

RED CROSS - BRITISH

File: Greece

WE 150/14

To: Mr. Dudley Ward
Mr. Aickin
Sir George Reid

~~X-Adm: BRCS~~
B.C.R.S.

From: J. A. Willis

AGREEMENT WITH BRCS IN GREECE

You will be interested to see the reply from the Greek Chief of Mission to the letter of 11th May regarding the agreement which was signed between the Greek Mission and BRCS concerning local relationships. It appears that on the Mission side at least, (clause 4) the local agreement is not considered to go further than the corresponding clause in the general Memorandum on Conditions of Service.

Copies of the Memorandum have already been sent to the Greek and other Missions with an intimation that we are still awaiting the reaction of CBSRA to the revised conditions.

May 31st, 1. 945.

JAW/AD

Italy *Wash. Long*
UNITED NATIONS RELIEF AND REHABILITATION ADMINISTRATION

Italian Mission Headquarters

#5
10 November 1944

TO: A. Sorieri
FROM: S. M. Keeny
SUBJECT: Agreements with Voluntary Societies Related to Camps

I understand from our conversation of today that the procedure for negotiation with the British Red Cross will be as follows:

- (1) Hawes will have copies made of the draft of the standard agreement.
- (2) Hawes will check with Jackson as to whether this agreement has been completed.
- (3) We shall postpone discussions with General McLeod until we have cleared with Jackson.
- (4) Varrichione will compile the information he has as to job assignments of the present personnel. He should also procure from Col. Findlay's office any available information as to the tenure of the present staff, in order that we may have a picture of the turnover.
- (5) Our discussion with General McLeod will be directed to keeping the present personnel and to have them work under Varrichione's direction subject to assignment wherever they are needed; also to arrange for "reasonable" advance notice of transfer and to define "reasonable."

The same general agreement should apply to the negotiations with Gibson for the Friends.

S.S.

CC to A. B. Hawes
L. Varrichione
SMKeeny/fg

Copy 3

~~Brascombe~~

~~Brough~~

Schuyler

Williams

ADDRESSED TO: British Embassy, Washington
FROM: Foreign Office, London
DATED: May 11, 1944
DEPARTED: 9.55 p.m., May 11, 1944
RECEIVED: 6.30 p.m., May 12, 1944
Rec'd Home 10:15 am, May 15th
CODE

TELEGRAM NO. 4136

Br. War Relief Society

Following for Lehman from Sir F. Leith Ross and Leonov Telegram no. 237 dated May 10.

London Office of British War Relief Society of U.S.A. has roughly 1000 tons of un-assorted and un-classified new and used clothing stored in London and wishes to know if Warra would like Society to ask American donors for permission to offer these supplies to us. I shall appreciate early statement from you of Warra policy for guidance here in possible future negotiations with Society. While awaiting your reply we are checking as to availability of volunteer assistance here to undertake sorting and classification and will inform you of our findings.

DISTRIBUTION

Action: Hendrickson

Attention: Lehman
Salter
Jackson
Lenschikov
Feller
McEachy

Recd.
31 mar - AM

WAR ORGANISATION

of the

BRITISH RED CROSS SOCIETY and ORDER OF ST. JOHN OF JERUSALEM



PRE-ARMISTICE CIVILIAN RELIEF OVERSEAS



MF/mc

PLEASE REPLY TO
THE DIRECTOR.

2 LOWNDES STREET,
LONDON, S.W.1

SLOANE 9861

Miss Craig McGeachy
U.N.R.R.A.
1734 New York Avenue, N.W.
Washington 6, D.C.

March 18.1944

Dear Miss McGeachy,

It was very kind of you to write to me about Mr Greenstain. He came yesterday and we had a very pleasant and interesting talk - at least it was helpful and interesting to us, and I hope he found it the same.

We are meeting again next week for further discussion, and I hope that more co-operation and a closer link will be established between the Societies and U.N.R.R.A. as a result.

With kind regards

Yours very sincerely

Raigant Falman

Chairman.

CIVILIAN RELIEF OVERSEAS COMMITTEE.



WAR ORGANISATION

OF THE

BRITISH RED CROSS SOCIETY AND ORDER OF
ST. JOHN OF JERUSALEM



TRAINING COURSE
ON
**PRE-ARMISTICE CIVILIAN RELIEF
OVERSEAS**

REPORT OF
LECTURES

JANUARY—1943

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All communications to the Director
Pre-Armistice Civilian Relief Overseas
2 Lowndes Street, London, S.W.1
Telephone : Sloane 9861

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TRAINING COURSE
ON
PRE-ARMISTICE CIVILIAN RELIEF
OVERSEAS

WAR ORGANISATION OF THE BRITISH RED CROSS SOCIETY AND ORDER OF ST. JOHN OF JERUSALEM

TRAINING COURSE FOR PRE-ARMISTICE CIVILIAN RELIEF OVERSEAS

*Lecture by SIR FREDERICK LEITH-ROSS, G.C.M.G., K.C.B., at Opening
of Training Course for Pre-Armistice Civilian Relief on Sunday,
10th January, 1943.*

The needs of Europe after the last war were met by governments and by voluntary relief organisations. The relief rendered was inadequate, and the work of the voluntary organisations very unco-ordinated, with the result that thousands and thousands of lives were lost which could have been saved had arrangements been better planned. Relief work, after the last war, was confined to a few countries; this time conditions will be much worse and the area of distress much larger. In the enemy occupied countries to-day—for instance Belgium—the plight of children suffering from malnutrition is already serious. Conditions in many parts of Europe will have had no parallel since the 30 Years' War.

Food will be the first necessity. But Medical supplies, Medical services and equipment and clothing will be almost as essential. Shipping and Inland transport, and fuel both for homes and transport will have to be organised. Moreover, it will be essential to get the productive capacity of these countries going again. Agriculture will need seeds, fertilisers and machinery of all kinds. Industry will need re-stocking in raw materials.

An Allied Committee is at present at work on estimates of the needs for relief. To a great extent these estimates have to be based on guess-work as it is not possible at this stage to forecast accurately the requirements of populations. Sub-committees of Allied specialists are also at work and it is hoped their conclusions will soon be ready for presentation to the Allied governments.

Outside Europe the needs of countries like Burma, Malaya and China will have to be met.

On the cessation of hostilities there will be two periods: a period during which the military will have to accept responsibility for organisation and transport of supplies to where they are needed (this is a problem which is likely to begin in areas which are the scene of

military operations—the Americans are already giving relief in North Africa to the civil population). The military authorities will want to hand this over to the civil organisation, which it is hoped will be built up on an international basis—here the second period will begin.

There will be need of an international organisation to control world supplies and their allocation. Discussions as to how this can best be done have not yet reached any final result. A great degree of international collaboration will be necessary—for there is always greater readiness to sacrifice life in war than economic privileges to secure a better peace. When the supply problem has been solved, that of distribution will also have to be organised. The main task of distribution in western European countries should be undertaken by local governments and voluntary organisations and it is not desirable that either we or the Americans should undertake distribution in countries like Norway, France, etc. In the case of such countries, the international organisation would only have to appoint liaison officers to act with local governments, who would report to Headquarters cases of special need. But in other countries of Europe where democratic governments will not be set up so quickly the international organisation may have to send in much more considerable relief missions.

It is not possible to say at present where and when the voluntary organisations can be brought in. There is no doubt that their help will be needed. But their activities will have to be co-ordinated. They will be subject to the directions of the military authorities and of any governmental organisation responsible for relief; and account must be taken of the requirements of countries in which missions are working. There will remain a large field where governmental machinery will only partially organise relief work, and here voluntary organisations can help most with problems of feeding, child welfare, etc. These can give right personal contacts and do more on the human side, and there will remain great scope for voluntary organisations even in areas where governmental machinery is functioning in an adequate and effective way.

Voluntary organisations should prepare lists of personnel, equipment and resources, so that they may be ready when required. There will be dirt, disease and distress of every kind and the task will be a hard and thankless one often among people who have had years of anti-British propaganda. There will be no great reward, only the satisfaction that we will have been doing our best to try and restore a better order in the world. Those ready to take the risks of endangering personal health and even life, which will be encountered in the work of relief, will need to be trained, competent and efficient, cheerful and tactful in the midst of great difficulties. And they must be ready to wait patiently till the call comes.

MEDICAL SIDE OF RELIEF

By DR. MELVILLE MACKENZIE

I must first make it clear that the scope of the official organisation for Relief Work is not limited to post-war work, but also covers the difficult period between the liberation of a country or part of a country and the end of the war.

The reason that official action is being taken at the present time, in the middle of the war effort, is because at the end of the last war such an enormous number of lives were lost owing to the fact that no adequate machinery had been created beforehand to meet the complicated problems that arose; actually, more people died from preventable disease and famine than were killed in the four years of war itself. It is therefore necessary, even amid the strain and effort of war, for consideration to be given to the creation of machinery ready for action immediately hostilities finish.

Furthermore it is clear that the moment a country or part of a country is liberated relief work must begin at once. A moment's consideration of the present military position will suggest how rapidly relief work may have to be undertaken.

I do not need to describe what is happening in Europe. You are quite familiar with it. The present picture offers every likelihood of conditions being more terrible than at the end of the last war. Already in some countries, cases of the most advanced manifestations of malnutrition, such as osteomalacia (softening of the bones) are occurring. In other countries, a second pregnancy is considered tantamount to suicide, so undernourished are the women. Malnutrition is so great generally that at the present time it is estimated authoritatively that one hundred million people need feeding, that is to say need more to eat than they are getting. Typhus is widely spread in North Africa, Spain, the Balkans and Poland and over Eastern Europe. Malaria is rapidly increasing. Imagination will enable you to fill in the picture, but there is one thing I would like to stress, namely that one is apt to get a false picture at the present time of what may be the conditions after the liberation of countries which are now occupied. These are now being run by an efficient organisation, Germany, but the moment that this control is lifted chaos is bound to reign for a period owing either to military activities or to breakdown in the local Government in cases where Quislings or Nazis sympathisers have been in power. Moreover it is likely that this period of chaos will occur, not only in countries which have been freed by military action, but also in cases where no military operations are necessary. Any period of chaos will obviously be a very difficult one for relief work.

Of the fundamental factors contributing to the present medical tragedy in Europe is firstly the vast movements of population which are going on. Apart from the movement of prisoners of war of all nationalities there has been labour transportation, transference of race groups, etc.—all on a very large scale. From the medical point of view

movement of populations is one of the biggest factors in the production of disease, for people are not only moving under condition of great physical hardship but they either bring infectious diseases into new areas where these did not exist before, or the new arrivals themselves become infected when they get into an area where an infectious disease is endemic. At the end of the war prisoners of war, demobilised soldiers, transported labourers and refugees of all kind will pour back to their homelands, and though one may hope that this movement can be controlled medically to some extent, in practice it will be exceedingly difficult to exert adequate supervision.

The second big factor is the agricultural breakdown. Not only are the able bodied men in the army but there is an absence of transport on farms, particularly horse-transport. In view of the practical difficulties with mechanical tractors in winter, in addition to the need for petrol, skilled drivers and mechanics, the backbone of peasant agriculture in Europe is still the horse. The shortage of these animals is great as an enormous number have been commandeered for military purposes, there is little breeding going on and considerable numbers have been eaten.

There is a third factor from the medical point of view, namely the great economic strain under which people are living. It is not simply a question of lessened food, or even of unsuitable food, but the necessity of labouring at a time when an individual is unfit for work. Under war conditions an individual in order to live has often to work whether he feels up to it or not and for cases of threatened or early tuberculosis this may be catastrophic. If it is possible to rest for a day or two when the patient feels he requires it, it is often possible to carry on, but if he is compelled to work every day, however he feels in order to live, then the disease is given every opportunity of progressing.

Finally, mention must be made of the impairment of the Medical and Public Health Services and the hospitals. In every country there is a greatly lessened number of trained doctors, nurses and midwives, as a large number of doctors and nurses are in the forces and have become or will become casualties. Many have been massacred or transported to Germany and a large number of Universities are closed. Most of the young men who would normally be qualifying in medicine are now soldiers and in addition to all these factors there is the ordinary deaths of older doctors from natural causes. This shortage of doctors, nurses and midwives is one of the great difficulties at the present time.

At the beginning of the course, it is of interest for you to know something about what arrangements have been made officially, to meet the problems which are certain to arise at the end of the war. The Inter-Allied Post War Relief Committee for post-war requirements, under the chairmanship of Sir Frederick Leith-Ross, was set up as a result of an Allied Conference in September, 1941. Attached to the Inter-Allied Relief Committee are a number of technical advisory committees on various subjects—medical problems, nutrition, agriculture, etc. As you are concerned chiefly with the work of the Medical Technical Advisory Committee, the only other Advisory

Committee I shall mention is that on Nutrition, as this Committee (and not the Medical Advisory Committee) deals with all questions relating to malnutrition. As, however, vitamins have medical aspects, there is a conjoint committee of the Nutrition Committee and the Medical Committee dealing with special cases requiring vitamins, for example—expectant and nursing mothers, young children and those suffering from deprivation diseases (such as beri-beri, rickets, scurvy, etc.)

The following is a list of members of the Medical Advisory Committee all of whom sit as representatives of their governments and are in each case medical officers.

Chairman : Dr. Melville Mackenzie (United Kingdom)

Belgium and Luxembourg	..	Dr. E. J. Bigwood.
Czechoslovakia	..	.. Dr. Skadal
France	..	.. Medecin General A. Sice
Greece	..	.. Dr. A. P. Cawadias
United Kingdom	..	.. Dr. N. M. Goodman
U.S.A.	..	.. Dr. H. A. Smith
Union of South Africa	..	.. Col. P. G. Stock (Observer)
Netherlands	..	.. Dr. van den Belt
Norway	..	.. Dr. Caspersen
New Zealand	..	.. Lt. Col. B. Myers
Poland	..	.. Dr. Babecki
Yugoslavia	..	.. Dr. L. Kojen
Allied Post-War Requirements Bureau	..	.. Mr. G. H. Gorvin

In this list the allied occupied countries are officially represented as well as the United States, Great Britain and the Dominions. The work of the committee is to advise on requirements of medical supplies and to make recommendations with regard to the re-establishment of Medical and Public Health Services and the control of epidemics.

Attached to the Medical Advisory Committee are a number of expert committees which are different in character. The members sit as experts in view of their special knowledge and experience. They express only their personal views and do not represent any nation or organisation, official or voluntary. There are such expert committees on requirements for hospitals, surgery, radiology, general practitioners, and bacteriology ; tuberculosis ; maternity and child welfare ; malaria ; typhus fever ; typhoid fever ; dysentery ; cholera and diphtheria ; laboratory equipment, including vaccines and sera. More Sub-committees will be established to meet various technical problems as these arise.

Another part of the official machinery is the Post War Requirements Bureau. This bureau was set up by H.M. Government in accordance with a resolution passed at the Inter-Allied Conference meeting at St. James' Palace. The functions of the bureau are to co-operate with

various technical advisory committees and sub-committees and to assist in the collection and collation of the various estimates of requirements made by individual countries to the Inter-Allied Committee.

Finally, there is the Consultative Council of Voluntary Societies under the chairmanship of Sir William Goode. This is linked up with the Post-War Requirements Bureau through a special Liaison Officer.

Some idea of the character of the work that is being done by each sub-committee can be gained by a description of the work of the expert Sub-Committee on Drug Requirements. In preparing estimates of requirements the period of relief has been divided into three phases. The first, a period of chaos, when there will be large refugee populations to deal with and military operations may still be in progress and when shipping and transport of all kinds for both material and personnel will be exceedingly difficult and limited. For this period a classified list of requirements has been prepared—a minimum list of fifty drugs which may be regarded as sufficient for doctors and hospitals during the period of extreme emergency.

