he says, lives by a firm belief that its citizens have the moral energy to correct their own mistakes, and to correct them before serious or irreparable harm is done to the fabric of the free society. It is a question of responsible power, conferred by the democratic process and exercised responsibly with respect to the rights of the minority and also to the welfare of the whole society. The free society, in fact, is a great experiment, and it is above all for his clear indication of the collective and moral responsibility of individuals and groups in Great Britain involved in this affirmation of the dignity, the freedom and responsibility of man that this book deserves to be pondered.

There is first, as Mr. Murry justly observes, room for doubt as to whether the workers appreciate the necessity of dealing justly with one another or with society as a whole. Here his words should be weighed by the trade unions as well as by professional associations in general. Before the free society can be regarded as reasonably secure, the workers must be taught their new responsibilities.

That may well be the most important and urgent task a free society has to undertake; but with it, and of it, must go an increasing consciousness of the whole in existing groups and associations. An ordered society requires discipline; but in a free society that social discipline must be a self-discipline; and here, as Mr. Murry reminds us, is the importance of voluntary groups and associations within the free society. To the degree to which they are inspired by an understanding of the free society, they will establish the patterns of just legislation before the need of legislation becomes acute. They will anticipate the social disciplines which the free society needs.

Now while Mr. Murry pertinently reminds us that in the free society the loyalty demanded is no longer primarily loyalty to the fellow-members of a group or section but to the free society as a whole, it is as well to remember that there is a converse side. The disciplines voluntarily accepted in the free society are disciplines which must be accepted above, by the government, as well as the governed; and they too must be inspired by an understanding of the free society as well as by a vision of its potentialities. To take only one instance at present in the public mind. It would be a grave mistake for the Government to imagine that the uneasiness of a large part of the medical profession over the new Health Act is not due to misgivings as to whether the profession will be able under the Act to give the public service which its professional ideals and traditions require it to render.

In dealing with the danger to the State of communist activities, a profound saying of Burke may be recalled: "It is no inconsiderable part of statesmanship to know how much of an evil ought to be tolerated". The Government has rightly decided that democratic principles do not call for the toleration of treason and terror, and it has wisely left it to the community to decide on the larger and fundamental issue, whether, in a democratic society, free scope should be given to those who seek to destroy democracy and to set up an intolerant regime.

If, therefore, the Government, in administering the decision, makes sure that impartial justice is done where the person concerned is not a member of the Communist Party but charged with "continuing association with it", it may well be claimed to have met Burke's test of statesmanship. That will not indeed avert the need for constant vigilance within and without Parliament. The debate on March 25 should have reassured those who fear that the cloak of security may be used to stifle the integrity of science and the ability of the scientific worker to serve mankind. But it is for scientific workers individually and in their professional associations to take up the challenge to fundamental thinking and constructive action which Mr. Murry throws down to them in "The Free Society"; in that way only can freedom be ultimately safeguarded in science or among the free nations of the world.

FAMILY AND NATION

HE broadsheet series entitled Planning issued I from time to time by P.E.P. (Political and Economic Planning) has produced many excellent and stimulating documents, and has made a valuable contribution to the solution of several of the social and economic problems with which Britain has been and still is confronted. The latest issue, entitled "Family and Nation", is, however, frankly disappointing. Much of the information in it is of great interest, and it raises many important issues which need to be raised and to be raised frequently. Admittedly the family is difficult to plan for, being so variable and so individual; and there is unconscious or perhaps conscious humour in the statement that it "must be strengthened in the functions for which it is peculiarly suited, such as the production of children". After an excellent section reviewing the fluctuation in the birth-rate, the introduction of family allowances, and the present state of incometax rebates, the broadsheet goes on to outline a plan whereby the 'para-medical' services, together with marriage guidance, can all be combined in a family welfare service.

Such a proposal needs the most careful consideration at the present time, for it presupposes a large expenditure of public money and it also cuts across the recommendations of the Denning Committee¹. Both are serious matters, and one would therefore expect weighty reasons to be given in support of the proposal.

The functions of the proposed new organisation would be to "improve the conditions in which children grow up, increase the number of 'wanted' children and help to reduce the number of children whose birth is not desired either by their parents or by the community . . ." This is a wide programme involving many issues, some highly controversial; but the broadsheet suggests that "the existing arrangements for maternity and child welfare would provide a foundation" for implementing it, "other provisions being added as they were shown to be desirable and practical". But suppose for the sake of argument that the controversial difficulties had been surmounted

and that the experts were agreed on such subjects as sterilization, abortion and artificial insemination; would not the case for incorporating these paramedical matters into the already existing maternity and health services, rather than vice versa, be overwhelming?

