of the first child. For the well-to-do the average cost was £57, for the manual worker £36. Poorer mothers economized progressively as their families grew in size. A high proportion of the total expenditure in all groups went to purchase non-medical items such as layette and pram. Statutory grants and allowances covered only a very small proportion of the total expenditure. Even when the new rates become available, the grant will still cover only a small proportion of the total costs. The first stage toward the removal of the economic obstacles to childbearing is the provision of free confinement care. But total costs can be substantially reduced only if mothers are assisted also with their non-medical expenditure. Reference is made to the Swedish system whereby low-income families can apply to a special fund for additional aid for specified items, including clothing, equipment, dental care, additional food, and domestic help up to a maximum of around £27.

Of all single births in the sample, 6.4 per cent. were premature. The causes of such prematurity were partly biological and partly economic. Prematurity was less frequent amongst mothers aged 25 to 35. Birth intervals of less than two years predisposed to premature birth. Women who had worked outside the home during the last five months of pregnancy more frequently had premature babies than those who had not so worked or had left work during the first four months.

By the end of the eighth week 43 per cent. of mothers were bottle-feeding their babies. Contrary to general belief, babies were more often successfully breast-fed when they had been born in hospital. The main failure was in establishing lactation. The establishment and maintenance of lactation depends more on the quality of antenatal supervision than on care given during the puerperium. Such antenatal supervision is more important than any other factor, biological, social, or economic, that was considered.

The great majority of married women in full-time gainful occupations during pregnancy were primigravidae. They usually terminated their employment in mid-pregnancy and only a small proportion of them had resumed work on a date two months after delivery. The few remaining at work during the later stages of pregnancy were exposed to rather greater risks of stillbirth and prematurity than were women not in employment, although they used antenatal services to the same extent. Expectant mothers compelled by economic necessity to continue earning in late pregnancy did not receive enough assistance from current maternity grants to enable them to leave work without financial loss.

Domestic help is essential to give mothers a chance of resting during the later weeks of pregnancy and after confinement, but many women were not receiving such assistance. Even the well-to-do were not always receiving help, but lack of help was much more frequent in the poorer groups, especially amongst multiparae confined at home. Seventy per cent. of the mothers intended to seek the services of a municipal home help at their next confinement if such were available.

Unmarried mothers first came under antenatal supervision at a later stage of pregnancy and some received no antenatal care at all. They were rarely delivered by doctors, and therefore were even less likely to receive any form of analgesia than were the manual workers' wives. Economically the unmarried mother is at a great disadvantage. Leaving work commonly results in destitution. Most of them had to return to full-time work soon after the birth of their child. Many decided to bring up their babies in their own homes.

The report concludes with the presentation of a number of recommendations the nature of which is clearly indicated by the findings recorded above. It reveals many hidden defects of the existing organization, and the recommendations made for improvement are essentially practical. It is intimated that since this enquiry was limited to the study of pregnancy and labour and the first two months of the puerperium, and in order to make a complete assessment of the achievements of the maternity services, a follow-up survey of maternal morbidity and of the social and economic factors affecting infant health and development during the first two years of life is to be undertaken.

There can be no doubt of the value of this report, which includes a great amount of information which is made available for the first time. It can claim to be of special interest to the medical profession and to all others who are concerned with the employment of medicine as an instrument of social policy.

F. A. E. CREW

Textbook of the Rheumatic Diseases. Edited by W. S. C. COPEMAN, O.B.E., M.D., F.R.C.P. 1948. Edinburgh: E. and S. Livingstone. Pp. 619 with 351 illustrations. Price 50s. net.

Social Medicine interests itself particularly in the relationship of the social environment to disease. There are diseases in the aetiology and dissemination of which the social environment is implicated and there are others which, because of their nature and incidence, result in problems which affect society as a whole and which for their solution demand adequate social action. The inclusion of a chapter on the statistics of rheumatic diseases in this most comprehensive textbook shows that these demand the interest of social medicine no less than that of clinical.

It is recorded that out of 16.7 million days of incapacity for work within a year amongst insured men, muscular rheumatism accounted for 220,000 days, lumbago for 194,000, rheumatoid arthritis for 131,000, osteo-arthritis for 64,000, subacute and articular rheumatism for 40,000, rheumatic fever for 11,000, chorea for 4,000, together with arthritis (unspecified) 201,000 and rheumatism (unqualified) 702,000. These are the figures given in the report on *Incapacitating Sickness in the Insured Population* issued by the Department of Health for Scotland in 1937-8. Dr. Percy Stocks, who is responsible for this chapter, calls attention to the need for accuracy in diagnosis and for a standardization of simple classification if statistical investigation is to be profitable.

The figures of Hedley (1940) on rheumatic heart disease in Philadelphia hospitals are quoted to show that in 39 per cent. of people with a history of rheumatic fever the onset of rheumatism occurred before the age of 10, and in 63 per cent. before the age of 15. In 39 per cent. of people with a history of rheumatic heart disease the onset of that condition occurred before the age of 10, and in 58 per cent. before the age of 15.