The next list is one for a period when the Central and Local Governments have not yet been fully re-established but conditions are more settled and greater transport facilities exist. The list of drugs for this phase is about 120.

Finally, consideration will be given to the full list of drugs in ordinary use in each country.

In addition to the difficulty of preparing the estimates themselves the list has to show exactly how the drugs and equipment should be packed, how much each bottle and box should contain, what are the best preparations to use, etc. The quantities have been estimated for 100,000 persons for one month and will be packed as one unit of drugs. The number of units required has been put at 200 for the first period and 300 for the second.

Apart from the question of nutrition and medical requirements there are two other very large problems, namely, the control of epidemic diseases and the re-establishment of the personnel of hospitals, public health and medical services generally.

With regard to the first question we are very fortunate in medicine in that we can foretell with considerable accuracy the sort of problems we shall have to face. We are not able to forecast regarding such maladies as influenza or spotted fever, but we do know certain epidemiological problems that are inevitable, *e.g.*, outbreaks of typhus, malaria, typhoid, dysentery and increased tuberculosis.

The second question is that of personnel for the medical and health services. Clearly one of the first things to do, in addition to the importation of trained workers from abroad is to re-establish the Faculties of Medicine of the Universities and the schools of Nursing and Midwifery. There is another problem—a smaller one, which perhaps does not concern you closely. I refer to the loan of experts to

different countries. One of the difficulties we may expect is that, through movements of populations, certain diseases may be introduced where these have never been known before, so that the doctors, nurses and health services are faced with maladies they have not previously seen.

For instance at the end of the last war malaria spread in epidemic form all over the Balkans, introduced by soldiers and returned prisoners of war. The mosquitoes of large areas became infected for the first time and as many as 90% of the people in some of the regions affected developed malaria as a result. Subsequently a Malaria Commission of experts from India, Africa, America and various other parts of the world was set up by the League of Nations. These doctors studied the conditions under which malaria occurs in various parts of Europe and prepared a report on the best methods of control. Subsequently the members of the Commission advised any Government who sought their help.

[Another problem is that of maternity and child welfare, and accommodation for orphan children. Even now in some parts of Eastern Europe the problem of orphan children is actually greater than the problem of typhus or malaria. The children get separated from their parents, are deserted by them, or in some cases manage to get food when their parents starve to death leaving them orphans. These children have to be found homes and given food, education and recreation.] To provide some form of entertainment for them is of the greatest importance and it is well worth while learning how to do this before going into the field.

Other problems are the supply of clothing, bedding, and soap as well as those of overcrowding.

Finally, there is the provision of institutional accommodation for old people, epileptics and mental cases.

Though, strictly speaking, it is outside of my field I should like to contrast the practical difficulties of feeding in areas of malnutrition and of true famine. In an urban area of malnutrition the problem is to ascertain who requires food. This can often be done satisfactorily under emergency conditions by lay-people with little training but with common sense. Enquiries should be made regarding the wages and earnings in the various classes of the population. In classes with wages below the average price of food it is clear that malnutrition must exist. The next step is to question large numbers of women and children with regard to what they have actually eaten in the last twenty-four hours. The figures must be collected from large numbers, for some women, often those who need food most, may be too proud to speak truthfully whilst others go to the other extreme and may pretend they have had little or nothing. It must also be remembered that children tend to say what they think you want them to say. Much may also be learnt by interviewing the local doctors and obtaining their impressions as to the amount of malnutrition and the classes affected—and these impressions are generally very valuable. Enquiry should be made as

to whether there has been any large increase of deprivation diseases such as scurvy, beri-beri, etc., from practitioners as well as from clinics and hospitals.

The problems in true famine areas are quite different as everyone has to be fed and so no enquiries are necessary. On the other hand there is the great difficulty of distribution, particularly in cold countries, as for example Poland and Yugoslavia. Whilst it is possible that in great emergency a certain amount of food might be brought in by plane this is too elaborate and expensive a method to be used over a long period. It is very difficult to keep motor transport going in extreme cold and snow, for mechanical transport requires skilled mechanics and repair shops, oil and petrol. In actual practice therefore recourse has to be had to the horse and as the horse population has fallen enormously it may be necessary to import them into the countries and areas where they are needed. This was done during the famine in Russia at the end of the last war when we brought back thousands of horses from Central Asia in the summer to have them ready for food distribution in the winter. Distribution has to be made regularly each week in winter as well as in summer to villages often 20 or 30 miles apart. It is a very big task complicated by the facts that both horse and driver eat a considerable proportion of the rations they carry, and sledges often cannot be loaded to more than half their normal load owing to newly fallen snow or the weakness of the half-starved horses.

I will not speak here of typhus for Dr. Fenton is lecturing on it. I would only say that, as far as we can see, the conditions will be such as to favour the spread of the disease on a very wide scale.

Dr. Hawes will speak on malaria and I would urge you to follow his advice closely, particularly in respect of self protection against this disease—otherwise you will become ill and a burden on the other relief workers.

In conclusion, I would like to mention one or two points about relief work in general. I would first urge that before volunteering you should ask yourself honestly whether you can stand the physical hardships and emotional strain of work in relief areas; otherwise after the expense to the relief funds of your training, equipment and travelling you may break down and need nursing, thus leaving your work to be done by someone else and taking a nurse from other work. Nurses in relief areas are generally serving big regions and can ill be spared to look after relief workers. If you feel you cannot stand the physical hardship or that the emotional strain (and this is very great) may prove too much, then you should volunteer for service at home, in connection with packing and dispatch, etc.

There is another important point; you should, whenever possible, volunteer to work in the same work as that by which you earn your living normally, *i.e.*, work professionally and not as an amateur. In relief work the lives of thousands of people are at stake and work must be efficient.

There is one thing you can start now, namely to study a foreign language. Study preferably some language not commonly known, such as Polish, Greek or one of the languages spoken in Yugoslavia. Unless you speak the language of a country a great deal of work is impossible, *e.g.*, nursing, social investigations, etc. If you study for a time, and get a grounding in the grammar, you will be surprised how quickly you pick a language up when you are in the country. It is often thought that because a language is written in different characters to those of English, as for example Greek, it is more difficult to learn. I should say that with perhaps the exception of Hungarian all European languages are about equally difficult to learn.

In the field it is essential to acquire and maintain the highest degree of self-discipline. It is a great temptation, for instance in a famine area not to eat your full ration but to give away part of it. This must be resisted as if yielded to it will mean that you will break down and have to be nursed.

Similarly, whatever work is to be done you must take a reasonable amount of rest and, if at all possible, relaxation at fixed periods. On the other hand do not lay yourself or your organisation open to the criticism of being too luxurious—as has sometimes been the case amongst voluntary organisations.

You must too learn to protect yourselves against water-borne diseases, such as typhoid fever and cholera, as well as typhus fever and malaria.

Another point of importance is to maintain close co-operation with the Government of the country you are working in. Remember you are there on sufferance and it is essential to work in accordance with the policy of the Government whatever it may be.

My final point is—and I need not stress this to you—do not look for romance or excitement because the work is often very dull, conditions are sordid and sometimes lonely. After a week or two the novelty of being in a foreign country wears off and the work is monotonous and up-hill. It may be particularly so after the war because of the anti-British propaganda the Germans are doing at present.

In conclusion, I can assure you that in spite of the difficulties and possible dangers you certainly will not regret any time you devote to helping those suffering as the result of the war.

DISCUSSION

Question.—Is Russian likely to be used? Does it help with the Polish language?

Answer.—Russian is a very useful language to know for it helps you to understand the other Slav languages such as Bulgarian, Polish, etc.

- Q. Is it intended to treat malaria with quinine or will new drugs be used?
- A. Most of the supplies of quinine came from Java and Sumatra and consequently the supplies may not be sufficient to meet all the demands—Synthetic drugs such as mepacrine must therefore be used.
- Q. We have heard lately a great deal about the increase in venereal disease, do you not think we should get some training and instruction in it?
- A. This will certainly be one of the problems, but it is too technical, as far as treatment is concerned, to make it possible for it to be usefully included in the present course.
- Q. What number of medical personnel will be needed?
- A. That is a very difficult question to answer as it depends so much on what national personnel is available in the countries themselves. It is impossible to say at present anything definite about numbers.

POLISH RED CROSS

By MR. TADEUSZ LUTOSLAVSKI

I think I should begin with the very simplest things. It is a country which is not as far from this Britain as you would think, it is not more than 700 miles, hardly more than to the Hebrides. What is the size of the country? It is a country which was, before the war, and still is (legally if not in fact) the fifth largest in Europe in area and population (35,000,000 inhabitants). About the climate, there are certain ideas which are exaggerated. The climate is not as cold as is supposed. Owing to the fact that it is only 700 miles away to the east, and not to the north, it would be strange if there were any great difference of climate. The differences are not great, they are no greater than between Germany and Britain. Summers are warmer and winters colder, but not much.

As to differences in the manner of living, which I understand is one of the subjects of interest to you in a practical manner—well, the differences are considerable; the standard here is higher, but even this statement cannot be accepted without some reservation. There are indeed in this country many more people who own cars than in Poland, but on the other hand, in Poland there are more who can afford to have domestic help. It is up to you to decide which is the best comfort—car or maid.

The same goes for food and things like that. It may be that in Poland tea and coffee and oranges are more expensive. (I am not, of course, speaking about the present conditions, which are terrible, and cannot be compared with anything else). As to pre-war conditions,

it is true that some of the commodities originating overseas were more expensive, but on the other hand, butter, ham and eggs were much cheaper and more plentiful. Again it is a matter of taste. I recently heard an English woman declare she was surprised to see people of Poland so healthy in spite of the fact that they drank sour milk and ate black bread ! Well, I thought to myself, that is one of the reasons why they are so fit. Black bread is mostly rye and is whole-meal in the fullest sense. It is certainly dark in colour (due to the rye) and it is coarse, but it is supposed to be very wholesome.

Now conditions in Poland after the last war were similar in certain ways to those which you may find there if you happen to go there after this war. I suppose after this war things may be even worse. They were pretty bad after war had raged for four years over the territory of Poland. The medical situation was bad because all sorts of epidemics from Russia and Eastern Europe were spread by the armies of Germany and by the Russian army. And, in fact, Poland's eastern frontier separating her from Russia was at that time also the sanitary frontier between Europe and Asia. At that time on that frontier on one side were all sorts of epidemics, and the frontier itself was closely guarded by sanitary inspectors, quarantine and so on. On the west side there were no epidemics of great intensity, or they were much smaller, so that Poland played the part of a sort of protecting wall for Europe. If disease had penetrated over, it would have done tremendous damage.

A British physician, Dr. Seymour, wrote in the "Medical Official" about the part played by Poland, and I must read that. He says: "The struggle carried on by Poland against the diseases and infections coming from the east is a chapter in the history of the public health service of Eastern Europe which cannot be over-estimated. The story of that struggle is as glorious, and far more beneficial to mankind than any battle . . . one hundred and eighty-two members of the Sanitary Personnel gave their lives in the struggle against typhus. Of each of them it can be said as of the Spartans at Thermopylae that 'obedient to the laws of our land we here lie fallen in battle.'" Those were the Polish officers of the Health Services who were protecting Poland. Later on Polish Health Establishments were set up by the State. Polish Health Services were based on rather a different line from those of this country, because the hospitals in Poland were controlled by the State and Municipal organisations and corporations, though there were of course private hospitals. The idea of private charity and philanthropy does exist, but it does not carry the entire burden of the hospital service. In that work, which went on for twenty-one years, remarkable results were achieved. Mortality in the first years after the war was unavoidably high owing to under-nourishment during the war and the spread of infectious diseases and to other reasons such as insufficient sanitation. But in twenty-one years great progress has been achieved and this progress is especially notable in the social diseases such as tuberculosis. In the pre-war period mortality decreased (it is unfair to compare peace and war periods). In 1914 mortality was 36 pro mille and after sixteen years in 1930 it had fallen

to 14.7, less than half of what it had been previously. There were similar results in reducing infant mortality, mortality in maternity cases and so on.

A number of health centres were established and the principle was that there should be one health centre for every district. That had not been fully achieved, for some remote centres did not get them. The system of Health Centres (you know them well here) originated in America and they were at first started as a sort of out-patient centre, but they were eventually enlarged, various departments were added, such as X-ray departments and sick bays and they became universal. There were small units prepared to deal with medical and sanitary problems and as a rule the district medical officers of health were also supervisors of health centres. I do not know what has happened during the war, but most likely our services have been very much damaged and destroyed because of course many of the Polish doctors lost their lives and many more were driven away or killed by the Germans. I rather suspect, however, that some rudiments must have remained, for it is not in the interests of the occupying powers to have epidemics spreading, however hostile may be their attitude to the population. It is therefore to be supposed that after the war some sort of sub-structure will still exist, and I do not think it would be a case of creating something entirely new, it would be largely a matter of assisting with medical supplies, materials, appliances, foodstuffs and all sorts of other facilities available for helping the existing organisations.

In Poland there were always voluntary organisations for dealing with social problems. It is one of the strongest tendencies in Poland and in Polish communities to form themselves into self-help organisations of all kinds. This is a very common thing. Perhaps the Poles are not so efficient in purely business organisations on a big scale for profit making, perhaps it may be because they have not had sufficient opportunities, but at any rate they have not proved as conspicuously successful in this as in the domain of those social organisations for helping each other, not through big charities, but by mutual assistance. It is not a case of a set of rich people handing help to the poorer people, but it is the idea of everybody helping everybody else. Admitting that some may have a little more than others, help is mainly mutual and such an idea is seen in the Polish Universities where very many poorer students live on scholarships which are not granted by the Government or by any benefactor, but by the mutual help organisations of students. There are also hostels built by student organisations. The same thing goes on for helping people when things are pretty hard. I think you will find an interesting item about emergency work in Mr. Foster Anderson's "Borderline Russia." He went on behalf of the British Red Cross and found that he did not have to organise distribution, but had to help and to co-operate with existing organisations.

This is the kind of organisation that there was before the war. We also had Social Insurance. It is, I am afraid, quite a common view, held by a considerable section of British opinion, that Poland is a backward country. It is also interesting to know that about 70% of the

recommendations made in the Beveridge plan have been applied there years ago. I have not read the plan very closely, so I cannot go into details about it, but we had contributions for everybody for sickness, for old age, unemployment and burial about twenty years ago in my "feudal country."

It is doubtful whether this system built up so carefully and over a period of years has been destroyed.

There are similar systems existing in Germany, and I think that it may be presumed, even after the war and in spite of all the damage that will have been done, something of these systems will remain. Possibly all funds may have been looted by the Germans and no reserves left, but hospitals and State Insurance services will probably remain, though they may be in a very bad condition. I do believe that some of that structure will have been left and that relief will be a matter of help and not of the creation of something new and that we must profit by the existence of organisations serving already millions of people.

How bad the situation is I need hardly tell you, because I think it is known that conditions are dreadful and not only for the Jews but for the Poles as well. Even apart from the mass murders, the condition of those who remain is appalling. Although Poland produces a lot of food, that food is now being exported to Germany without payment or for purely fictitious payment and the country is on the brink of starvation and all its reserves are gone. It can be imagined what may happen before the end of the war: perhaps the fortunes of war may make Poland once more a battlefield. Even if this does not come about, very prompt help is required to save the lives of those who have survived the trials of the occupation—specially the children. As to the children, I cannot imagine how they can live under present conditions, at any rate in the towns. Perhaps in some country districts they may be better off because the peasants do produce food and can nearly always keep a little reserve, but I would not count on that too much.

