application must be made to the Ministry of Health for an order transferring the necessary powers.¹

The lack of housing accommodation has hampered the closing and demolition of houses very considerably, but a reference to the figures of work done in this direction shows that where opportunity offers many local authorities are alert to their responsibilities.² Mention must be made of the Housing (Rural Workers) Act of 1926, which enabled, within limits, rural authorities to aid the owners of dilapidated cottages to recondition them, without an increase of rent. Progress has been "disappointingly slow," but when the possibilities of the Act are better realized much useful remedial work will probably be done.

Although not properly within the province of the public health department, the powers given by the Small Dwellings Acquisition Acts of 1899 and 1923 are important as being a useful factor in the solution of the housing problem. By these Acts local authorities are empowered to lend on mortgage to the occupiers of small houses up to 90 per cent. of the approved purchase price to enable them to own the house in which they dwell. It was the latter Act which extended the amount which might be advanced; and its popularity and value may be gauged by the fact that since its passing local authorities have advanced £54½ millions whilst building societies have contributed to the solution of the problem £172 millions in aid of the purchase of small houses.4

Progress in housing still appears to many to be painfully slow; all public health officials are alive to its urgency, but considering the complex economic and social factors involved the advance made must appear to the unprejudiced observer to be a very remarkable testimony to the value of the co-operation of national and local authorities, co-operative enterprise and private effort.

CHAPTER XXIII

SANITARY SUPPLIES AND SERVICES

THE Royal Sanitary Commission, in their second report (1871) includes, amongst other things comprising "the ordinary supply of what is necessary for civilized social life," a supply of wholesome and sufficient water for drinking and washing, provision of sewerage, and the utilization of sewage, removal of refuse, provision of burial for the dead without injury to the living, and regulation of markets. In so doing, they rightly recognized that the subdivision of local government which was referred to them was "generally designated in recent legislation as sanitary though it might be, in a wider sense, called economical."

It is important to press this point when considering public health efforts of all kinds. Looked at from a financial point of view, these efforts result on the whole, and usually in detail, in a loss; the balance is usually on the debit side. But, viewed as benefiting the community, as a provision of "collective goods" which are enjoyed by all, and often to the greatest extent by the poorest members, the financial outlay is amply justified. It is these facts that have deterred private enterprise from any general attempt to provide the supplies and services enumerated above. The public interest and private interests clash; and to the growing recognition that, in matters of health at least, the interests of the community cannot be left to the mercies of private individuals, we owe the increasing extension of the public provision of these supplies and services.²

¹ Housing Act, 1925, s. 77.

² See page 149. ³ The Minister of Health in the House of Commons, May 15, 1928. ⁴ The Right Hon. Neville Chamberlain in the House of Commons, May 15, 1928.

¹ Marshall, Economics of Industry (1893), p. 54. ² Compare Mill, Representative Government, Chapter XV.

As water is one of the prime necessaries of life, it was inevitable that local authorities should be given the power to provide a supply proper and sufficient for public and private purposes. In order to do this, an authority may construct and maintain waterworks, dig wells, and do any other necessary acts, lease, hire, or purchase any waterworks or sources of supply, or contract with any person for such supply, and has various powers for regulating the supply and use of and making charges for water. Although from the text of the section (51) this is a power, not a duty, of the local authority, a later section enables the Local Government Board (now Ministry of Health), upon complaint that a local authority has made default, to make an order, enforceable by mandamus or executed by a person named in a further order at the expense of the authority, requiring the authority to perform their duty within a stated time.2 The duty and powers of a rural district council under the Public Health (Water) Act, 1878, to provide or require the provision of a sufficient and wholesome supply of water for every occupied dwelling-house and to ascertain the condition of the water supply within their district, may be granted to any urban authority by order of the Ministry of Health.3 The fact that parish councils may utilize any spring, well, or stream within their district 4 does not relieve the rural district council of its duties as regards water supply, the parish council being enabled to complain to the county council where they think the rural district council ought to have provided a water supply and could have done so at a reasonable cost. If satisfied, the county council may thereupon resolve that such duties be transferred to them, or may make an order appointing some one to perform the duty and recover the costs from the defaulting authority.5

There were no complete statistics as to water supplies

¹ See British Waterworks Year Book and Directory with Statistical Tables, 1926.

