would be attached in these Provinces to research in the development of wood products and in fish, apple and other food processing. Certainly there should be a tie-up between scientific research and the development of important secondary industry based on the products of the forest.

As for economic and social research, the potent nucleus of a Maritime Economic Research Council exists in the Institute of Public Affairs. Thought might be given to establishing such a council and to coordinating its studies with those of parallel organizations in the New England States. The Maritimes and New England are both part of the "geographic province of the Atlantic seaboard"—they have similar problems, and much in common in history and

tradition. Such a relationship ought to be abundantly fruitful to both parties. An example of this kind of co-operation is the joint work which is being done by the Universities of Manitoba and Minnesota in studying the post-war problems of that region. This study was undertaken at the request of the Provincial Premier and the Governor of the State, and has already been productive of information of great value.

In order to develop Maritime resources and to determine the true interest of the Region, it is clear that much hard-headed study and research is needed. The best way of doing this is to undertake a research programme on a regional basis; uncoordinated provincial studies would almost certainly be inadequate.

# Britian's Plan for a National Health Service

By SIR ARTHUR S. MACNALTY

PUBLIC health organization in Britain is not merely a collection of scientific knowledge applied mechanically to the maintenance of health and the prevention of disease. It throbs with life, understanding and human sympathy. Often the work has been initiated by the voluntary efforts of philanthropists; otherwise, without this popular appeal to the imagination and the hearts of men, it could not have achieved its victories in a democracy like Britain's.

EDITOR'S NOTE: Sir Arthur S. MacNalty, K.C.B. M.A., M.D., F.R.C.P., a former Chief Medical Officer of Britain's Ministry of Health and of the Board of Education, is now Editor-in-Chief of Britain's Official Medical History of the War.

During the war heavy additional work has devolved upon the Ministry of Health and the local authorities in Britain. They have organized an emergency medical service for the treatment of air-raid casualties; and also the evacuation scheme—which included the transfer of school children, expectant mothers, young children, cripples and blind persons—from urban centres to safe areas. Meanwhile the national health has remained on the whole remarkably good, as the following table of the chief vital statistics for England and Wales for the war years up to 1942 shows:—

Year	Death- rate	Infant Mortality Rate	Maternal Mortality Rate	Tuberculosis Death-rate per million Population	
	per thousand population			Respiratory	Non-Respiratory
1939	2.	50	3.10	520	98
1940	4.0	56	2.60	571	108
1941	12.9	59	2.76	570	121
1942	11.6	49	2.47	506	110

Not only during this war have the existing health services been maintained, but further advances have been made in public health, especially from the administrative standpoint. These advances made to meet a grave national emergency will certainly have strong claims to inclusion in post-war planning.

#### Nutrition

Nutrition is vital for national health. Britain's Ministry of Food devised a scheme of war-time rationing which has done several most important things. It has distributed the essential articles of food to all members of the community; it has controlled food prices; and in distributing food it has been guided by the advice of experts in nutrition, thus doing a great educational work in teaching food-values to the nation.

More, the Government has fostered research work in nutrition. The new Education Bill makes it obligatory on local education authorities to provide milk and meals in schools. Under the present permissive powers meals and milk are already provided for nearly 30 per cent of elementary and over 80 per cent of secondary school children.

Food production, as well as its distribution, will need adjustments after the war. There will be important tasks in the feeding of the populations of occupied countries, and it is obvious that rationing of food in Britain will have to be maintained for some years after peace returns to Europe. It will be necessary to retain much of the care and provision that has been exercised for the health of children and their mothers during the war years.

## Housing

Housing Slum dwellers show a consistently higher death-rate than the community at large. The slum death-rate of any industrial town is nearly double that of the average artisan district.

The housing policy of the Government has a three-fold objective:—(1) the eradication of the slums; (2) the abatement of overcrowding; and (3) the provision of new houses at lowest practicable rents.

This policy for the most part has had perforce to rest in abeyance during the war; yet it is of vital concern to the national health. Plans are already made for a post-war housing policy. The Minister of Works foresees an "interregnum" covering the first two years after the war when transitional difficulties will make it necessary to include in building schemes a variety of emergency measures to relieve the nation's most pressing needs; this will be followed by ten years during which four million new houses will be erected. The Ministry of Health and local authorities are closely concerned with this programme.