The class which is suffering the worst hardships is the educated class, for while the peasant may have a little, and can sometimes get milk and eggs, and the workman has to be fed because work must go on—even the Germans understand that you cannot starve the working men—the black-coated workers are very hard hit, indeed most of the educated people, for they were considered by the Germans to be their worst enemies. These people get no subsistence unless they are doing some physical work and often they are unfitted for it. These are the people who will need real help.

You may think that I have taken a very pessimistic view of what may happen before the end of the war—terrible things may happen yet, although it would be a mistaken idea to think that any nation could be exterminated. Sometimes when we read about mass executions we think: well, in that case not many people have remained. That is a mistake; a nation of 35,000,000 is not easily wiped out, and though 1,000,000 may die, think of the millions that remain. Even if the Germans had wanted to exterminate all the Jews, they have not

yet been able to do it after three years, though after all there were not so very many of them. I do not think that after the war the Polish population will be very much smaller than it was before the war, but it will be utterly exhausted; they will have behind them four years at least of great suffering, both moral and physical and it will be a great and noble task to relieve those sufferings. I am sure that you will do a great deal for those people.

Question. Do you think that anti-British propaganda will have made any headway in Poland?

Answer. No, I do not think that it will make the slightest headway. On the contrary, I am sure that any attempt made in that direction by the Germans would have the opposite effect to that intended.

Q. Are there any other languages spoken in Poland except Polish?

A. Well, I think that after three years of occupation it is likely that many people will have had to learn German, otherwise there is hardly any foreign language spoken. A very few speak English and French—the educated people—but as a rule the language problem might prove a difficult one, but I do know many English who speak perfect Polish.

Q. Is any Russian spoken?

A. No, certainly not. With regard to this question before the last war, up to 1917, as you know, the Russians occupied certain parts of Poland and then some people did know Russian. The Russians left and twenty years have passed—they did return for a very short sojourn in 1939. It is to be stressed then that no Russian is spoken at all in Poland. Some Ukrainian and some Ruthenian is spoken, but they are no more Russian than Polish dialects.

Q. Have many cattle been destroyed, and will there be a great shortage of stock?

A. A good deal may have perished owing to the shortage of fodder, but I do not think that the stock has been totally destroyed. Germany in her own interests must have kept cattle.

Q. Would it be tactless of those of us who know German to use it?

A. It certainly might lead to misunderstanding, so that if you could use any other language it would be better. Any misunderstandings would probably only be temporary.

Q. Is Poland a free trade or a protectionist country?

A. Before the war there was not a single free trade country in the world, so it would be very strange if Poland happened to be one.

Q. Will the conditions be very different in the part of Poland annexed by the Germans? What will have happened to the Polish institutions?

A. It depends on what kind of institutions you mean. In the part annexed to Germany there are about 11,000,000 Poles. I have omitted to mention something which is of some importance.

Under German occupation part of Poland has been declared incorporated to Germany, whereas the remaining part is under German administration. In the latter part organisations such as social insurance and local government are maintained to some extent, but only under strict control. In the part which is annexed to Germany everything is on the German model and has simply been made a part of Germany. I think that experience has proved that the Poles of West Poland are well organised and efficient people. It seems likely that we should have least difficulty in that province. In 1918 West Poland re-organised more quickly than the rest of the country, in spite of the fact that they had no living memory traditions to go back to, and now there will be many who have lived for twenty years in a free Poland. No one existed in 1918 who had any memory of a free Poland, yet they re-organised in a very short time, but now we have a large number of young people who have been trained in freedom and things should be easier.

- Q. What is the standard of education among the peasants in Poland ?
- A. Education is free and compulsory up to the age of fourteen and everybody goes to a school. Before the last war there was a good deal of illiteracy, but at the time of the outbreak of the present war there was a very small proportion of illiterate people, less than in Italy and much less than in Spain, perhaps 15%, and those were older people, too old to go to school when Poland became free. The elementary schools have on their syllabus the usual subjects, reading, writing, arithmetic, history, etc.
- Q. How far was Poland self supporting regarding food ? How far has it changed over to industry for German uses ?
- A. Much was exported and it has been the policy of the Germans to keep Poland an agricultural country. It is the same with other occupied countries, the idea being to make them dependent on Germany for industry. The British raids have, however, caused the transfer of some industries and a number of war industries have been established in Poland because of the pressure of the R.A.F. on Western Germany. I do not think that that will make any great difference and Poland will still be largely agricultural. Of course, this all depends on when the war ends, specially with regard to the harvest. If the Germans are driven out after they have had time to take the crops for the year, that will make a lot of difference.
- Q. Was agriculture mechanised to any great extent ?
- A. No, not to any very large extent. Horse transport was used.
- Q. Will the children have had any form of education now ?
- A. I think they will have had some form of education in the elementary schools, but I am afraid that education in general will have been greatly neglected. Universities have been closed altogether and many of the secondary schools also. As to the primary elementary schools, they are still open, but they are under German control.

- Q. Was some of the land owned by the peasants and was it very little ?
- A. The proportion of land owned by the peasants as small holders was about 60% of the total arable land. About 20% was owned by the State. Large landowners controlled less than one-fifth. It is a malicious legend that Poland was a country of large estates, such a statement would be far more true, for example, of Scotland than of Poland.
- Q. What do you think the rail and road communications are likely to be like after the war ?
- A. I think that railways and roads are likely to be rather good, because as you will realise, all German traffic to and from the eastern front must be passing through Poland, and they must therefore be kept in good condition. The Germans have probably improved them, and unless some new hostilities should destroy them, I think the transport facilities should be good.
- Q. Is it possible to find out what kind of books there are in Poland ?
- A. I have no precise information, but I do not think that Germany would allow the use of old Polish books, and most likely they have produced new German books. The old books were, of course, written from the Polish point of view and would naturally be prohibited.
- Q. Have the old books been destroyed ?
- A. I believe so, but I do not know for certain.
- Q. Is it compulsory for children to speak German ?
- A. Yes in the part which has been annexed to Germany—the west part—but not in the remaining area. In the west part there are 11,000,000 people and there would not be enough teachers to instruct those in the remaining part as well. The Germans could not do it. Before the war there were about 100,000 elementary teachers who, of course, did not know German, and if you had the children taught German you would need Germans to do it, and a hundred thousand of them, which is quite impossible.
- Q. Can people in one part of Poland communicate with those in the other ?
- A. Yes. There is a line of demarcation and to travel you need special permits, but correspondence is free. It is, of course, censored.
- Q. Is there a Polish medical faculty in Edinburgh ?
- A. Yes, there is one with 150 students and Polish professors. It is hoped that by the end of the war 200 Polish doctors will have been trained there to help in the work. At the best only 40 or 50 can be trained per year and so only a part of the 150 students can graduate yearly. This medical experience will be very useful, but it is only a fraction of what is needed.

- Q. Is any relief work being done by the neutral Red Cross?
- A. I do not think so, because it is not allowed by Germany. Before America came into the war some efforts were made, but I think that even then it was unsuccessful. It is still less likely to be done at present.

FAMINE RELIEF

By MISS E. M. PYE
Society of Friends

I think I have been asked to talk to you because I have been privileged to have some 28 years' experience of this kind of work, and although theory is not of much use without experience, I think, if you cannot immediately make use of your experience, a few matters of theory may stand you in good stead. I want to tell you something of my experiences, to give you my theory of what actually works in given situations, and if I am rather discursive, and tell you more about what happened in the past than what is likely to happen in the future, you may nevertheless find some little nugget of usefulness for the work in which you are interested. How many of you will actually take part in the work overseas we do not know, but there are certain guiding principles to be followed in such work and it is about those I want to tell you in relation to the practical work which I myself have done.

I went to France in 1914. The Society of Friends had organised a party of workers to help the people behind the lines. When they reached the Marne the Prefect pointed out the terrible difficulties of mothers who were refugees from the north of France and he said: "Make a maternity hospital." I was telegraphed for and went out in December. We had a very long and interesting experience in connection with that maternity hospital in France. I remember that the first person who came was a mother of eight children. She fled away from her burning home just to the north of the hospital, which was situated some 15 miles behind the French Front. She brought six children in with her. Another daughter was born at the hospital, and I had the pleasure not very long ago of hearing that that mother had brought this daughter, now grown up, to have her own baby at that same place.

In 1918 we had the experience of evacuation because the French Front was moved back with the German advance. We had to move the whole of the hospital with the mothers in it to a place that was a little safer. Just under 1,000 babies were born in that maternity home while I was in charge.

There are two special lessons arising out of that experience which you might find useful. The first is the extraordinary generosity of mind of the French people. Just think what it would be like to have a French Maternity Unit coming to our country and saying: "We are going to have a maternity hospital here." I doubt whether our English habit of mind would have the generosity which these French

people displayed in welcoming us with open arms. We must look for the attitude of mind of the people to whom we go. The other was a professional discovery, namely, how immune we are to our own germs. When I was adapting that hospital I was appalled by the sanitary conditions. There were no drains at all except a pipe which went straight down to the cesspool. But during the four and a half years we were there, we never had a single case of sepsis. The diseases which are dangerous to people are those conveyed by germs which come from outside; in other words, the germs to which they have become relatively immune during the course of their lives cease to have virulence for them. From the beginning of that experience we were extraordinarily free from any troubles of that kind.

I vividly recall the morning of Armistice Day, November 11th, 1918, when I went into the grounds of that hospital to hear the guns cease fire, and I want to tell you that the only sensation I remember feeling was one of immense fatigue. I tell you that because I think that those of you who go abroad should bear in mind the fatigue which follows a time of great strain. That is one of the things we shall have to take into account. I have always had that remembrance of my own sensation at the sudden stopping of the guns which had not ceased their roaring for four and a half years. One felt that one was too tired even to rejoice.

When the question of our going away after the Armistice came forward, the people of the Marne came and begged us to remain. Fortunately, we had built up a French staff and the Society of Friends was willing to make financial provision on one condition, namely, that there was a Voluntary Committee organised to take over the administrative burden of the hospital work. Then it was said to me: "But you would have a committee consisting of Protestants and Catholics, and of Left, Right and Centre groups." "Well," I said, "at least let it be tried." I went round and got together a committee in which all the religions and all the politics were represented and all combined together to make the thing work. That committee most loyally maintained its unity, and, for example, when one of its members, who was a free thinker, died, both the Catholics and the Protestants insisted on putting another free thinker in his place. My point is that, if you look for it, you will find co-operation amongst every kind of people. Not all are willing to co-operate, but you can find people who will work for unity and goodwill against their own personal prejudices. That is one of the great things which all relief workers must realize and learn.

In France at that time there was no famine. The babies were beautiful and well nourished. But when the war was over in 1919 the Society of Friends had received a call from Austria, and I was sent out there. There indeed was famine. I shall never forget the experience of visiting infant welfare centres and of seeing those poor flabby babies, who were too weak to cry (indeed, they did not cry, they just mewed). Nor shall I ever forget the twisted limbs of the older children. At one place where we made inquiry we were told that 100 per cent. of the

babies showed signs of rickets. There was no food to be got in the country, which was swept bare. Just about the time that I got there the Food Mission was working to bring food supplies into Austria, and the Hoover people from America were dealing with the children of school age by means of very fine canteens. But there was no organisation to deal with children under 6.

The Friends' Mission under Dr. Hilda Clark therefore set to work and organised a system by which these children could be fed in their own homes. Someone said: "But the mothers will eat all the food intended for the children." We knew enough of mothers, however, to be sure that was not true, and we said: "Well, it is an experiment, and we will try it. We will have every child supervised at the Infant Welfare Centre and watch what happens." It was one of the most thrilling things that I remember to see those weight charts, which had been horribly going down and down and down, gradually, when food supplies were given, begin to creep up again.

One thing which we did learn was that it was advisable to separate the medical work from the food distribution. The first distribution of food was made in the Welfare Centres, and in a starving country like that you can imagine how the Welfare Centres were stormed because of the news that got around that there was a little condensed milk and so on available. Therefore we decided that for every child, while its card must be obtained at the Welfare Centre, the actual giving out of packages of food should be done from other centres. My experience of that work leads me to advise you never to take a "No"; if a thing is right you will find a way to do it. It was said that there were no buildings suitable, yet nevertheless, we found a good place in every district for a centre and there we had distributions to the mothers for their infants once a fortnight. They came for a package of food material which they took home and gave to their children under 6. Some 64,000 children were dealt with in that way when the work was at its height.

That was only a very small part of the work we were doing, but the actual feeding of the children, the distribution of the fortnightly packages, was done by voluntary labour. All told, we had about a thousand women giving voluntary work on behalf of their fellow citizens. These women included the grand lady who had been rich and had a butler and maid to help her, and they included the humble little woman who could only give one afternoon a fortnight of her precious time. They all worked together in the utmost harmony.

As far as I remember (I cannot be absolutely certain, for in the course of time one forgets the less agreeable things and remembers only the more agreeable) there were no disagreements. They were the most loyal and splendid workers anyone ever had. We were given by the city of Vienna the use of the great cattle market, and we got the school children in turn to come and weigh out the food materials, rewarding them by giving them a food package for themselves. We had some 500 of them working in relays, doing it as regularly as clockwork, and it was very successful.

In those days a voluntary organisation had to do the buying of the food. There was no government system. We were buying food from all over Europe, and we had to work out our accounts in 13 different currencies. The currency difficulty is a very real one, and you may imagine what sort of things happened when the value of money in a particular currency changes overnight, so that you find the next morning that you can buy only half the goods you could have bought the day before. We lived through that in the Vienna Mission, but we decided—that is a point for you to bear in mind, though I hope that devaluation of the currency will not happen again—to change first thing every morning what we should need to pay our bills for that day, so that we never speculated on any change in currency.

Of course, we had a great deal of other work. One of the great difficulties which all relief workers will find when they go into a country is the competition between the countryside and the town. We found in Vienna that the country people still had butter, and our workers used to go out and buy butter, bringing it back in rucksacks on their back, and give it to the children. We also had a large scheme whereby we bought cattle from Holland and gave them to Austrian farmers on condition that they would sell their butter to the townspeople. We got the co-operation of the "Save the Children" fund and many other organisations, together with the Society of Friends, and finally the British Government gave us a £1 for £1 grant, in the latter years, which made it possible for us to carry on this large piece of work.

The permanent result is interesting. These 64,000 children had to be medically supervised. We assisted in doubling the number of Infant Welfare Centres by grants of money and in other ways, and I believe that a very largely increased number of Welfare Centres has continued in Vienna until this day. The Viennese doctors and nurses were the most devoted people imaginable. You might have thought that this extra work put on people who were themselves starving would have led to grumbles. But that was not the case at all. They did not mind how much nursing or how much supervision they had to undertake, and we had their warmest co-operation throughout.

An enormous amount of hospital material was sent out from this country, and from America also. The situation in Austria was such that there was no cotton, linen, chloroform, or anything, and we had one hospital competing against another for such supplies as there were. Therefore a general hospital pool was established, and that pool received all the material and assistance and from it this was distributed to the various hospitals on a fair basis. That answered extremely well. We had even a "cod liver oil pool," which proved very useful because the deficiency of cod liver oil was one of the most serious we had to encounter, and there was great gain accordingly for the under-nourished and rickety children. All the institutions shared in this cod liver oil, and there was a gradual improvement in the children visible even to the naked eye. Some five or six years later a medical examination of all the children who had been through that terrible time and still survived was made and it was found that the signs of rickets had disappeared in

an extraordinary way. Of course, we do not know what deeper ills there were, what destruction was wrought on the nervous system of the children owing to the experiences of that time, and I have myself often wondered how far the nervous injury then inflicted as a result of the absolute starvation of those years may have accounted for later events. My own view is that some affection of the nervous system might have resulted in some cases, and I think that such results ought to be studied. Possibly some such study may be one of the good results forthcoming out of the present awful situation.