The records maintained by the Emergency Medical Services during 1942-4 show that the contributions to total illness amongst men made by osteo-arthritis and muscular rheumatism increased rapidly as age advanced, whilst those of rheumatic fever declined. Amongst men under 25, two-fifths of all rheumatic illness consisted of rheumatic fever and its sequelae, one-fifth being other forms of arthritis, and two-fifths muscular or undefined. At ages 35-44 rheumatic fever contributed less than

one-tenth, other arthritis about a quarter, and muscular types over three-fifths.

The statistics of sickness in the Civil Service of Canada in 1937-8 and 1938-9 show that rheumatic fever accounted for about 4 out of 1,000 of all illnesses causing certificated absence from work, and chronic arthritic rheumatism and other arthritis for about 19 per 1,000.

The records of the Emergency Medical Services 1942-3 show that half the men were still in hospital under treatment or convalescent after a lapse of nearly three months from the date of first admission to hospital in the case of rheumatic fever, that for other arthritic rheumatism the median duration was eight or nine weeks for young men and about six weeks for older men, and for muscular rheumatism it was three weeks for young and four weeks for older men.

A hospital discharge study of all patients leaving New York hospitals in the year 1933 revealed that out of 576,623 who had been treated as in-patients there were 2,097 with a diagnosis of rheumatic fever without heart affection, 3,852 with rheumatic heart disease (of whom 1,835 had rheumatic fever), 610 with Sydenham's chorea, and 6,209 with arthritic conditions.

The Canadian Civil Service statistics for years just before the war showed that the average duration of certificated absence from work was about twenty-four days for rheumatic fever and twenty-two days for chronic arthritic rheumatism.

Rheumatic fever is a notifiable disease in Denmark. The annual notification rate during 1938-43 averaged 74 per 100,000 persons. A comparable rate for England and Wales would be 30,000 cases annually, about 7 out of every 1,000 infants born would have rheumatic fever before the age of 15, and subsequently another 38 attacks would be expected amongst the survivors.

The records of the London County Council for 1938 suggest that about 2.5 per cent. of London's child population were suffering from or had experienced some form of rheumatic infection.

Estimates derived from samples of men between 18 and 41 rejected by Medical Boards from military service suggest that about 7 per cent. of rejections were on account of heart disease of rheumatic origin and that 6 or 7 per 1,000 of all men of those ages had been sufficiently incapacitated by rheumatic fever to cause rejection.

The social survey on behalf of the Ministry of Health during 1944-5 revealed that the reported incidence of rheumatism was higher amongst women than men, the female excess amounting to about 40 per cent., more than this under 25 and less from 35 to 44. With advancing age from 20 to 60 the rate increased eight-fold in men and seven-fold in women. The disability rate per 1,000 men was about 5 per 1,000. An excess in frequency was shown in the group with ample house room. Thirteen

per cent. recorded rheumatism out of 1,767 people with only one or two people in the household compared with 10 per cent. out of the 4,062 with three, four, or five in the household and 9 per cent. out of the 891 with six or more in the household. These differences were not to be explained by any suggestion that the smaller households consisted largely of older people. The work of Daniel is quoted. He found that there was a clearly defined inverse relation between incidence and number of persons per room, families with less than 0.6 of a room per person having 3 to 4 times the rate of families with 1.4 or more rooms per person. A similar correlation was found with the net income reckoned as a percentage of the minimum needs of the family. There would appear to be no important difference between urban and rural incidence for total rheumatism.

The mortality caused by rheumatic conditions arises mainly by heart lesions left by it. Dr. Stocks again discusses the effect of variety in death certification upon profitable statistical investigation. The crude death rate of women from rheumatic fever declined steadily during the early part of the war. Amongst men, despite the fact that the civilian rates were prejudiced by selection, there was a decline from 1938 to 1942 followed by a rise in 1943 and 1944. The rates are maximal at ages 10 to 14 and higher amongst females between 5 and 10. After 35 neither age nor sex makes any marked difference to the rate.

There could be nothing more indicative of the value of the co-operation of the medical statistician and the clinician than the place that this particular chapter claims in this book, nine-tenths of which is concerned with attempts to cope with the clinical problems caused by the rheumatic diseases. In this chapter the clinician will find ample means for the checking of his own hypothecon concerning aetiology, whilst the investigator, medical or social, will find abundant invitations to profitable research.

F. A. E. CREW

Disorders of Sex and Reproduction. By A. P. PILLAY, O.B.E., M.B., B.S. 1948. London: H. K. Lewis. Pp. 299+xiv with 5 photographs and 2 graphs. Price 18s.

Since sexual disharmonies are the cause of so much distress in a modern society and are so heavily responsible for the insufficiencies of certain social institutions, this book has its value to such as are concerned with the social aspects of disease, and though it does not deal either with the incidence of the various disorders of sex in the population or with the effects of such diseases on social affairs, nevertheless, despite its purely clinical approach, it can claim to be of interest to the social scientist.

F. A. E. CREW