### A Comprehensive Health Service.

As already observed, a number of advances in public health which are of permanent value have been made during the war years. But the experience of these years has also shown that the present machinery of public health and medical organization is unwieldly and cumbersome. There is much overlapping of effort. A number of small local authorities have inadequate resurces for the full performance of their public health duties; central and local government are at present too complicated; and it is also true that various health services were not planned comprehensively, but were established independently to serve some special need: while various health reforms are necessarily permissive in charac er. It may be observed that the nuclei of a comprehensive medical service are already present in the Insurance Medical Service, the Public Assistance Medical Service, the Health Services, and hospitals of the local authorities, the specialist provision made by municipal and voluntary agencies and the planning of the Emergency Medical Service. The task is to combine this scattered provision into one harmonious whole.

In all this planning for health reform many complicated problems are presented which only time, patience and experiment can solve.

Once here, a great reforming spirit is abroad in Britain which is eagerly looking forward to fresh advances in public health after the war. These advances will also influence work in international health for which plans are also being made under the United Nations Relief and Rehabilitation Administration.

Sir William Beveridge, in his famous report, has declared it to be an indispensible prerequisite for his social security plan that there should be comprehensive health and rehabilitation services for prevention and restoration of capacity for work available to all members of the community. Complying with this demand, the government has issued a White Paper on a National Health Service for Britain. It was presented to Parliament by the Minister of Health and the Secretary of State for Scotland in February this year. In considering the form which the new Service should take, the Government have had the help of informal discussions with representatives of the major Local Authorities, the Medical Profession, the Voluntary Hospitals and others. They now put forward definite proposals, not as fixed decisions, but for discussion in Parliament and in the country. Constructive criticism is welcomed, and after all concerned have expressed their views the Government will introduce legislation which they hope will be largely accepted. It is a method which embodies the true spirit of democracy in Britain.

When the time came for the Ministry of Health to formulate its new proposals, the nuclei of a comprehensive Health Service were already present in the existing official and voluntary services. The task was to weld this scattered provision into one harmonious whole. This is the key-

note of the White Paper.

The new Service will provide for everyone all the free medical advice, treatment and care they may require. It represents the natural next development in the long and continuous growth of the health services of the country. "Although it forms part of the wider theme of postwar reconstruction—and although it will form an essential part of any scheme of social insurance which may be adopted—it has to be seen in the light of the past as well as the future and to be judged on its own merits as part of a steady historical

process of improving health and the opportunity for health among the people."

Personal health still tends to be regarded as something to be treated when at fault or perhaps to be preserved from getting at fault. A comprehensive health service will help to emphasize it as something to be positively improved and promoted.

#### Administrative Structure.

It is proposed to set up an organisation in which both central and local authority will participate, central responsibility lying with the Minister of Health and the Secretary of State for Scotland, and local authority with the major local government authorities (County and County Borough Councils) operating for some purposes, severally over their existing areas, and for other purposes jointly over larger areas formed by combination.

At the side of the Ministers, but independent of them, there will be a professional statutory body, the Central Health Services Council. Its function will be to express the expert view on any general technical aspect of the Service. It will advise on matters and general regulations referred to it by the Minister, and on any other matters within its pro-This Council will consist of 30 vince. to 40 members representing the main medical organisations, voluntary and municipal hospitals, medical teaching and professions like dentistry and nursing. There will also be set up a Central Medical Board to perform executive functions in the general practitioner service. will be composed, in the main, of members of the medical profession and will be the "employer" body with which the general practitioner enters into contract in the new Service.

Larger area authorities will be created by combining the existing county and county borough authorities in joint boards to be settled by the Minister after consultation with local authorities. In some exceptional cases, of which the County of London is the most obvious, no combination will be necessary. The new Service includes hospital and institutional services for the sick in general, for mental cases, for maternity, and for every general and special hospital subject. Infectious diseases hospitals will in future form part of the general hospital system.

## Hospitals and Local Clinics.

The new joint authority will examine the general health needs of the area, but normally the provision and maintenance of local clinics will rest with the individual councils. Some forms of local clinic service, like tuberculosis dispensaries, mental clinics and cancer diagnostic centres are, in essence, out-patient activities of the hospital and consultant services, and these should usually be the responsibility of the same authority which deals with these services over a larger area. A local Health Services Council will advise the local authority or joint board on technical matters. Provided that all the professional interests are fairly represented, this advisory body need not be of a uniform pattern throughout the country.