After I came back from Austria it did not seem long before we had that terrible flood of refugees, not from war, but from persecution. I had the opportunity of seeing the way in which the Jewish people in Paris dealt with the refugees who fled into France over the frontier in 1933. Then there came the Spanish Civil War. A Quaker who was in Spain wrote a most heartrending account of the refugee children in Spain, and the Society of Friends sent some materials and money. I went out to help them to set up canteens where the little children could be fed.

Here, if I may hark back for a moment to the Austrian experiences, there is one point on which I am very insistent. In Austria we had an enormous distribution of clothing, both second-hand and new, but nothing of that kind was distributed free. We always made the mothers pay a very small amount, because we felt that it was better for their self-respect to have to pay for what was provided. One of the things we have to be extremely careful about is not to do relief work in a manner which injures people's self-respect, and we found that this method in Austria was of great value. In Austria at that time there was more paper money than people could buy materials with, but in Spain that was not the case. I still think that if the time comes when large distributions of clothing have to be made you may find it better to take something in return. It may be that our present system of giving a coupon will solve the difficulty.

We set up canteens for these people in Spain. They were canteens for children under 6. We had not enough food to give to older children, and it was a most sorrowful sight to see little things of 7 or 8 bringing their smaller brothers and sisters to the canteens but not able to receive anything themselves. The age limit is one of the most painful things to enforce.

During the Spanish Civil War we were successful in getting grants from 24 Governments in money or kind. When the war came to an end, as it did suddenly, there was a very tragic spectacle. I was on the French frontier at that time and saw, pouring over the frontier into France, thousands and thousands of Spanish refugees. They were in a line four abreast, waiting for the frontier to be opened, the line stretching away right to the next village. Those mothers with little children in their arms were there for three days and nights before they could get food and shelter. The extraordinary thing was that so few of them died. We carried out a piece of emergency service—I am not going to say that it was very effective, but in the absence of any other

provision it accomplished something—as we organised lorries and gave hot drinks and condensed milk and cocoa to the people as they passed. Most of them had loaves of bread and dried food, but no provision for drinks.

Then I remember going at night and seeing the whole of the hillside covered with people lying under the stars without any shelter. You must not suppose that this was the effect of French incompetence. The magnitude of the problem was so great that no previous organisation could have dealt with it. Half a million people came over in that stream. The Spanish people are full of courage, they never grumble. During the first few days after the country was opened, the French authorities in that part conducted medical examinations, carried out inoculations, and sent away by train into the interior 43,000 mothers and children. The others were put into huge camps, of which you have heard so much, in the south of France.

We did what we could to make the life in those camps less hard and bitter. The French Government provided food and shelter, and we tried to supplement it with a certain amount of bedding, and we also did what we could to organise schools, both for adults and children. We organised a maternity hospital outside the camps and inside the camps we had a convalescent department and a small-children's department where extra milk was given to ailing children. In that camp life we had the most extraordinarily friendly co-operation with the French Government. They were thankful to us for anything which was done to help these Spanish refugees, and nothing we could suggest was too great a trouble for them to carry out. Camp life under such conditions is always frightfully bad for people, but it is ameliorated if they can be given something to interest them or some form of employment. Our first efforts were directed to setting them to work for themselves. Later on we were able to provide musical instruments for the musicians amongst them, and artists' materials for the artists, among other things, to make life less bitter. I paid many visits to those camps during two years. Even after the present war broke out, the work for the children was still going on. When I was there in 1940 we had to hand over the work finally to the American Friends Service Committee, whose workers still remain there.

I had another experience of refugee work. In 1940 I saw the way in which our workers were dealing with some of the thousands, or perhaps even millions, of refugees who were pouring into France from Holland, Belgium, and the east of France exactly in the same way as the Spanish refugees had done a few years before. These people were in even worse condition because they were longer on the way, and some of the families had fled in only their night-clothes. I witnessed again the way in which the French people dealt with the situation, in Bordeaux station, for example, they put up 3,000 temporary beds. It is, of course, very dangerous to have large numbers of people sleeping together on straw. Finally wooden frames were made, with short legs and stretched wire netting—a sort of forerunner of our bunks in the Tube shelters. These were knocked together and sacks filled with straw were placed on the top,

and I saw 3,000 of them in one station shelter where these people were taken for the night, were allowed to sleep, and were sent on next day. But the question of water and food in the case of such thousands of people makes an almost impossible situation. The Welfare workers, taking only about four hours' sleep in the twenty-four, devoted themselves to giving the people food and water and trying to help them in some way before they were sent on to further stations. The impression I got of the French social worker is one of the very best.

I should like to try to give one or two conclusions from all this experience. We are probably at the end of one epoch and the beginning of another in respect of relief work. In the new organisation, for one thing, there is no doubt that supplies will be given—at least we hope so—by the Allied Governments. The time has passed when relief societies will have to buy in competition in the open market. I think there is no doubt that government control will continue for a very long time. But there is another misconception which people are liable to entertain. After the last war the American work was done on the most constructive basis. The child welfare work, which was very well developed in a small way in such highly organised medical centres as Vienna, was very behind-hand in some other places. The Americans came in and helped to develop it, with the result that now in many of these countries you have people trained and ready for this work and only asking for the supplies necessary, to come in and help their own people.

I want to mention one of these countries. We have heard from Greece some terrible stories of starvation. But in the midst of the cataclysm there we had this letter from a worker in Greece: "The number of anti-natal centres has been trebled. There are actually twelve such centres working in Athens and five in the Piraeus, and three more in preparation. The number of child welfare centres has been doubled. Twenty-one new visiting nurses, after three years of training, have recently got their diplomas and have come very opportunely to reinforce the ranks of social workers. They are young girls full of enthusiasm."

Therefore, you see, the people who will help in the relief work out there are the Greeks themselves. Our part is to see that the food goes to the people for whom it is meant, but I believe that in many of these countries we shall find already a social welfare organisation capable, with friendly guidance, of dealing with supplies.

The whole constructive principle of relief work to my mind is that you must work *with* the people and not for them. If you start with that conception you will be much more likely to do really effective work. We have to realize that although we talk about mass feeding and mass shelter, and have for the moment to provide for large masses of people, the reconstruction problem is an individual problem. For example, we find one mother too distracted to profit by what is given her, and inquiry will show that her child *is* missing; or we have a child who will not take its food, and this may mean the beginning of an illness or perhaps of an epidemic. We have to be prepared, if we are going to do

constructive work, to put these people in touch with those of their own country who can deal with them in the best way.

There will be great need for food and clothing in the occupied countries, where our friends in France, for example, are working. Through the local teachers they have given an extra meal to about 85,000 children all through this war. There you have a good skeleton organisation which will be capable of developing immediately. The same possibilities will be found in Belgium as soon as it is possible to send food there.

The one essential qualification for relief workers is a friendly reconciling spirit. That is the key which will open doors in every country to which you have the good fortune to go. Relief work is not exciting, although a great many people think it is. It consists mostly of very long hard slogging work, but it is well worth doing. No problem is too big to tackle, because you can always find some way of making a small beginning and then you find that it grows. If you remember that and are willing to put your shoulder to the wheel, in whatever country you go to, you will be doing not a little to bring about the new world for which we hope.

Let me in closing give you a message which was received from the Austrian helpers when the time came to close the depots: "There are no words to express our gratitude for the help that has been given by the Mission. Thousands and thousands of mothers have been helped and have learned to believe again in love and humanity. The help which has been provided is not only of material value but of moral value also. It helps people to feel that the hatreds of this war, which have caused so much distress and misery, will not be carried on to all eternity."

QUESTIONS

At the close of her address, Miss Pye answered some questions. In reply to a point about the permanent effects of the experiences of the last war and famine in Austria particularly, she said that she was not qualified to speak on the medical aspect, but her personal opinion was that a state of nervous instability had been produced among large numbers of people in Central Europe, that is to say in Germany and Austria, and the world was now seeing the results. It seemed to her that the instances of dreadful cruelty which were heard of might very likely be the result of the starvation and twisting of the nervous system which had taken place in the earlier years. She did not believe that people who had had a healthy childhood would be as liable to these distortions of nature as those who had undergone this terrible starvation in their youth.

In reply to another question, she said that in the case of mothers with small babies, the food should be given to the mother in the effort to stimulate her to feed the child herself. But if, as happened in a state of great nervous and physical exhaustion, the mother had not got the milk directly to give to the child, a supplement was necessary.

One member of the audience asked whether the Astrid Home in Belgium was still functioning, and Miss Pye said she believed it was.

Application had been made for permission to send money to Sweden which could be spent in Belgium and it was hoped that this would be brought about.

Asked whether camp life was bad from the physical or psychological point of view, Miss Pye said that it was from the psychological point of view that it was so unfortunate for large masses of people. If the people could be got to have their own games and other occupation, the situation was alleviated, but it was necessary to make some mental as well as physical provision for the men and women so placed. The same questioner pointed out that in the Middle East, after the war, there would be large camps, previously used by the Army, which would no longer be needed for military purposes, and which might be brought into relief work. Miss Pye replied that there was no question that camp life, given good conditions, was excellent for children, but there must be people supervising it who understood children and knew how to keep them occupied.

The Chairman, in asking the assembly to thank Miss Pye, said that she had given a most thrilling account of her experiences. She had spoken of work carried on in the worst possible conditions and yet brought to the most complete and utter success. They all knew that relief work to be really good had to be practical and to unite business experience with kindness of heart. Miss Pye had shown that she possessed both qualities in full measure. On behalf of the students he thought they owed her a great debt of gratitude.

THE GREEK RED CROSS

By A. P. CAWADIAS, O.B.E., M.D.

President of the Greek Red Cross in London

I always remember some words of a German philosopher who, studying the psychology of his compatriots, said that if the Germans were at a place where there were two roads, one pointing to heaven and the other to lectures on heaven, they would choose the lectures on heaven, and I am afraid now that this audience will have to choose the way of a lecture, not on heaven, but on something more like hell. I confess that I do not myself like lecturing, being more of a man of action, but I do want to discuss what is necessary for Pre-Armistice relief work.

In the Red Cross the principle which actuates it is to help the victims of the war. This was recognised long ago in the creation of the Knights of St. John, and even more since the organisation of the Red Cross itself. It is a principle unfortunately not recognised always by everybody; every country is national, but the spirit of sympathy for its victims and of help for them is international. Yet, after all, every nation is interested in helping the victims who suffer in her own country and through the agency of the Red Cross she can be led to

extend that interest to victims of the same war in other countries. Formerly the victims of war were chiefly the prisoners and the wounded, but in this war, the victims who suffer most are the civilian population, and to this the Red Cross has had to direct its attention.

This change of policy of the Red Cross, from the narrow conception of help for prisoners and wounded to the wider conception of help for civilian populations, has been a little difficult, but now it is being recognised and we know that the object of the Red Cross is to help the victims of the war, and particularly the civilian people wherever they may be.

There are three phases of relief work, but each of them is connected with the others. There is first of all the relief given during actual war. The duty of the Red Cross is to help now, to give immediate relief. This, of course, has to be done under great difficulties, alike concerning shipping, transport, and political difficulties. Then comes the second phase of relief work. That is the relief which will take place when, in countries liberated one after the other, it is possible for workers to go in and help the suffering population. But we cannot consider this liberation relief without considering also the immediate relief given while the war is continuing, nor the third phase of relief, the post-war relief which will be necessary after the Armistice, when it will be possible to send provision, including medicines, more freely.

I have always been a little amused when people have spoken so much about post-war relief, sitting in comfortable chairs and discussing what will become of Europe after the war, and not appearing to realise that the war has to be fought now. We have had conferences on post-war relief, but we have sometimes tended to forget that there is a war now and that peoples are starving and dying for lack of medicines and of every sort of provision even while we speak. Here comes the Red Cross, which is the only institution that can offer immediate help. It is its duty to be in the war. But the Red Cross will also be required to help enormously in Pre-Armistice relief. We have been told, for example, of the interest of the Red Cross in the happenings in North Africa. The Red Cross will also find a large sphere of action in the post-war period, although then, it is to be hoped, the respective Governments will be able to do more. Thus the thread of relief work throughout belongs to the Red Cross, and I hope that this organisation will have an enormous development after the war is over.

This morning I want to speak of the second and third of those phases of relief, namely, the "liberation" relief and the post-war relief, and to say something of the principles which have to guide us in this work. I want to speak particularly of the Greek Red Cross and its relief centres. The Greek Red Cross, although a small unit, has done much splendid work for years past. It has always been well organised, and during the last war and the period of famine that followed it revealed its qualities as a wonderful organisation. It has always had at its head men who were imbued with the principles of humanity which guide the Red Cross in every part of the civilised world. They were realists, men who saw things as they were, and not as they wished

them to be. The Greek Red Cross was welcome among all classes of society in Greece, and the most impressive thing was that when the period of famine began, men and women of the higher class in Greece worked steadily and organised themselves to bring relief to the poor. It was one of the most distinct demonstrations of the strength of the organisation of the Greek Red Cross, and it gained the respect of the Armies of Occupation, thereby helping the situation enormously.

Some people will ask me whether there is need for more than the country can itself provide. Of course there is need for more—tragic need. Notwithstanding the good organisation which we have had for relief, the country has been reduced to a terrible condition. Starvation has brought about not only the death of many, but widespread illness, illness in an insidious form, the disease of malnutrition. Workers in the Greek Red Cross have sometimes been obliged to give up their work because of avitaminosis and the fatigue and exhaustion to which they have been subject. This thinning of the ranks of the personnel of the Greek Red Cross is not a thing to be wondered at. They have done superhuman work, with nothing much to eat themselves, but the call for new blood is urgent. That, therefore, is the first need, that new personnel should be available, provided from this country, and I can say that the collaboration which will be found on the part of those who remain in the Greek Red Cross will be perfect.

There is no need for me to tell you of the great bonds which bind Britain and Greece. The British and the Greeks belong to the same race, although separated by almost the width of the Continent of Europe. Their standard of education has been always the same. The ideals of character and of courtesy and manners are similar among the two peoples. The system of education is similar, the mentality is similar; the Greeks, like the British, are a land of sailors. These points of similarity are extremely important. Moreover, there is a likeness between them from the political point of view. It might almost be said that Greece from the point of view of politics has always belonged to the Commonwealth of British nations, like a dominion, although there has not been the legal tie. So far as language is concerned, many of the Greek people speak English, and it will be very easy for workers who go out there to carry on their work with them. They will find it agreeable from that point of view. You will find people with whom you will be able to work in splendid accord.

What is the nature of this Greek population amongst whom some of you will go? You have all read in the newspapers about the terrible starvation that has overtaken the Greeks. You will understand this better if you look at a physical map of Greece and note that it is largely a mountainous country. On the few plains some food is grown. But the food is insufficient to support the people and food cannot be transported to Greece any more. Conditions have been relieved since the British Government sent food ships across last February and active food relief began in Greece. I must say, as President of the Greek Red Cross, that I have found the British Government always very willing to help, and I fully realise its difficulties. We ask, perhaps, a

little bit too much, but we have done so because we needed it in this period of famine. We have always had very great help. But the effects of famine do not cease even when food has been sent. The food which has been sent is not, of course, sufficient, and even when food is again available, a condition of under-nutrition will have started in the individual, other diseases may well develop as a result, and something more is needed than immediate food relief to restore his health.