² Seventh Annual Report of the Ministry of Health, pp. 44-5. ³ See *Municipal Year Book*, 1926, pp. 691 et seq., for list of authorities and financial particulars.

available, but by arrangement with the Ministry of Health the collection and publication of statistical information was undertaken by the British Waterworks Association, by which much useful inquiry has already been made.¹

A Select Committee which inquired into water power resources recommended a Water Commission to conserve water resources in general interests, readjust conflicting interests and generally to assist the Public and Parliament in questions affecting water supply, and an advisory Committee has been set up by the Ministry of Health to review the situation with the object of formulating a national policy. The tendency is for water supplies to be put into the hands of ad hoc authorities—e.g. the Durham and Staffordshire Potteries Water Boards—and the establishment of regional committees with the primary function of advising neighbouring authorities with common interest in source or supply of water and securing co-operation, whilst leaving ultimate decisions with water authorities themselves.²

Methods of acquisition of the supply or its source and of charging for the water, vary considerably. Whilst efficiency, not profits, has in general been the aim of the local authorities, many have realized useful surpluses.³ The returns which must be looked for, however, is not financial but vital; in public health, not pecuniary profits.

The provision of means of quickly and cleanly removing and disposing of waste waters and excremental matters is almost as essential as an abundant supply of pure water; in practice the latter frequently depends upon the efficiency of the former, and also makes its provision more necessary. There are numerous instances of the good effects of the construction of efficient sewerage and sewage disposal works, and the general reduction of the disease and death rates from typhoid fever, as well as the practical elimination of cholera, are due in no small measure to the increasing

¹ Public Health Act, 1875, ss. 51 to 67.

² Ibid., s. 299. ³ Public Health (Water) Act, 1878, s. 11.

⁴ Local Government Act, 1894, s. 8. ⁵ *Ibid.*, s. 16. Public Health Act, 1875, s. 299.

efficiency of this public health service. There are still many towns in England and Wales whose sanitary conveniences are not on the water-carriage system. The Central Government are, however, continuing to press upon local authorities the necessity for a speedy conversion from the conservancy methods to the water-carriage system, and their efforts are meeting with success.

With certain exceptions the Public Health Act vested all existing and future sewers within the district of a local authority together with all buildings, works, materials, and things belonging thereto, in that local authority, who may improve or abolish such sewers, where it is deemed necessary, must maintain them, so as not to be a nuisance or injurious to health, and must not pollute any streams or other water by discharging sewage into them. The sewage becomes the property of the authority immediately it has gone through the drains into the sewer. For the purpose of receiving, storing, disinfecting, distributing or otherwise disposing of sewage any local authority may construct works within or without their district, contract for the use of, purchase or lease lands, buildings, engines, or other things necessary for their purpose, and may contract to supply upon terms, for a period of less than twenty-five years, any person with sewage.1 Whilst it is generally agreed that the watercarriage system is by far the better method, great and increasing difficulties are met with when seeking an efficient method of disposing of the sewage. The methods that have been adopted are very numerous,2 and the Royal Commission appointed in 1898 to inquire into the matter issued their ninth and final report in 1915, having surveyed a vast field of effort and formulated recommendations the value of which progressive investigation constantly modifies. The amount of loans outstanding in 1924-5 for the purposes of sewerage and sewage disposal works totalled £49,241,397, the amount raised during the year reaching

² See Municipal Year Book, 1926, p. 831 et seq.

£5,039,587, the expenditure, including loan charges, reached $f_{8,710,545}$, the working expenses being $f_{4,773,119}$; whilst the receipts amounted to only £755,317.1 This is a more important instance of a return for expenditure being received in improved public health.