The term "hospital services" includes all forms of institutional care of every kind of sickness or injury. It includes also outpatient treatment and treatment at sanatoria and rehabilitation centres. Two main problems are dealt with in the new Service: (1) the bringing together in suitable areas of the activities of the various separate and independent hospitals and (2) the combination of two quite different hospital systems (voluntary and municipal) in a single service. The whole Service must be brought under one ultimate public responsibility without destroying the independence and the traditions of the voluntary hospitals. voluntary hospitals must still look substantially to their previous financial re-Those who enter into the new Service will receive payment for services rendered from the joint authority. addition both the municipal and voluntary hospitals will receive a direct grant from public funds.

One of the duties of the joint authority will be to provide an adequate consultant service based on the hospitals and available to all general practitioners working under the plan. The Government awaits the report of Sir William Goodenough's Committee on Medical Schools before proposing in detail a form of consultant service. There is need for more consultants and a better distribution of them. Remuneration may be on a whole-time or part-time basis.

### General Practitioner Arrangements.

In order to provide a comprehensive general practitioner service which is the "Front Line" of the new Service, the State now proposes to take a greater part in future in regard to medical practice.

- (1) Central negotiation of major terms and conditions will remain. Insurance Committees will be abolished and doctors will be in contractual relation with the Central Medical Board and be remunerated by it.
- (2) Other functions of Insurance Committees will also fall to the Board, but, to avoid over-centralisation, minor functions will be discharged through a local committee on which there will be members of the local authority.
- (3) The new joint authority will provide for the linking of general practitioners with hospital and consultant and other services in the area.
- (4) County and county borough councils will normally provide premises, such as Health Centres, which are approved in the area plan.
- (5) The doctor in his contract with the Board will be required to observe the arrangements of the area plan. The personal doctor-patient relationship and free choice of doctor is to be preserved, the whole Service being based on the "family doctor" for every man, woman or child. General practitioners will work from their own surgeries as at present, separately or in groups as teams of workers, or from the specially provided and equipped new Health Centres. All necessary

drugs and medicines will be provided. Doctors may still engage in private practice subject to their contractual obligations under the plan, or they may remain independent.

Other features of the new Service are a full dental and ophthalmic service and a home nursing service. The School Medical Service will be linked up with the maternity and child welfare clinics in a manner to be decided under the new Education Bill. The cost of the health plan would be met out of taxation, rates and the new social insurance contribution which is yet to be developed. The estimated cost is 148 million pounds per annum.

### Liberty of the Individual.

Such are the outlines of these far-reaching proposals based on the principle of liberty of individual choice. There is neither compulsion for patient nor doctor. The people are free to make use of or not to use these facilities. The doctor is still free to pursue his profession in his own individual way.

The scheme is now open to discussion. It will probably receive much criticism and may be modified in certain of its details. Granting all this, it emerges as a great conception, broad in view and full of wisdom and vision. Rightly used, it may become the Great Charter of Health in Britain. More remarkable still, it has been planned in the fifth year of a war in which the national existence is at stake.

# Prefabricated Houses

By A. C. SHIRE

**C**OON after the nine days wonder of O Technocracy had died down, feature writers of the press started touting the prefabricated house. According to them, the geniuses of modern industry, utilizing the wonders of modern science, were incorporating hitherto unrealizable comforts and conveniences into houses which. ordered by telephone, would be delivered to you the next day, wrapped in "Cellophane," complete and ready to live in, including a five-foot shelf of books in the bathroom. These wonder houses would cost practically nothing and, like an automobile, could be traded in after a couple of years for a new model which would not leak quite so badly, and which would probably include a baby incubator or an automatic toothbrush.

In spite of the failure of the prefabricated house to live up to such exaggerated claims, the shouting about it has not died down. A more realistic and probably more desirable prefabricated

EDITOR'S NOTE: A. C. Shire is Assistant Chief Engineer of the Foreign Economic Administration, Washington, D. C. house is gradually evolving, although its development was undoubtedly retarded by repeated attempts to produce a super-extra-ultra streamlined miracle.

## Experimental Stages

The prefabricated house of to-day is not necessarily different, as a finished house, from any other. The term "prefabricated" describes the way it is made. not the resultant product. In exterior appearance, it may resemble any of the popular styles, such as the local builder's adaptation of a Cape Cod cottage, or one of the Hollywood Spanish varieties. It may be covered with clapboard or shingles, or have as an exterior material, one of the modern plywood or asbestos Its roof may be flat cement boards. or sloped, and covered with any of the lighter usual roofing materials. Interiors do not differ from other houses that are being built to-day except that plaster is not used as an interior finish. Kitchen equipment and the methods of heating are the same as those available to anyone.