Thus it will be appreciated with what a terrible condition of under-nutrition Greece has been faced. It is a condition which will have to be helped not only with food, but with the provision of medicines, drugs, vitamins, and all the various hygienic measures of every kind.

Then there is another problem, that of malaria, which exists particularly in the north of Greece. Whenever there is a war or starvation in Greece there is always an outbreak of intense malaria. Malaria played its part amongst the ancient Greeks, and an eminent Professor of Oxford University suggests that the fall of Athens after the Peloponnesian wars was due to the intense malaria which had spread in Greece. Malaria, of course, is a germ disease, but the germ only grows when there is a suitable soil, and under conditions of starvation and faulty hygiene malaria spreads. It is not a question of the vitality of the germ, but of the strength of the individual. With malaria endemic in the country, and a terribly exhausted population, the conditions were suitable for a big development of malaria, and the International Red Cross in their last report said that if measures were not taken before next May there would be a terrible catastrophe. Of course, measures will be taken, relief has been afforded, but all the measures that are being taken will be insufficient, and in the Pre-Armistice period those measures will have to be continued.

The problem of nutrition and the problem of malaria are two of the big problems facing Greece. I should like to impress on you the fact that both problems will be tackled, but there is one thing that must be said from the point of view of the conditions in Greece. You will find there not only a number of organisations which are in splendid working order, and people with whom you can talk as freely as with your neighbours here, but you will find also a very high degree of preparation on the part of people for whatever you may bring them. It is extraordinary from a medical point of view what a high standard of appreciation of Hygienic measures exists among the Greeks. Take the question of vaccination as an example. We have never had any trouble over that subject. After the last war, in 1921, when Greece had a population of $4\frac{1}{2}$ millions, she had to deal with two million refugees. All these people came from Asia Minor in a terribly destitute condition. It was expected that there would be epidemics in Greece, but the people were told that they ought to be vaccinated against certain diseases and that was done. Although we had to deal with a cholera epidemic in the Greek Army just before 1914, an epidemic which also affected the Serbian, the Bulgarian, and Turkish Armies, we had only to tell the captains or anyone in authority that the soldiers ought to be vaccinated and vaccinated they were. There are always, of course, some academic people who want to be sure on the subject

even to the point of demonstration in the case of cholera, but we cannot in actual work wait for academical demonstrations working on these principles of immediate action. Whereas tens of thousands died in the other armies, there were only 600 or 700 deaths in the Greek army, which shows the efficacy of vaccination and the response of the Greek people to the desire of the authorities. The people are ready to collaborate in all necessary hygienic measures.

In the towns of Greece life is very like that in the towns of England. In the villages there is a population of very simple people. They are, however, a lively and understanding race. There are other racial elements in Greece, but these are in the minority.

That is what will be encountered from the point of view of collaboration. The most important thing is that the organisation and, to a certain extent, the personnel will be available, and that there will be a great desire on the part of the population generally to co-operate in what is done for them. You will find a great deal to interest you in contact with the Greek race. You will observe the same qualities which have persisted for nearly thirty centuries. You will find the same mentality and even the same words—allowing for some divergence and shifting of accent—as appertained to the people who talked with Ulysses three thousand years ago. The love of political discussion remains the same. All the good and all the bad qualities of the ancient Greeks are here again in their modern descendants.

Another point which brings out the similarity between life in England and life in Greece is that the Greeks are largely a reserved people. The question has been asked at the various crises of modern history: "What will the Greeks do?" They do not boast about their achievements or parade their virtues, and the greatest mistake that has been made in recent years is to suppose that the Greeks have the same temperament as other Mediterranean races. It is true, as I have said, that they are lively, but they are masters of themselves, and they are never wanting in courage and spirit. People forgot when they asked what the Greeks will do, that it was Greece which won the first victory by defeating the Bulgarians in 1918 and so made the first break in the Axis of that day.

Turning finally to the things which are most needed, these include medicines as well as food. In all countries in the world, but especially in England and America, there are Greek colonies, and these are doing their utmost to provide their fellow countrymen with the food and medicines needed. Some people say: "Yes, but it is possible that there will still be war in Greece, and if there is war, how will the Red Cross organisation function?" Well, the people will be tired and exhausted, but the whole organisation will continue. Post-war relief will be extremely interesting, for, as I have said, the organisation will be in existence, the material will be ensured, and the conditions will be such as to facilitate the work of relief. One has to reckon with the great elasticity which the Greeks have shown throughout their history. They are gifted with a great resilience which will be an element of considerable value in all these undertakings. Indeed, the Greeks are

such fighters that when I hear of a "War to end-war" I ask myself what is to become of Greeks, because Greece has been fighting for thirty centuries.

I have considered principally in this brief talk the Pre-Armistice relief work. We have to consider such work as being connected with the measure of relief which is given now, and the Red Cross supplies the thread of continuity between the war relief, the pre-armistice relief, and the post-war relief. I have given you only a few general principles, perhaps a talk like this is of most value if it promotes questions, which I will answer as well as I am able.

QUESTIONS

In reply to questions, Dr. Cawadias said that the money given to the Red Cross for the relief of Greek children had been put to good use, although there had been some necessary delay.

He was asked to add a little to what he had said about the language difficulty. Modern Greek was such a difficult language to acquire that he thought it would be better if those going out relied on the knowledge of the Greeks of the English language. But a few Greek words here and there would cheer them up. French would help enormously.

In answer to another question, he said that there was, before the war, a compulsory and extensive scheme of health and social insurance in Greece, though he did not know the details.

Asked whether the help given to Greece should be material only, or whether it should include personnel, he said that personnel would certainly be required, first because the workers out there would be utterly exhausted, and also because personal help, particularly from England, would afford the Greeks great encouragement.

A further question related to climatic conditions. Dr. Cawadias said that Greece had a very fine climate. In the summer it was rather too hot, but the English never complained of the heat, it was only the Greeks who did so. The winter was mild. There were certain mountainous parts which were very cold in winter, but it was on the whole a healthy and pleasant climate.

The Chairman said she believed that there were a great many islands in the Grecian Archipelago and she wondered how relief would be organised in respect of these. Would it be easy to transport material to all these islands whose populations had suffered badly?

Dr. Cawadias replied that transport was obviously a very big problem, not only in the islands, but in the mountains. The cattle used for transport had all been slaughtered, and there was not one transport animal now in Greece. The question of transport would be extremely difficult. As for the islands, communications were made by little boats. Many of these had been destroyed during the period of invasion, but some had been restored and the islands were very near to one another so that communication should not be too difficult. The question of transport was undoubtedly one of the most acute problems and was being considered in governmental circles. In the interior of Greece there was only one train, and this was not used very

much. Transport had been carried out by lorries and cars, which now no longer existed.

A member of the audience asked whether anything had developed out of the scheme for taking children from Greece to Egypt or India ; also, what were the relations of the Greek Red Cross to the occupying Power with regard to facilities for the distribution of food.

Dr. Cawadias replied that many well-meaning people proposed the evacuation of Greek children, but they forgot how close was the tie between Greek children and their parents, who would not be separated. Not one Greek would leave another Greek in order to save himself if the other were left to starve. He himself had people of his own family there who, notwithstanding the starvation conditions, nor the fact that they had permission to leave, preferred to remain in order that they might be with the others. The question of the evacuation of children had been approached from a metaphysical standpoint, and the result had been really to retard relief work. As long as fifteen months ago he had said that such evacuation was utterly impracticable. Even when the Swiss Red Cross wanted to take some of the Greeks he had said that, owing to the Greek temperament and the family tradition, this could not be implemented. It was out of the question to evacuate the whole number of two million children.

With regard to the relation of the Greek Red Cross to the occupying Power, Dr. Cawadias said that the Red Cross was a very essential link and, as far as he knew, it was respected very highly by the Germans. He had some proof of this in the fact that in some of the letters which had been received, the head of a camp of British prisoners of war near Salonika had thanked the Greek Red Cross for milk, fruit, and vegetables which had been sent to prisoners, showing that the Greek Red Cross had, at any rate at that time, its own stocks and could use them as it pleased and send them even to British prisoners of war. He thought that more recently there had been a tendency, not for Quislings to arise (because there were no Quislings in Greece), but for people to be in authority who were rather more favourable to the Germans and the Italians.

A question was asked whether the health services were generally state controlled. Dr. Cawadias replied that some were voluntary and some were state controlled. There were some excellent hospitals, many of which again were voluntary.

Asked by the Chairman whether it was known that people in the outlying villages had tended to go down into the towns in the hope of getting assistance, Dr. Cawadias said that, on the contrary, there was a tendency to stay in the villages because even the little that they could grow there was much more than existed in the towns. There was no movement towards the towns.

The Chairman expressed to Dr. Cawadias the thanks of those present for his vivid picture of the people and the country to which it was hoped to send help. The help would be sent in some slight measure as a recompense for the magnificent stand the Greek people had made at a very important turning point in the history of the war.

CAMP ORGANISATION SANITATION AND WATER SUPPLY

By LT.-COL. C. S. RYLES, O.B.E., R.A.M.C.

This is going to be a fireside chat, and I hope that you will ask questions at the end.

When choosing a camp site, you will be fortunate if you arrive at the spot after heavy rain and see what it looks like then ; any swampy part is to be avoided. It does not matter whether the camp is on elevated ground or at sea level, but we do want a dry camp and we do want to know something about the sub-soil. When choosing it would pay you to have a hole dug here and there, four or five feet deep, and see what comes up. You may find water—let us hope not ! See what soil you find. It may be covered with grass, but will not remain so for very long in a camp, so look under the grass and, if you are lucky, you will find gravel or sand, although exposed sand is not very much fun during dry weather, because it blows about and gets into everything, even into the food. Gravel or chalk is good, but the latter is apt to fissure and crack, and your foul water may spread anywhere and go to some distance. Here, the local authorities will be very particular about the fouling of water supplies. On the Continent they tend not to be so careful, and the water is foul anyway ! In this country you would have to make holes to take off what you have no further use for. When you have to deal with washing places, bathrooms or cook-houses, it is a terrible job to know what to do with the water. At Aldershot there were New Zealanders and Canadians, and these troops use far more water than we do. A camp on the way to the reservoir was occupied by New Zealanders, and a stream runs down one side of the camp on which is the cook-house. The stream began to overflow, and we called in the R.E.'s, and they extended the drains, but we found that the whole system got choked with soapy water and grease and was beginning to smell, and the state of affairs was dreadful. It will be a problem for you to know what to do with your waste water.

Now, the soil around Aldershot looks good, but is mixed with clay which you do not notice at first until the sullage water runs over—the clay being impervious will not absorb any at all.

One of the chief things you need is a good sub-soil which will absorb your waste water.

You want your site to be on something of a slope, but in camps with bell-tents it is a miserable business trying to sleep on palliasses on the sloping ground, and it is not very easy to level off enough space for the bell-tents. Let us hope you will have huts, but you will probably have to start off with bell-tents, so let us hope that there is not too much slope. You will have to dig drains and trench them to take the water that flows off. Apart from that, there is not much to be said about the soil on camp sites.

In places like North Africa, keep away from native villages, at least half a mile, because of the mosquitoes that come from them.

Circular No.3.

COUNCIL OF BRITISH SOCIETIES FOR RELIEF ABROAD

Publications by Societies.

1. By courtesy of the War Organisation of the British Red Cross Society and Order of St John of Jerusalem a complimentary copy of their "Training Course on Pre-Armistice Civilian Relief Overseas - Report of Lectures" is circulated herewith to each Society represented on the Council and the Standing Conference.
2. The Ling Physical Education Association have published a booklet entitled "The Use of Exercise in the Post-War Rehabilitation of Children in Occupied Countries", price 2/-, obtainable from the Association, Hamilton House, Bidborough St, London W.C.1.
3. The National Federation of Women's Institutes have issued a printed report of their Conference on Post-War Relief held on March 11th, 1943. They will be pleased to supply copies (4d each) to Societies represented on the Council and Conference.

W.D.HOGARTH

June 28th, 1943.

Secretary.

Think of malaria, and keep away from water and native villages. Normally, one would prefer to be close to water because otherwise it has got to be transported, and you will not get piped supplies at first. But this must not weigh with you when there is a question of malaria ; you must be half a mile away then, even though it means transporting water some distance. You will have to take what you can get in the way of living quarters—huts or tents or marquees ; you will expect some improvement later. Troops can be just as healthy in bell-tents in even the bitterest weather ; they are in fact better than when they are over-crowded in barracks. Any old soldier will tell you that, in the Balkans and France, where it was cold, or in hot places where there were droplet infections, *e.g.*, influenza, which are likely to spread, the troops do well in bell-tents. There are one or two points about these. You must have for the tent bottom a wooden floor board, and you must have raised paths, made with ashes if there is nothing better—duck-boards are good ; you can use up the ashes from the cook-houses for paths leading from tent to tent. Also you will need a decent recreation room for the people, who are not very comfortable in tents. They can spend their evenings there, and just go to their tents to sleep. In bell-tents you *can* accommodate 15, feet meeting in the middle, but eight is about the maximum to put in one tent. You may get beds, but you usually get palliasses—these are extended pillow cases stuffed with straw, and it is a good tip to make a hole for your hip-bone, which seems to obtrude itself. These are the main points about tents ; they should be rolled up in the morning to let in the air. You must be careful to see that the occupants do not bring in food, and this is important from several points of view. In case of plague it attracts rats.

The next point is the allocation of responsibility for sanitary conditions. You can do it yourself or you can make other people to do it for you. An Army Unit does its own work. I think you should choose from among the occupants of the camp certain people to be responsible ; and, of course, all must look after their own tents. There must be no paper or rubbish lying about. You will find a notice in a camp at Bisley "Please keep this camp tidy ; after all, we have to live in it." People are apt to be careless. People inside are responsible for the interior of the tent and the immediate vicinity.

If you put up a canteen, the canteen authorities will accept responsibility only for the counter and the part behind. The front has to be looked after by people living in camp. That is the rule. You must make up squads, each with one intelligent person in charge, and allocate the various parts of the camp to the various squads.

Then there will be the cook-houses, and the whole question of food is very important. Cook-houses must be looked after. In the Army we are very particular, and no one is allowed to touch food who has ever suffered from typhoid or dysentery. You will ask how you are going to find out. This may be difficult ; in the Army we have Medical History Sheets and we look at these, which show the records of dysentery, typhoid, etc.

This is very important, because a man or woman (there are more women "carriers") who has ever suffered from these diseases is liable to excrete micro-organisms for months, years or for life. There is liable to be infection of food if it is prepared or issued by such people. It is as well to have rules for cook-houses, and that is the first rule. There must be no smoking. You must see that cooking facilities are ample, as well as facilities for preparing the food; and look into the question of arrangements for washing-up. Also there should be some means available for the cooks to wash their hands. When we say this to the R.E.'s, they reply: "Is a sink not good enough?" All too often the sink is full of vegetables being prepared. But the cooks must have something, even a basin on a tripod.

We often get requests for cook-houses to be fly-proof. Now, in this country, fly-proofing is not authorised, and it is not necessary, but abroad it is. Flies all too often are accepted as an act of God—I assure you they are never an act of God! They can always be stopped if you have sufficient energy and some knowledge of the life history of the fly. Abroad you may be so situated that, although your own precincts are clean, yet there may be people near you, over whom you have no control, who are not imbued with the same ideas, and in those circumstances in the Army we do allow fly-proofing for cook-houses. At the same time, a part of the cook-house—the store-room and preparation room—are allowed fly-proofing even in this country.