SANITARY SUPPLIES AND SERVICES.

A cognate service with similar objects—i.e. the speedy and cleanly removal and disposal of matters which are offensive or dangerous to health-is the removal and disposal of house refuse and the contents of sanitary conveniences on the conservancy system. Local authorities may, and if required by the Ministry of Health must, undertake or contract for the removal of these matters for the whole or part of their district and may sell or otherwise dispose of them, a daily penalty being recoverable if, when they undertake or are required to do so, they make default after the expiration of seven days from the receipt of notice in writing from the occupier of any house within their district.2 The Local Government Board frequently exercised their powers in this respect, and in 1912 went so far as to apply for a mandamus to compel the Windsor Rural District Council to comply with their order. The council, however, gave an undertaking in the High Court that they would take the necessary steps within a month and the case was removed from the list.3

This service is frequently performed by the public health department, the sanitary inspector or a special officer being put in charge of the staff necessary for the purpose. The methods of disposal, in contrast to those for sewage, are very few, resolving themselves, as a rule, into two-incineration in a destructor, or dumping on waste land, occasionally with a view to its reclamation. The former is the more sanitary method, and is almost imperative for urban districts, where it is often united with various industrial activities such as the manufacture of paving-slabs from the slag, or disinfectant powder from the ash, or the genera-

¹ Public Health Act, 1875, ss. 13 et seq.; definitions of "drain" and "sewer," s. 4, and Public Health Acts Amendment Act, 1890, s. 19. See also Public Health (Support of Sewers) Act, 1883.

¹ Eighth Annual Report of the Ministry of Health, pp. 226-7.

² Public Health Act, 1875, ss. 42 and 43. ⁸ Forty-second Report of the Local Government Board, Part III,

tion of steam or electricity. The expenditure during 1924-5, inclusive of loan charges, was £6,597,455, the receipts being a negligible quantity. There is evidence that this department of public health activity is often defective in organization and costly in working. To avoid this and to ensure comparative data a report on the methods of keeping costing accounts in relation to public cleansing services was printed and sold in large numbers, a fact which gives

hope for improvement in the future.2

In their Eighth Annual Report the Ministry tabulate and comment upon returns of costs of public cleansing made by seventy-nine of the councils of county boroughs. These show wide variations in the quantity of refuse per 1,000 of the population per day (from under 10 cwt. to over 22 cwt.; average 16.6 cwt.), cost per ton of refuse collected (from under 6s. to over 12s.; average 9s. 1d.) and cost per 1,000 of population per year (from under £90 to over £180; average £130).3 A further return from all urban areas with populations exceeding 30,000 has been asked for and it is hoped that comparisons of costs may lead to local scrutiny and material economics.

The advantages of public abattoirs for the purpose of supervision of slaughtering, prevention of cruelty, cleanliness, and the inspection of the meat supply have been already referred to.4 Any urban district 5 and, with the consent of the Ministry of Health, any rural district,6 may provide slaughter-houses and make bye-laws for their use and management, and a number of local authorities have already done so,7 but few of them yield a profit. In twenty-nine districts public slaughter-houses are combined with markets, all but three showing a profit on the financial transactions.8 Where a public slaughter-house or market has been provided by a local authority they may, with the

8 Ibid., p. 749.

consent of the Ministry of Health, provide a cold-air store or refrigerator, together with all apparatus necessary for the storage and preservation of meat or other foodstuffs, and may make reasonable charges for use.1

Borough councils, with the approval of two-thirds of their members, and urban district councils, with the consent of the owners and ratepayers in the district, may provide and maintain a market-place or house and the necessary appendages, making charges and tolls for its use, and bye-laws for its regulation.2 Rural district councils, with the consent of the Ministry of Health, are enabled to do the same by the Public Health Act, 1908. A fair number of authorities have taken advantage of their powers and provided these institutions which, besides facilitating the supervision of the quality of foodstuffs and the veracity of weights and measures, as a rule show a financial profit.3 In 1924-5 the outstanding loans for this purpose amounted to £6,093,140, of which £67,006 were expended during the year; the expenditure reached £1,553,820, including loan charges amounting to £375,350, against which there was a revenue of £1,983,687.4

