 in Paddington, to 2.28 in Finsbury, 2.62 in Southwark, and 3.01 in Holborn. Corrected for age and sex distribution of population, Hampstead is the lowest,

0.84. Wandsworth comes next, 0.91, then Paddington, 1.01, while at the opposite extreme are Finsbury, 2.30, Southwark, 2.62, Holborn, 2.65.

Although a system of voluntary notification of phthisis has been established in thirteen metropolitan boroughs, only 1,191 cases were actually notified in London in 1902. In some of these boroughs the machinery of notification only came into operation late in the year.

SANITARY ADMINISTRATION.

Part II of the report consists of a very full summary of every branch of sanitary administration in the metropolitan boroughs, which, although it does not lend itself to convenient comment, will none the less be extremely valuable to all engaged or interested in sanitary work.

A special report of Dr. Hamer is appended, giving a very full account of small-pox in London common lodging-houses, 1901-2; in another appendix by Dr. Hamer the occupation of persons attacked by small-pox is discussed; exemption clauses in by-laws as to houses let in lodgings form the subject of a third appendix; accommodation for women in common lodging-houses of a fourth; in a fifth appendix Dr. Young gives a detailed account of the sanitary administration of Hammersmith; and the sanitary staffing of each London borough is the important subject of a final appendix.

CONTRACT MEDICAL PRACTICE.

CONTRACT WORK AT ASHTON-IN-MAKERFIELD.

A CORRESPONDENT writes: The four resident practitioners at Ashton-in-Makerfield, through the Secretary of the Wigan Medical Guild, some time ago intimated to the various secretaries of the sick clubs in their district that after December 31st, 1903, unless the rates of pay of 2s. 6d. and 3s., which have been the standard rates for the last thirty years, were increased to 4s. they would not accept re-election.

Several conferences were held between the representatives of the various Lodges and the medical men, at which some minor points were agreed upon, but the rate of 4s. was insisted upon by the medical men. This the clubs definitely refused to pay, with the result that they amalgamated and advertised in the lay press for a qualified man to work for them at the old rate of 2s. 6d. per member. Numerous applications were received and a selection made, with the result that an outsider is now brought into the district with a guaranteed salary of £150 per annum for attendance upon 1,200 members.

The Wigan Medical Guild has given all the support it could in the matter, but the weakness lies in the fact that in Wigan, which is only five miles distant, the old rates prevail. Had the movement originated in Wigan, as the centre (and the change is equally desired there) the Ashton practitioners would have experienced no difficulty in obtaining the advanced rate; it is to the credit, however, of Ashton that it has been the pioneer in the movement.

It is very much to be regretted that a registered medical man should be found willing to offer his services under such conditions. One important fact which has been made clear during this incident is that the most enthusiastic of working-men federators are the prime movers in preventing others from obtaining what they themselves advocate so eagerly.

PRESENTATION.—The recent marriage of Dr. Ronald Polson, of Worcester, was made the occasion, early this month, of one of those ceremonies which it is always pleasing to record, inasmuch as they show that the self-denying efforts of medical men do not always pass unappreciated. Dr. Polson has been resident in St. John's, Worcester, since 1887, and was presented at a large gathering of his patients and friends with a congratulatory address, and a silver tray. Several speeches were made, by Canon Carr and others, in which attention was drawn to the beneficent character of the work which Dr. Polson had done. The plate was inscribed, "I was sick and ye visited me."

A LEPROSY SCARE IN AMERICA.—A rumour gained currency not long ago that 25 cases of leprosy had been discovered in the Russian colony near Lincoln, Nebraska. Some uneasiness was felt, but the Health Commissioner, who made a thorough examination of the suspected persons and found them to be suffering from a perfectly benign skin disease, issued a report which dispelled the alarm. How often must sufferers from harmless cutaneous affections have been cut off from communion with their kind and condemned to the living death which was the leper's portion in the Middle Ages?