You are going to have a terrible job dealing with greasy water. It is all right in this country where you have a sink and can pull out the plug and the water that has grease in it will run into the house drain and so into the sewage system. Abroad, however, you must know where the outlet of your pipes are, for they may be just outside the cooking places and you will soon find that out by the smell.

There are all sorts of methods for dealing with the problem. There are many kinds of grease traps, but none of them are of any real use. For example, you can fill a wicker basket with straw and lay that at the foot of the pipe, and that will catch a certain amount of grease. You must remember, however, that the water near the grease trap will be hot and will not therefore throw out the fat. If you can conduct the water twenty feet away, where it will cool, and then use a straw-filled wicker basket, there is a chance that you might catch a certain amount of grease; but even then some is left. There are many kinds of manufactured grease traps, and the Engineers are very fond of them. *(The lecturer here drew several diagrams of types of traps on the board).* In this country you have to be careful about letting the water run into a stream before it is purified. The Thames Conservancy Board will knock at your door if you start fouling water supplies, and even abroad you cannot do it—besides, it makes your own place noisome.

You must purify your sullage water, and then you can run it into a series of herring-bone trenches. The Hattersley method requires two cement pits, and its working is rather technical, but it is the best method. Ferrous sulphate and lime are added to the water, the grease and soapy

deposits fall and remain at the bottom as a sludge, and this can be used as manure for vegetables.

Soakage pits: dig a hole in the ground three feet in diameter, excavate about ten feet down and hope to come upon gravel or fissured rock; if there is clay it will not work for long. Into the pit put large stones; and above, in layers, smaller stones, with quite small gravel at the top. Place a funnel well into the gravel and pour your stuff into the funnel—there should be a wisp of straw in the funnel which should be taken out each day and replaced by a new one. Here you discover the importance of sub-soil; if it accepts your sullage water, you will be happy.

If your water has to be transported and put into tanks, or if it has to be drawn from a well with labour, you will find that less is used.

All cooks and all those employed in the cook-houses should be inoculated. All dusters, dish cloths, cleaning cloths, etc., should be renewed frequently.

Dining-rooms may be infested with flies—if they are, this is due to unclean conditions, probably outside, where the flies are breeding. Do not allow floors to be washed too often or to be left wet; give them a chance of drying. This applies even more particularly to wooden floors.

Outside the cook-house you will have tubs and bins for swill and waste stuff from the kitchen, which can be sold to farmers or can be given for salvage; the fats go to munitions. Bins can be a great trouble if not well constructed. When the bin is emptied and finally set down again, some of the liquid will trickle back and may be left at the bottom; you may find flies breeding in these bins. Every few days, scorch the bins; hold them over a fire, or put straw in and set that on fire in the interior.

In some cook-houses they have no sink at all and the washing-up is done in enamel basins. It is one of the jobs of the assistant cooks to empty out the dirty water; they back out of the cook-house door and throw it out on to the ground, probably on to the same place every day. That provides an ideal piece of ground for flies to breed in.

Flies are filthy all the way through; they breed in filth and feed on filth. I have found them breeding in a dirty dish cloth covered with grease; they breed in ground that has been soaked with filth; and in the maggot stage they can burrow deep into the soil. The house-fly lays its eggs in dirt; and the eggs, in the course of a day or two, develop into larvae, white maggots, which feed on any kind of filth. After three to seven days (depending on the temperature) they become pupae or "grubs"; after a day or two they hatch out as flies. Flies are filthy even in the way they take their food. They regurgitate it and suck it back again, thus spreading infection. They must be killed at every possible opportunity. Flies breed so fast that you must find their breeding places to do any good; it is not enough to swat them. Remember that the breeding places are often below dirt. They cause a tremendous amount of mischief; typhoid, dysentery and cholera

are all very largely spread by flies. In this country we are apt to suppose that nearly all typhoid comes from water, but abroad it is just as often from flies.

The canteens and the recreation rooms are important, for you must have some place for recreation. People cannot sit in tents or huts through all their waking hours.

Until the Armistice you will find black-out important. A barrack room may suffer from over-crowding and lack of ventilation, but how much worse will the air be in a canteen where everyone is smoking. If you have an epidemic about (such as Spanish influenza after the last war) something must be done. The lights should be extinguished, the black-out should be taken down and windows opened, and people can sit for a time in the dark; then the black-out is put up again and the lamps relighted. In a sleeping place windows need only be closed if the black-out screens are wobbly, but we should be able to fix up the black-out firmly, and even if the shutters are unventilated, the open windows behind will allow in fresh air. In the early days of the war, when the shutters were prepared in a great hurry, they were not ventilated, but going round the barrack rooms at night we found that a certain amount of air did get in if the windows were left open. That, however, is not enough for a canteen.

Empty Tins. What are you to do with them? If the salvage people want them, the answer is easy. But, if they do not? You will have to bury them. Scorch the tins thoroughly in an incinerator soon after they are empty.

You will have sacks or boxes placed at intervals round the camp, into which people can put odds and ends of rubbish.

Now we must go on to the question of water supply and its purification. All water in the circumstances in which you are likely to find yourselves must be considered impure. Here in England we are spoilt; the water is all right and the only trouble is that your cistern may be dirty. Abroad all water is foul and you must purify it unless it has been *proved* to be pure and to have come from an untainted source. A well should be lined with bricks and the bricks joined with cement, or the whole inside of the well may be lined with cement. You must have a parapet and a sloping cement apron, and usually there is a small drain round the periphery of the apron to carry away spill-water. And you must have a cover and a pump. You must go round your well to a distance of a hundred yards or so to see if there is any source of contamination such as a cesspool. Water purifies itself as it passes through the ground, but a certain distance is necessary. You must have a cover to your well because anybody is liable to throw things down. A bucket and rope are not sanitary because anybody with the foulest hands may grasp the rope and lower it into the water. If you have a well which complies with all these requirements, then send a sample of the water for analysis, though personal inspection is better than nine analyses.

With regard to the purification of water, the Army has reached a very high standard. First, the water must be clarified by means of a

filter, and then chlorinated. In the Army we use bleaching powder, *i.e.*, chalk impregnated with chlorine gas. The powder should contain 25% of chlorine, but it deteriorates if the tin is left with the lid off. If there is any dirt in the water, such as bits of leaf or other dirt, we know that the chlorine attaches itself to the dirt (it is "deviated") and is then no longer available for killing the microbes. That is the reason why you must clarify the water first.

(Diagrams drawn on the board illustrating various types of purifiers).

Then there are the Stellar and Meta filters. You may be able to get one of these, and all kinds are produced, some on tripods. You may have to improvise your water purifying in tanks of canvas or metal.

(Practical demonstration given of the Horrocks Method for determining amount of purifier needed for water).

DISCUSSION

Camp Organisation

Question. How do you keep flies out of the swill bins before the refuse is collected?

Answer. By lids.

Q. Lids do not always fit or are not always put on.

A. There is no means of keeping the flies out unless the lids fit; these should be fastened to the receptacle with wire. I know this is a counsel of perfection!

Q. Is there any special type of antiseptic which should be used?

A. Do not make use of antiseptics if you can help it, for you may be able to sell your swill to a farmer. Cleanliness is better than disinfectants.

Q. Is it any good putting it on the outside?

A. It will not keep the flies off. If you can get rid of the swill every three or four days, then flies will not breed.

Q. Is chloride of lime any good?

A. No, you will destroy the value of the swill as pig food. No pig would eat it. The inspection of swill bins will tell you a very great deal; you will see what food is being wasted. I was told recently by an officer commanding in a certain camp that his men were not getting enough to eat. I decided to go and see. We found that an enormous amount of good stuff was being thrown into the bins by the cook, and that was the explanation of the apparent shortage.

Q. You said that the people in the cook-houses should be immunised. Does that mean everybody?

A. Everybody should be immunised, but the problem is whether they will consent, and you cannot force them to be done. The French Army began the last war with no inoculation, and it took a year and a half to get it started. It is a grand thing and a definite protection, if not a perfect one. There is perfect protection against small-pox; against typhoid it is 95% protective. Everybody should be done.

- Q. How do you make the kitchen fly-proof?
- A. The windows, instead of being made of glass, are covered with wire gauze, and the doors are on springs. When there is a lot of traffic going through, often a stone is put in the jamb to prop the door open; thus the cook-house becomes an excellent fly-trap, but that is hardly the intention of fly-proofing.
- Q. Do you have a definite size for a camp?
- A. Yes, in the Army there are definite figures laid down for everything.
- Q. If you have no choice for a camp site, but must take what you have given, what would you do?
- A. Do the best you can. I think the great thing is, to get water flowing away from the camp. You may have no choice, but one must suppose that you will have *some*.
- Q. If you have to pick out a camp in a water-logged place, should you make the huts go parallel or at right-angles to the main drains?
- A. If you have a place which is low down in the valley and it is water-logged, the only way to make it suitable is to dig large deep drains if there is any flow-away. You must protect your drains to prevent children falling down. Cover them or plant bushes closely along the edges. You will probably want to put your huts at right-angles to the drain, but there is not much in it.

MALARIA

By DR. J. W. FOSTER

London School of Hygiene and Tropical Medicine

I must tell you from the very beginning that the control of malaria entails very hard work, and this is the first thing to realise. Col. Ryles has been talking to you about the difficulties of camp sanitation. I may tell you that the things he dealt with are simply flea-bites compared with the difficulties of fighting the malaria mosquito, though our two provinces do overlap in quite a number of ways.

In spite of all the work that has been done, there is still an enormous amount to do, and every individual must play his or her part when it comes to the point. The second thing is that you must look after your own health. I am only here to-day because I did succumb to malaria and had to come home!

Now, malaria has been known since the time of the Greeks; Hippocrates knew of it and they knew a great deal about it in the 5th century B.C. The Greeks called it Intermittent Fever and we know, for example, that Alexander the Great died of this disease in 323 B.C. He died after going for a bathe and also drinking rather much, which he should not have done, for alcohol is not a prophylactic. In our own country Oliver Cromwell and James I. died of the Intermittent Fever.

Malaria has thus been known for two and a half thousand years, but it was not until 1880 that Laveran found the micro-organism that is called the Plasmodium, and our knowledge of malaria really dates from that time. After 1890 a lot of work was done by Sir Patrick Manson; he told us that the organism must have an extra-corporeal life and that it must be transmitted from host to host in order that it might persist. A parasite is not striving to kill, but is striving to live in a living host, and the Plasmodium of malaria does that by being transmitted from host to host.

Eight years after Manson discovered this, Ross found that the transmission of the Plasmodium was done by the mosquito. He further discovered that it was not every mosquito that was able to do this, but only the anopheline mosquito. There are 1700 or so different kinds of mosquito, but in any one place, say the Balkans, or the north coast of Africa, or Equatorial Africa, or Albania, in fact, wherever you may have to go to do anti-malaria work, you will probably only be up against two, or at the outside three, of the anophelines and therefore when you come to think of the control of the disease, you will find that your work is reduced from fighting 1700 species to perhaps three. I was in Burma in 1938, and at the Harcourt Butler Institute of Research one of the workers told me that there were seven malaria-carrying species in the country. Well, though he was a Burman and told a very good tale, as a matter of fact there were not!

We can artificially infect mosquitoes with malaria, but it is not quite fair to talk about these, for we are not up against them when trekking about the country; so I can say that three species are all that you will have to fight in any one place. From experience I know that in the Ethiopian region, which includes all Africa, except for part of the Mediterranean littoral, part of Arabia and South Persia, there are only two species to be fought. All the others are a nuisance, but they do not carry malaria, although they may have to be controlled on account of other diseases.

The life history of the Mosquito.

It is only the female who bites. She is not only more deadly than the male, but the male is actually quite a delightful creature. He is innocuous and lives entirely on fruit juice and nectar—he is, in fact, quite kind-hearted. All he can do is to suck up the juice of plants, so we always refer to being bitten by “her.” You can only get malaria from a mosquito who has herself become infected by sucking the blood of an infected human being. (Diagrams shown to illustrate the life cycle of the mosquito, showing development through the asexual and sexual cycles, the formation of gametocytes which pass into the stomach of the female, are fused, and form fertilised gametocytes. From the female gamete is formed the oöcyst, in which large numbers of sporozoites develop and are liberated into the body cavity of the mosquito. These pass to the salivary glands and are injected through the proboscis when the mosquito bites). The asexual phase causes malaria but does not propagate the species. The sexual cycle, which does not cause malaria, does keep the species alive.

When the mosquito bites, it injects a little of its irritating saliva below the skin. This is for several reasons. The first prerequisite is for a good supply of blood to be determined to the part. Also, the blood is thereby kept fluid and the mosquito is able to suck it up. The proboscis is very fine, finer than any needle, and were it not for some ingredient of the mosquito's saliva the blood would coagulate in it.

There are four different species of the genus *Plasmodium* that can infect man with malaria:—*Plasmodium vivax*, the organism that causes benign tertian fever; *Plasmodium falciparum*, causing subtertian or malignant fever; *Plasmodium ovale*, causing tertian fever; *Plasmodium malariae*, causing quartan fever. These are four distinct clinical types of the one disease.

Ross had great difficulty in getting subjects to offer themselves for experimentation and so he worked on birds. There are only three orders that can become infected by any *Plasmodium*: certain birds, certain monkeys, and *Homo sapiens*.

In some parts of Europe you get *P. falciparum*, and some day you might have to decide which form of the disease a patient has. The prognosis is completely different and the treatment may differ also. The sexual form of *P. falciparum* is crescentic.

Now let us look at the *clinical features of malaria*. When you have been bitten by an infected mosquito, the disease itself is divided into five phases. First, the incubation period of about ten days. If you have been infected with the *Plasmodium falciparum* this period tends to be shorter. One bite from one anopheline mosquito can give you just as severe an attack as hundreds of bites. It is not until you get a large number of the "rosettes" (diagram) that you get a temperature and then you get rigor and ague. After the incubation period there follows the premonitory stage. During this stage, some patients have the symptoms of influenza; but do not be put off with a diagnosis of influenza if the patient has been in a country where there is malaria. During the incubation period the patient may have travelled hundreds of miles from the place where he was infected. With retreating armies and escaping refugees this is a very important point to remember. From the very first day of your entry into a malarious zone you ought to adopt general and personal control measures, and even at this stage you should have the blood thoroughly quininised. Do not wait for the first cases of malaria to occur. Moreover, when you have left such a zone, you should carry on with whatever prophylactic measures you were taking, for a further month or six weeks.

The symptoms resembling influenza are: a racking headache, pains in the bones, malaise, and so on. After the premonitory period you have a fairly clear-cut three-stage period: (1) the cold stage; (2) the hot stage; (3) the sweating stage—the whole period usually lasting from six to ten hours. Roughly, the cold stage lasts from one to two hours, the hot stage from three to four hours and the sweating stage from two to four. That is a classical attack. In the first stage of fever, the cold stage, the patient is a picture of complete pessimism; he does not care what happens to him; nothing matters. He keeps

piling on blankets all the time and feels intensely miserable, he gets goose-flesh and his teeth rattle in his head with the intense shivering of his body. You can see the whole of his bed shaking. This ague is a very real thing.

The hot stage follows when the patient begins to throw off his blankets, and his temperature rises to 104° or 105° ; he may become delirious and he may vomit. Look out for vomiting at this stage; there may be a great lack of fluid in the body, and you should keep forcing fluids down at this stage.