By a series of adoptive Acts, the first dating from 1846, borough and urban district councils 5 and parish councils (on the adoption of the Acts by the Parish Meeting),6 may establish baths and washhouses, adapt them for the purposes of gymnasia, music and dancing, and make byelaws for the regulation of their use. A large number of local authorities have availed themselves of this power, no district now being considered up-to-date unless facilities for learning and practising swimming are provided. The amount of loans for these purposes outstanding in 1924-5 was £2,856,186, £378,216 being expended during that year, the expenditure of £1,418,107 being raised to £1,699,289

¹ Eighth Annual Report of the Ministry of Health, pp. 206-7.

² See Seventh Annual Report of the Ministry of Health, pp. 51-2.

³ See Eighth Annual Report of the Ministry of Health, pp. 14 et seq., 4 Chapter XV. and 206 et seq. ⁶ Ibid., s. 262. ⁵ Public Health Act, 1875, s. 169.

⁷ Municipal Year Book, 1926, pp. 749-52.

¹ Public Health Act, 1925, s. 71. ² Ibid., 1875, ss. 166 and 167, incorporating the Markets and Fairs Clauses Act, 1847.

³ Municipal Year Book, 1926, pp. 827-36. ⁴ Eighth Annual Report of the Ministry of Health, pp. 226-7.

⁵ Public Health Act, 1875, s. 10. ⁶ Local Government Act, 1894, s. 7.

by loan charges, to meet which a revenue of £770,359 was received.¹ The maximum charges prescribed by the Baths and Washhouses Acts were abolished by the Public Health Act, 1925, and powers were also given enabling local authorities to make a fuller use of swimming baths which are often closed during winter months.² The removal of such restrictions will enable some local authorities to reduce the annual losses falling upon the rates.

The provision of adequate and proper accommodation for the disposal of the dead is one of the most urgent and essential branches of sanitary administration, a long series of Burial Acts, extending from 1852 to 1906, in addition to the Cemeteries Clauses Act, 1847, which was incorporated in the Public Health (Interments) Act, 1879, giving powers to various authorities for the purpose. The majority of the ad hoc burial boards have now been abolished in favour of the sanitary authorities, and the distinction between a burial-ground and cemetery (chiefly one as to the distance from a dwelling within which burial was prohibited) has now been removed by the Burial Act of 1900, which gave the Local Government Board (now the Ministry of Health) powers and duties relating to their use and sanitation, and left the Home Office with jurisdiction in ecclesiastical matters. The Cremation Act, 1902, extended the above powers to include provision and maintenance of crematoria, the plans and site for which must be approved by the Ministry of Health, a certificate of a Secretary of State being required before it may be used.3 Very few of the local authorities who provide public cemeteries have added crematoria. The amount of outstanding loans for these purposes in 1924-5 was £2,435,698, of which £168,272 was expended during that year, the expenditure of £1,142,552 being increased to £1,378,410 by loan charges, which was partly met by a receipt of £965,544.4

² Part IX, ss. 85-6-7. ³ Regulations as to use issued March 31, 1903. Most of these supplies and services have the common characteristic of involving a charge upon the rates, and have often been quoted by unthinking or irresponsible persons as being instances of unsuccessful public enterprise. This is quite erroneous. The primary reason for their provision is the improvement and maintenance of the public health. That they should be conducted as economically as the object to be attained permits must be admitted, but their success is not to be measured in £ s. d.; but in the far more elusive standard of vitality and health.

¹ Eighth Annual Report of the Ministry of Health, pp. 226-7.

Regulations as to use issued March 31, 1903.

4 Eighth Annual Report of the Ministry of Health, pp. 226-7.