a single thawing may occur without loss of essential properties before freeze-drying. The useful life of dried plasma varies with the degree of secondary drying, that is, with the residual moisture content and with the type of packing. The British transfusion bottle has an aluminium cap and a rubber washer; since rubber is permeable to water vapour the vacuum is best replaced by a dry inert gas. In the United States the evacuated container is placed in a tin which is also evacuated.

The volume under notice contains articles by fifteen authors, and deals with theoretical and practical aspects of freezing and freeze-drying of antibiotics, bacteria, viruses, blood products, milk and foodstuffs, and the preservation of living tissues. It also deals with the simple apparatus needed to apply freezedrying techniques to dead tissue for histological work. There are inevitable inequalities in the different articles, but the book should be read by all who use freezing or freeze-drying. Apart from the linedrawings and micrographs, the illustrations are of extremely poor quality.

S. T. Cowan

BEGINNINGS OF A WELFARE STATE

Studies in the Social Services
By Sheila Ferguson and Hilde Fitzgerald. (History of the Second World War: United Kingdom Series.)
Pp. ix+367. (London: H.M. Stationery Office, and Longmans, Green and Co., Ltd., 1954.) 22s. 6d. net.

PROF. R. M. TITMUSS ends his penetrating social history of the Second World War, "Problems of Social Policy", by saying, "The disturbances to family life, the separation of mothers and fathers from their children, of husbands from their wives, of pupils from their schools, of people from their recreation, of society from the paths of peace . . . have left wounds which will take time to heal and infinite patience to understand". This present book, which although not written by Prof. Titmuss conforms closely to plans made by him, is, like its predecessor, a valuable contribution to our knowledge of family strengths and weaknesses, as revealed in a period of serious and prolonged strain; knowledge which is vital to the wise ordering of social policy. Except for the study of the nursing service, which, interesting as it is, does not really fit into the pattern of the book as a whole, the book is centred on the family. It starts with the family as it was in 1939, already reduced in size by the decline in the birth-rate during the previous half-century, and therefore with fewer members to call on for support and help in times of crisis, and discusses the strains to which it was subject-strains such as the dispersal of individuals, and, in bombed cities, whole neighbourhoods, the mobilization of husbands and fathers, the paralleled mobilization of women, and in particular, married women"—and how they were met.

Dislocation of family and neighbourhood life meant that there were many things which the family could no longer do for itself, and what the family and neighbourhood could no longer do for themselves the State must help them to do. The growing recognition by the Government and its various departments that it must help the family bear its responsibilities if women's efforts to "keep their homes together in the

face of every adversity" were to be successful comes out in all the studies of which the book is made up. It is shown, for example, in the development of the emergency maternity service from a safety to a welfare measure, and in the new and extended functions which the Government assumed in connexion with the welfare of young children, both of which developments are here discussed at some length. Moreover, this participation by the State in family responsibility was, with some hesitation and certain exceptions, offered to all families who cared to take advantage of it; and these studies confirm the view expressed in "Problems of Social Policy", that one of the most far-reaching changes in social policy and administration which took place during the war years was the increasing readiness of the State to assume responsibility for warding off distress not only from the poor but also from all classes of Hence social service benefits came to be regarded by all concerned as among the rights of citizenship, a conception which is fundamental to the Welfare State as we know it to-day.

In general, one gains the impression from these studies that "the social stability of families as a whole, and of the nation as a whole was, under the circumstances, remarkable". Breakdowns inevitably occurred, however, and, as originally planned, this book would have contained studies of at least three symptoms of family breakdown—the war-time increases in juvenile delinquency, divorce and illegitimacy. Unfortunately, limitations imposed by the publication time-table only permitted the inclusion of one study, that of illegitimacy. This provides the material for two of the most interesting chapters of the book, chapters which demonstrate that the more careful examination of relevant statistics may lead to conclusions about the nature and extent of a social problem very different from those generally accepted. Thus, while the remarkably rapid rise in the number of illegitimate maternities from 26,569 in 1939 to 64,743 in 1945 has led to generalizations about the lowering of moral standards, especially among young people, the authors show that this contention cannot be supported if we relate these statistics to those relating to pre-marital conceptions. The war-time rise in illegitimate maternities was accompanied by an almost equally dramatic fall in the percentage of irregularly conceived maternities afterwards regularized by marriage; and, in fact, it was not until 1945 that the percentage of maternities conceived out of wedlock to all maternities rose above the pre-war figure. Moreover, when analysed according to the age of the mother, it was found that it was among the women over twenty-five rather than among their younger sisters that the rise had taken place. No attempt is made by the authors to arrive at a confident explanation of the situation thus revealed; this, they state, must await "a much more searching analysis of all the social, economic and psychological factors concerned in contemporary attitudes to sex relationship and marriage".

Despite its inconclusiveness, this sentence exemplifies a breadth of outlook which is characteristic of the book as a whole. Nowhere are war-time problems and policies studied in isolation; instead, we are continually brought back to the consideration of fundamentals of social need and national policy. Hence, although the studies contained in the book are specific and limited, they are likely to be of long-term value to both student and administrator.

M. P. HALL