Marriage guidance deals primarily with the personal relationship of two people. It is true that there may be, and often is, a family in the background; but nevertheless it is the personal problems of two partners that are involved, and marriage guidance as such cannot be undertaken merely as part of a larger service for the family. This is not to say that secondary questions such as childlessness and family planning do not come into the picture—they do very often but they are incidental to the main problem. This is recognized in the Denning Report, which recommends that grant-aid be made to voluntary organisations engaged in marriage guidance. Yet the reasons given in the broadsheet for rejecting the recommendations of the Report do not seem to be convincing; "marriage guidance has such an important function to perform that there would be serious objections to leaving it outside the Family Welfare Service". serious objections are is not stated.

One may suggest finally that many couples, though willing that the State should ensure them a safe passage from the cradle to the grave, may prefer to keep their marriage relationships to themselves. This raises the larger question now under consideration by a Home Office committee, on what lines marriage guidance as a form of social service can be most advantageously developed. There is nothing in the broadsheet to indicate that this aspect of the question, namely, State interference in what is perhaps the most intimate personal relationship that exists, has been seriously taken into consideration.

¹ Final Report of the Committee on Procedure in Matrimonial Causes. Cmd. 7024. (London: H.M. Stationery Office, 1947.)

FOOD POISONING

Food Poisoning

Its Nature, History and Causation, Measures for its Prevention and Control. By Elliot B. Dewberry. Second edition. Pp. xii+246+24 plates. (London: Leonard Hill, Ltd., 1947.) 17s. 6d.

HE subject of food poisoning was once largely a series of disconnected observations and records of outbreaks; but during the last three decades the facts have been associated and the discrepancies and fallacies removed. For example, the old expression 'ptomaine poisoning' has been shown to be without meaning and entirely incorrect. Now it is possible to give a clear account of food poisoning, including the various causal agencies, the paths of infection and the reservoirs of the various bacteria responsible. In the first edition in 1943, the author of the book under notice gave a clearly written account of the subject, and the second edition has brought it up to date. The first edition dealt very inadequately with staphylococcus food poisoning; but this has now been remedied by the addition of a new, separate chapter of 22 pages on this subject which gives all the essential facts. An additional section (appendix I) on laboratory investigation of food poisoning cases is of

doubtful utility, as this very technical subject is mainly of interest to the laboratory worker, and for him the account is barely adequate and is available elsewhere.

There are five main types of food poisoning, namely, Salmonella infections, toxin outbreaks due to special staphylococci, botulism, poisoning from contamination of the food with poisonous metals and other chemicals, and food poisoning from the consumption of poisonous plants, toxic mushrooms and other fungi, and poisonous fish or shellfish. Each group is separately and adequately treated. Most space is devoted to Salmonella food poisoning, which used to be, and may still be, the commonest type in Great Britain, and this is well done. The important recent work on the increase of this type of food poisoning due to the great increase in the use of dried egg mixtures is not mentioned; but this was probably too recent for inclusion.

Botulism is described in great detail, although not more than four outbreaks have ever been recorded in Great Britain. Its deadly nature justifies the detail, for it is more prevalent in some other countries. Food so infected usually shows signs of spoilage, but not invariably. This fact is just mentioned but should have been more emphasized, and the factors explained which determine whether signs of spoilage are or are not present.

The other types of food poisoning are adequately discussed, and no important inaccuracies were detected and few omissions. Examples of the latter are that cadmium poisoning should have been included in the chapter on poisonous metals, the value of the coagulase test is not given in discussing Staphylococcus poisoning and that more types of Clostridium botulinum are known than those mentioned. These are all small points, and the author has obviously been diligent to keep his book up to date.

The book is frankly a compilation not written by one personally an authority on the subject, but he has included all the essentials, and the volume may be accepted as an adequate and reliable account of food poisoning in its various manifestations. It is attractively illustrated and well printed.

ORGANISATION, METEOROLOGY AND WEATHER PREDICTION

"Here is the Weather Forecast"
By E. G. Bilham. (Binnacle Books Series.) Pp. 220
(36 plates). (London: Golden Galley Press, Ltd.,
1947.) 10s. 6d. net.

WEATHER and the causes of weather are not easy subjects for the writer who addresses himself to a mixed audience. If he aims at strict accuracy, the writing must abound in saving clauses and qualifications, and the result will be anything but a clear-cut picture. Should he largely leave out the qualifying phrases, then the end result will not correspond to reality. Mr. Bilham, in this book, does manage to avoid these two dangers, and gives a clear and highly authoritative account of the way in which weather forecasts are prepared.

The account of the organisation for collecting and distributing weather observations, warnings and forecasts is excellent, and there is much highly interesting information about upper-air measurements by radiosonde balloons and the war-time applications of radar to wind finding, and more recently to cloud observa-