The hot stage is quickly followed by the sweating stage. The sweat rolls off the patient in rivers and you will have to change the bedding, the mattress and the covers before four hours are up, sometimes even before the end of one. It depends on the case. You will, of course, have to change the pyjamas—perhaps two or three times.

That is a typical case of benign tertian. It is the classical textbook picture. But malaria can simulate all sorts of diseases and you may only get those classical symptoms in one case out of five. Do not look for them every time, for you may get a choleraic type, where the patient loses fluid by the rectum and the mouth; or you may get a pneumonic type; or you may think that the patient has typhoid or typhus. Then, you may get the cerebral type, and this is very fatal. In Kenya we had two Europeans who died in one week of cerebral malaria, and neither was ill for more than a day and a half.

Blackwater fever may occur as a complication of sub-tertian malaria. You can never get this disease if you have not had sub-tertian malaria. It is very fatal. The urine contains haemoglobin. It is dark red like port wine or even jet black.

Another form of malaria is the comatose type, the patient's skin is clammy and algid and cold to the touch.

When you are treating anyone in tropical parts, it does not matter what disease he seems to have, his blood must always be examined. That arises out of what I have been saying about the diversity of appearances in malaria. If he is ill at all in a malarious region, or if he has come from one, always eliminate malaria first. Examine the blood at once and if there is the slightest doubt give anti-malarial treatment. Another important point is this: Whenever a man is wounded, or suffering from shock, he is very inclined to get a bout of malaria if he has any residual infection in him. Shock will cause the malaria to recur. Even mental trauma is sufficient to bring out latent malaria. Another such condition is pregnancy, which is bound to be present among the refugees. You must make blood films because they may have come from some part where there was malaria. From the point of view of malaria, pregnancy is like a disease. The placenta itself acts like an internal organ—like the spleen, for instance, or the liver, and it may become riddled with the Plasmodia of malaria. There was one interesting series of cases of a hundred and fifty women, all in different stages of pregnancy. Out of the hundred and fifty, ten were found to have Plasmodia in the peripheral blood taken from the lobe of the ear.

After birth, the placentae were examined, and not ten but fifty had Plasmodia in the afterbirth. This shows that when examined in the ordinary way, four out of five of the infected women were in danger of dying through pregnancy because the presence of the Plasmodia was not detected. From that, and from a number of other cases, we know that, so far as malaria is concerned, pregnancy must be regarded as a disease. There is a danger not only to the mother but also to the child. One of the things that sub-tertian malaria does is to block up the capillaries with red cells filled with the organisms of malaria in its "rosette" form (diagram). These, clumped together, block up the finest blood vessels. The blood filters from the mother to the infant through the placenta which contains a vast network of capillaries, and if these are blocked, through the infection of the mother, the child may be starved to death before it is born. It could not be fed because the blood from the placenta could not get through to it. That is the mechanism of the death of an unborn foetus through malarial infection of the mother. This was not discovered till a few years ago. The mother herself may be killed because of the intense form in which her latent malaria is lit up by the trauma of parturition. She is liable to get an extremely violent attack from her latent infection. If there is the slightest suspicion, treat her energetically with quinine. Quinine is a spermicide but it cannot cause a miscarriage. This is an important point, for malaria can do so and, as we have seen, can cause the death of both mother and child. If you do not give quinine you are risking death, but if you do give it there is no risk.

Treatment.—The old treatment, by some form of cinchona, has been known for centuries. The tale goes that the Contesa de Chinchon, the wife of a Viceroy of Peru, was cured by quinine and therefore, a hundred years after the cure, Linnaeus named the plant "cinchona." The etymology is correct though Linnaeus' spelling was not. This is the oldest remedy of all, and from it we get quinine and other alkaloids. The Peruvian Bark (cinchona) was brought to Europe by the Jesuits about 1632. There is a good deal of doubt about the exact date, but it did enable Sydenham, one of the greatest English physicians, to differentiate malaria from all other fevers:—"If there is an intermittent fever which does not respond to quinine then it is not malaria." It is the most specific of drugs, it attacks the disease and cures it in the greatest possible number of cases. Thus we have a splendid cure, and it is very wrong to withhold quinine, where malaria may exist, but it is happening every day in the tropics. Quinine is very easy to take, very common in use and at one time it was cheap and available in every post office in the Crown Colonies. Before the war, over 90% of the world's quinine came from Java. To-day there is not enough to go round and the supply may get still shorter. This situation was foreseen by the German chemists and, about 1924, first plasmoquin and then atebrin were discovered. They are both synthetic drugs, and their equivalents are now manufactured in England.

We said that quinine used to be both plentiful and cheap, but now we may have to fall back on plasmoquin and atebrin. The latter is

used in cases of sub-tertian malaria ; it is a dangerous drug because it may have dangerous side effects. I therefore do not recommend atebirin for prophylaxis. I much prefer quinine, which has no drawbacks at all, except in the very rare cases of cinchonism, and we need never be afraid of taking it. Atebrin should be taken under a doctor's orders and supervision. We frequently treat sub-tertian malaria by atebirin followed by plasmoquin.

Prevention.—There are three lines of approach—defence, avoidance and attack. We want to make up our minds which is the best suited to the circumstances. We ourselves are our only defence. We talk about a specific *cure* for the disease, but there is no sure preventive. We have talked of vaccines for typhoid and plague, but there is none for malaria and we are driven back on our own resources.

Defence.—The first defensive measure is to take some drug, quinine if possible. After that I think that mosquito nets are the most important thing, and always see that there are no holes in them or repair them if there are. You have a perfect trap in a net with holes, and you must mend them. Then there should be fly-proof kitchens and so on, and we can have wire gauze fixed to the window frames. Also, double doors on springs. When you have two solid double doors, ten feet apart, you have a kind of air lock. The solid swing doors should open so that stretchers can be carried through, and there should be a space of ten feet between them so that one set is always shut before the other is opened. The gauze of the windows must never be allowed to be opened, and the doors on springs must be double.

Repellants.—Here you have various oils and pomades, and as a basis there is usually the oil of citronella—never use a substitute, for there is no good one. Every anopheline mosquito knows the difference between citronella and lemon-grass, so you need not waste your money on oil of lemon-grass ! You usually mix it with kerosene and make a citronella pomade, adding some such diluent as cocoanut oil. Bamber's prescription : Oil of citronella $1\frac{1}{2}$ parts, kerosene 1, oil of cocoanut 2.

Avoidance.—This is simply a question of the selection of a healthy camp site, avoiding mosquito breeding places. You must remember that mosquitoes can fly much more than half a mile, but they cannot carry the epidemic for more. So avoid swamps, forests and native villages by half a mile ; at sea, anchor half a mile to one mile away from the coast. Avoid native villages like the plague. The native children have enormous spleens and are riddled with malaria.

Attack.—You need to take sanitary precautions only against the species of mosquitoes which carry malaria, but detailed instructions on how this is done would require several more lectures. So I propose to end the afternoon by trying to answer any posers you set me—if I can !

Question. If a person has been bitten by a mosquito during the incubation and is bitten again, can the mosquito infect ?

Answer. No, it is not possible, the mosquito could not infect.

- Q. What supply of quinine will be available ?
- A. I cannot say. There are plenty of substitutes being made which will be available.
- Q. What is the action of quinine in the blood ?
- A. That is a mystery. We have no conception.
- Q. If a person has been infected, how long can the infection remain ?
- A. That depends on the form of the malaria. If a *P. vivax* infection, the longest known case is three and a half years. Somebody once thought it was seven for *P. falciparum*, but you are unlucky if it is as long as one and a half years.
- Q. Is it bad to take quinine for a long period ?
- A. Some people have taken it for thirty years, or even fifty, without ill effects.
- Q. Is five grains a day, and none on Sunday, a rule ?
- A. No, it should be every day. For prophylaxis, the League of Nations Malaria Commission advocated for adults an average dose of six grains every day, including Sundays. In treating refugees, you give about 20 to 30 grains a day ; say $7\frac{1}{2}$ grains three times a day ; that is, give a total of $22\frac{1}{2}$ -30 grains a day for five days ; this is for treatment, not prophylaxis.
- Q. In four periods ?
- A. No, three times a day for five days.
- Q. Is it possible for the same individual to acquire both forms of malaria ?
- A. Yes, quite. Malaria can do anything ! That is what we call multiple infection. Not only may you have the *vivax* plasmodium, but there may be different generations of *vivax* and different generations of *falciparum* ; to make it more difficult the temperature is then quotidian ! The safe rule is to treat with quinine, and that will clear up the lot in the vast majority of cases.

NURSING IN RELIEF WORK

By MRS. CARTER

Formerly of the League of Red Cross Societies in Paris

I have listened with great interest to Dr. Melville Mackenzie, who has given us such an excellent description of the machinery set up in this country to deal with the organisation of relief, and to Miss Pye, who drew from her well of 28 years of experience and gave us such a human picture of relief work as she had seen it in many countries. It is, therefore, with great humility that I speak to you on this subject.

I have had no direct contact with those responsible for relief work, and am completely ignorant of any official policy. I am probably not alone in this, as it is only known to a very few. We have no idea when, where and how hostilities will cease, to what extent we will be

asked to participate in this work, or whether we will be asked to participate at all. This, however, must not discourage us. The tradition of the Red Cross is to *Be Prepared*, and we must prepare ourselves to play a humble role, or to take great responsibility.

When listening to the other speakers, one thing which struck me very forcibly, and I think that it must have made a deep impression on you too, is the immense strides which have been made in the development of Health Services in the European countries in the intervening period between the two wars. This was due largely to the influence of the Health Department of the League of Nations, supported by the Rockefeller Foundation. The Rockefeller Foundation has given fellowships to medical officers to study the most modern methods in this country, the U.S.A. and the European countries. Institutes of Hygiene have sprung up all over Europe and schools for the training of Public Health Nurses have been associated with them. Scholarships have been awarded by the Rockefeller Foundation and by the League and Red Cross Societies to Nurses to study in England and the United States and other countries, so that there was developing in the European countries a public health service on modern lines.

Side by side with this, there was great progress in the development of Red Cross organisation and activity. It is to the great credit of some of the national societies that they took the initiative and led the way. Hospitals of the most modern and up-to-date kinds, notably in Greece and Finland, were built by the Red Cross; schools of nursing were established for the training of Nurses and Voluntary Aids; public health nursing services were organised; and plans made and personnel trained for disaster relief work.

We do not know how much of this remains. We have learnt that in Greece it is intact, in other countries the rudiments at least remain. We do know that machinery and institutions can be destroyed, but the human spirit never, and when these countries are freed this will surge forth and the work be rapidly re-established. We must keep this constantly before us, for it has a great influence on the planning for relief in those countries.

It is fitting that the Red Cross should have taken the initiative in promoting this course for the study of problems relating to the organisation of relief of civil populations during the pre-armistice period. The Red Cross has its deepest roots in this idea of "mutual assistance to all who suffer," and it has been the tradition of the Red Cross to prepare to bring relief to stricken populations in time of war or other national calamity. The International Red Cross has long been recognized as the body for co-ordinating relief and has at its various conferences laid down certain guiding principles.

Before I continue, I want to make it quite clear what I mean by *Nursing*. By this I mean first, the Nurse in all aspects of her work, both curative and preventative; the Nurse in hospital and the Nurse in all the various branches of public health. Secondly, the Voluntary Aid or Nursing Auxiliary, for she has been found to be an indispensable factor in Emergency Relief Work. For many years the Red Cross

Society has devoted itself with few exceptions to the training of women for this service, and it has been my very pleasant task to guide them. Thirdly, I would include the Male Nurse and Nursing Orderly. Relief work organised on an important scale would require all types.

Several of the previous speakers have referred to the various *phases of relief*. There is confusion in the minds of some I know as to just where one phase ends and another begins, and I think that it is important that I make myself clear what I mean as it affects the Nursing Service.

Dr. Mackenzie referred to the first phase or period of *Emergency*, when great chaos may reign and where distribution of relief is to the mass. Miss Pye gave us a vivid description of this as she had seen it in the Spanish war and other countries. Relief at this first period resolves itself into provision of the four primary necessities of life, FOOD, SHELTER, CLOTHING and MEDICAL AID. To be effective this must be *simple, adequate and rapid*. The test of its effectiveness will be the rapidity with which this first emergency phase passes into the second. There is no arbitrary line between these phases. We speak of pre-armistice and post-war relief, but human conditions do not change with the signing of a treaty and the ring of bells. The emergency period ends when the urgent primary needs of the mass have been satisfied and passes to the *second phase* when distribution is based on the *Family* as a unit. The restoration of the family leads to the restoration of the community which may be considered the period of post-war reconstruction proper. Everyone may not accept this, but it will serve as a basis for discussion of Nursing Needs.

What Nursing Services will be required in the emergency period? We have had a vivid account from Dr. Mackenzie of the result of the movement of populations and the difficulties arising from caring of refugees in encampments, difficulties of discipline, sanitation and the spread of infectious diseases. In the organisation of encampments provision may have to be made for nurseries, maternity homes, sick bays, and for prevention of the spread of infection; when no hospital facilities exist, emergency hospital accommodation will have to be provided. Nursing service will be required for these.

The Nursing Service will be a part of the Medical Service, and when the SURVEY to ascertain the needs for medical aid is being made I would plead that the Nurse who is responsible for the planning and supervision of that Nursing Service is called on to collaborate when that survey is made. As I have said earlier, rapidity is such an important factor and such a course will lead to a more efficient plan.

Attention has been called to the need for getting into touch with local authorities, religious and voluntary bodies, and working with them. I need hardly add how important it is that the Nurse responsible for the direction of this Nursing Service gets into touch with the Nurses of the country in which she is going to work and is guided by them. Many of the leaders in Nursing in the European countries before the war had travelled widely, taken post-graduate work in England and America, and spoke several languages.

Dr. Mackenzie called our attention to the necessity of assisting with the re-establishment of schools of Nursing, so that personnel may be trained as rapidly as possible. Many of the most modern schools of Nursing, notably the School of Nursing in Warsaw, were founded after the last war during the post-war relief period. They became the basis of their educational system for Nurses.

As the emergency passes and the distribution of relief becomes based upon the family as a unit, there is a great field for the public health Nurse and her co-worker, the Social Worker. Miss Pye, herself a Nurse and Midwife, has given us a vivid picture of what these needs may be. She called our attention to the fact that so much of the maternity and child welfare began as relief work in Europe in the last war and became the basis for a permanent service. This brings home the very real responsibility that we have in laying sound foundations. I could cite you many examples of relief work after 1918 which became the basis for a permanent post-war nursing service, notably the work at Soissons (Aisne-France) and the surrounding villages carried out by an American Mission; work started by the Society of Friends and the American Red Cross in Central Europe; the establishment of health centres throughout rural parts of the country by the Latvian Red Cross; and the work of Lady Muriel Paget's Mission for child welfare in Slovakia.

One word about the selection of Nursing Personnel for this Service. It may encourage you to learn that I will have no part in this selection, but were it my task, I would make the sieve very fine. You have already had a picture of the kind of work that you will be called upon to do. Dr. Mackenzie has stressed the necessity for you to be very honest with yourselves. Can you face up to the hardships and the emotional strain? I would attach great importance to health, and choose young, fit, well-balanced Nurses experienced in the branch of Nursing for which she would be required.

With regard to the "Voluntary Aid," I would choose those who have been well trained and had good experience; those who really know their job; those who have been "tried in the fire." There are many of them up and down this land.

I do not think, however, that is sufficient. Relief work presents peculiar problems of its own; shortage of doctors may throw greater responsibility on the Nurse for carrying out certain procedures which are usually done by doctors in this country but in which Nurses might quite well be instructed. The same applies to the Voluntary Aid. There are many more things she might be taught to do in an emergency period of this kind.

There are certain principles underlying the organisation of disaster relief work with which the Nurses and Voluntary Aid require to be familiar. Improvisation plays an important part in nursing under relief conditions and much time can be saved if this is carefully studied.

As far back as 1937 the League of Red Cross Societies realised that special training was necessary for the Nurses and called a conference

of experts from all over the world to meet with the Directors of the Nursing Services of the European Red Cross Societies. It was unanimously recognised that a study of the problems relating to relief work in war and disaster was necessary both for the trained Nurse and Voluntary Aid. I think this is a question we might study now in some detail. It may interest you to know that there is a Committee meeting now on which the heads of the allied Nursing Services are represented to consider this question. I hope that something really useful will be the outcome of it.

The last point that I wish to mention is the language. Judging from previous speakers, there seems to be some difference of opinion. The importance of language is so obvious one scarcely needs to stress it. Now is the opportunity to begin to learn. Language, however, should not be over-emphasised, as sometimes it may be, and selection based on it alone. Nurses who learn one foreign language well always learn a second more readily. English was a language very commonly spoken amongst Nurses in Europe, and its study was much encouraged in the Schools for Nursing. Work can be done through interpreters and much of the relief work after the last war was done in this way. It is not a satisfactory solution and throws a great strain on the Nurse.

I have had to give a general idea of what might be asked of us and have stressed the important points. It is quite impossible when we are so completely in the dark as to what demands may be made upon us. Those of you to whom the subject is quite new may be feeling confused and discouraged by what may appear to be the magnitude of the task, but in reality you may yourself be a member of a Nursing Unit delegated to some humble task in a Sick Bay, or in a Nursery, doing the task for which you have been trained. You will be working under the symbol of the Red Cross. Many of you are unaware how extensive and world-wide this Red Cross movement is, what a great civilizing and humanizing force it is. It goes far outside the confines of this country and this Empire and is found in every corner and quarter of the globe. Wherever you go abroad wearing this emblem you will find it an "Open Sesame." You will be welcomed as a friend and taken right into the heart of the country in which you work.

CONDITIONS IN JUGOSLAVIA

By MISS MURPHY

*Formerly Secretary of the Anglo-Jugoslav Children's Hospital
at Belgrade*

I want to tell you a little about the hospitals and welfare work in Jugoslavia, a country in which I have lived so long that I feel more than half Jugoslav myself. I would first of all remind you that the State of Jugoslavia is a modern one. It came into existence as the kingdom of the Serbs, Croats and Slovenes only after the last war, so that it has had only some 20 years of peaceful life in which to organise the country and develop it. Jugoslavia has not the same cultural

background as the other countries in Europe. I do not mean to say that she has no education, but by reason of her geographical position, in the centre of the Balkans, and surrounded by unfriendly neighbours, she has had to spend a great deal of her time in fighting or resisting invasion.

The country was dominated by the Turks for 500 years, only getting rid of them in the second half of the nineteenth century. During the last 20 years wonders have been done. The country is a democratic one in every sense of the word. For one thing, everybody comes of the same stock, namely, peasant stock. All the gentry and aristocracy were killed by the Turks in the fourteenth century. So democratic are the conditions found in Yugoslavia that one brother in a family may hold a high position in the Foreign Office, another brother may be a very smart officer, and a third may till the land, and the mother of the family may go about her house with bare feet and a handkerchief on her head, doing her ordinary housework. Nobody minds, because the people are absolutely without snobbery.

Most of the Yugoslav population is agricultural, though after the last war the development of some industries began. Mostly the country exported grain, wheat, maize, pigs, and fowls, and imported machinery and textiles and that sort of thing. Mostly she sent her produce to Germany and Austria because they were her nearest neighbours.

Yugoslavia is not a large country. The population before the war was about 16 millions only. Her capital, Belgrade, is not a very large town, the population being about 600,000 at the most. Anywhere in Belgrade if you go to the top of the three or four-storied houses you can see the country. Whereas in London you would see only a mass of roofs. In Belgrade you can see the Danube and the country and the hills all around.

During the last war the territories which now constitute Yugoslavia were actually occupied by the Germans for a long time, and although the last war was not nearly so brutal as this, the people underwent frightful hardships and endured starvation. The children and young people of those days did not grow up strong, and they are now the fathers and mothers of the present children of Yugoslavia. That was why there was such a great amount of tuberculosis in the country, though measures had been taken to control its ravages. The health of the nation improved up to the time of the outbreak of the present war, but I think it must have gone back now and may well be worse than ever.

In the more modern part of Belgrade there are large houses with lifts and electric light and a modern life is lived. There are also a number of villas with pleasant gardens on the outskirts and there are good shops and markets with plenty of fresh food and fruit and flowers. But it is a town of great contrasts. Motor-cars will be seen smarter than the motor-cars in London, but at the same time the little donkey-cart or the cart drawn by oxen will also be in evidence. Many of the people dress smartly, but amid the Western fashions one will see here and there the national costume. In the same way, together with the

fashion of the modern houses of Belgrade, little one-storey houses will be found.

The hospitals in Jugoslavia are run and subsidized by the State, and in all the towns of a certain size there are these State hospitals. In Belgrade the hospital service takes in not only the people in the city, but the people from the country round about. Each section of hospital work has its own building in its own grounds. There is a hospital section for the civilian population, another for the military, there is also a Pasteur Institute, as it is called, for the treatment of Rabies and for pathological and other examinations. There are, or used to be, some private nursing homes belonging to doctors, and all over the country there were a great many sanatoriums for Tuberculosis of the lungs, some of them run by the State and others by private agency. They were principally in Slovenia. There were only two hospitals for bone tuberculosis. One was on the shores of the Adriatic and the other was our own hospital, in which we came to specialize in bone and joint tuberculosis in children, and for this purpose took the hospital out into the country.

All the patients in these hospitals—I am speaking about the poor patients—are paid for. The people who are on National Health Insurance are paid for under the system. The people who work in the Government offices as well as other workers below a certain level of earnings are paid for by the Ministry of Health. Poor people of Belgrade, if they go to municipal doctors, are paid for by the Belgrade Municipality, and poor persons from the country by their district authorities. These payments, however, do not entirely cover the whole cost of the upkeep of the patient, but they are a great help.

The training of the nurses in this country proceeds on rather a different principle from the training of nurses in England. There are—or were, for I am speaking of conditions before the present war—three schools for training nurses. One of these, about which I do not know very much, was conducted for Catholic nuns. The Serbs, by the way, belong to the Greek Orthodox Church and the Croats and Slovenes are Roman Catholics. In addition, there were two very good schools which were originally started after the last war by British and American doctors and nurses. One of these was at Belgrade and the other to the south. These were regular schools—boarding schools—and they took young women between the ages of 18 and 24. The pupils lived in the school entirely for three years and were trained in every branch of nursing, as well as in house-work and cookery, and other practical work. After this they went on probation into different sections of the State hospitals, and at the end of the three years they were considered trained. Some of them afterwards went permanently into the hospitals, but a good many went into other social welfare work. A certain number became "Queen's Nurses" and were very like our visiting district nurses working amongst the poorest population in the towns and also in distant villages.

Besides these, there were in the hospitals semi-trained attendants, both men and women, who would correspond, I suppose, to ward maids.

There was also a school for midwives, where older women could be taught about welfare work. In Belgrade there were clinics for mothers and babies, and in all the towns there were centres for distributing milk to poor people. There were good school clinics where children could be examined, and not only young children, but also students. Canteens for school children were provided, and at these the children of the poorest population got a very good meal in the middle of the day, and facilities for exercise and recreation were provided. It can be imagined how much the children improve under this care and supervision. Children who on examination at the school clinics were found to be suffering from any affection or were not strong were sent in groups to the sea for a month in summer, and those with signs of lung trouble were sent to the mountains.

Then, of course, there was the Red Cross, which I hope is still working. We have had some messages from the Yugoslavian Red Cross, and I notice that their address is the same as it was before, so I hope all is well. The Red Cross did a great deal of good work. Again, there were some very good women's organisations, one in particular was called the "Circle of Serbian Sisters," and they did a great deal of very civilizing work. They had a kind of school and sent out to the villages to teach the women and girls hygiene, the care of children and also such things as the preserving of fruit and vegetables. There were other organisations working for mothers and children in all parts of Yugoslavia, and I cannot imagine that their work has been finished. Even if it is not conducted openly as of old, a lot of good underground work is being done.

What the position is now in Yugoslavia I can hardly imagine. In April, 1941, the attack on Yugoslavia developed and the Germans bombarded Belgrade—a small town—bombing it hard for three days, with the result that about every third house in the centre of the town was smashed. I have heard that the big hospital is still open, but the position of the people in the country must be lamentable, for the Germans have deprived them of so much. In the towns there is very little food at all though in the country something is grown.

As to the provisions which will be necessary, these include surgical instruments, medicines, blankets; in fact, it will be necessary for you to take with you every rag you can spare, needles, cotton, everything will be wanted. A friend of ours, who is a medical missionary and has worked a great deal among the Yugoslavs in the villages, had a very good idea of how one could work after the war. He said he thought it would be a good thing to arrange depots alongside the railways from each of which a car with a trailer, and taking perhaps one trained nurse, some welfare workers, three or four women, and a man, could go to some village, see what the conditions were, and start to work at once after communicating with headquarters. The food provision they would take with them would include flour, rice, beans, a little salt, and coffee, sugar, and dried milk. First-aid apparatus would also be necessary, together with simple medicines, and with this provision they would be able to start work at once.

At the same time it is very important to make the people feel that they are not getting something for nothing. The first thing I would do would be to get a local woman to undertake the cooking. It is far wiser to get the local people to do the cooking because they know what their families and neighbours like. It is no good trying to make people like the kind of food to which they have not been accustomed, however good it may seem in one's own eyes.

I stress the need for coffee because everything in Yugoslavia is carried out to the drinking of a little cup of Turkish coffee. Even if you go somewhere up in the mountains where there is nothing to eat, they will give you a nice little cup of coffee. Girls and young women should also be enlisted to help in laundry work, nursing and so forth, and when a village has been organised in that way it can be left and the party can go further on.

The Yugoslavs have a great liking for the English and they trust them. They remember that during the last war the British were their allies. In March, 1941, when they found that their Government, very mistakenly, was about to sign the pact with Germany, they could not bear it. They were not afraid of war, although they knew that they could not hold out against the Germans, but what hurt most was that they thought England would think they were not true. If you have to deal with the Yugoslavs you will find them a strong and independent race. In general they have very good manners. I like the peasant best—I do not like them so well when they become ministers. They are very nice and friendly, and really the pleasantest people are always the peasants.

Another thing which would be most acceptable is a motor ambulance. There are some parts, especially in Bosnia and Montenegro, where even in the best of times the villages are so far away that they have no doctors, and I have known cases where a man with peritonitis was put on a pony and taken five miles and deposited on the side of the road where it was known that at a certain time a doctor would be going on his rounds. But what could the doctor do except send him to hospital, perhaps another 40 miles? I think it would be very good to have a motor ambulance. There are good roads in Bosnia and Herzegovina and Dalmatia. The railway service is not very good, though the Orient Express used to pass through the country. In what condition the roads will be now I cannot say.

With regard to language, the people speak Serb-Croat and Slovene, which are very much alike. The Slovenes and the Croats use the Latin characters (in writing) and the Serbs the Cyrillic (like the Russian characters). People are very good at understanding visitors, and often in an out-of-the-way place one will come upon a man who, perhaps during the last war, was in England or in Canada and can speak English. I do not think the language is as difficult to acquire as, for example, Polish, and many English people learn to speak it very well, and even cultivate an accent in it. I think you will like the Yugoslavs very much because they are simple and likeable people with no snobbery.

QUESTIONS

In reply to a question, Miss Murphy said that at the Yugoslavia House in London courses were given in the language.

One member of the audience said she had heard an Italian dermatologist who during the last war had worked on the Adriatic coast say that everybody in Yugoslavia had scabies.

Miss Murphy replied that this might have been the case during the last war owing to the conditions then prevailing. There was also a great deal of typhus in the country at that time, but in peace years there were not many cases of scabies and conditions generally from the point of view of infectious or contagious diseases were very much better. In the villages, however, they must be prepared to find the sanitary conditions very primitive, and she advised them to take disinfectants. In some of the villages lice were a pest.

In reply to other questions, she said that as soon as the people recovered their strength after what must have been a period of exhaustion they would be found ready to assist in all the organized measures. It was a common observation that among people of this type recovery was more rapid and susceptibility to infection was less than among those who might be considered more highly civilized. The Matron of her hospital frequently made the comment how much more pain the Yugoslav children could bear than English children just because they were tougher.

A member of the audience asked what was the normal size of the family in Yugoslavia.

Miss Murphy replied that the more modern families consisted of only two or three children, but the old-fashioned families were very large. In the villages an almost patriarchal system obtained. The father was distinctly the head of the family. The members of the family pooled their work and their money, and it was the father who distributed the money as required. If the father was away it was the eldest son who took command. The men were very much the heads of the family. She was afraid the women were not considered very important. In the old Serbian houses, if one visited, the man would sit down and talk to the visitor, but the woman would remain standing. In the cities there were women doctors and architects, but the people considered that women's duty was to look after the house and to have children. The Serbian woman's duties were never finished.

On the subject of climate, Miss Murphy said that in summer it was very hot and peaches and tomatoes grew in the open. The winter was much shorter, drier and colder than in England. Palms and fig trees flourish in Dalmatia. There was not much malaria in Belgrade. The malarial districts were chiefly in the parts adjacent to Albania.

In answer to further questions, she said that the Croats considered themselves much more civilized than the Serbs because they were under the old Austro-Hungarian empire. But the people of the different races got on together very well. There was now a separate government or pseudo-government of a rather Quisling character in Croatia, and the

Germans and Italians had taken advantage of this. News was received from Belgrade, but next to none from Croatia. The Slovenes, she thought, were very fond of the Serbs. Under the Prime Minister, Dr. Maček, Serbs and Croats worked well together.

In addition to the Greek Orthodox adherents and the Roman Catholics, there were a large number of Mohammedans in the country. They were not really Turks by race, although they bore that name. She could not say what would happen after the war—possibly Croatia would go off by itself—but so far as the visitor was concerned he or she had only to be tactful and keep clear of political discussions and the people would be very pleasant.

The requirements were principally meat, wheat, maize, food of all kinds for animals, also vegetable seed. Vegetables were a very important item in Jugoslavia, especially beans and onions.

CASEWORK

By MR. B. E. ASTBURY, O.B.E.

General-Secretary, Charity Organisation Society

I have been asked to speak on case work, but a simple definition or exposition of family case work will not be of very much use to you bearing in mind the purpose for which you are preparing. I understand that the idea of these talks is to prepare you to carry out pre-armistice civilian relief work in occupied countries.

The case worker has equipment and working tools with which he sets to work. By far the most important of this equipment is a knowledge of the statutory social services. He must know, for example, the scope of the Assistance Board, what help he can obtain from the Public Assistance Committees, and he must know the various provisions of the Local Health Authorities. He must also be an expert on the work of voluntary societies, must know where the hospitals are, where the clinics are, the type of case to refer to its appropriate society—for example, a Blind Society—he must know where to find the right regimental association and so on. That is the equipment and with that he is able to carry what we call "a case load," because he is able to off-load some amount of the work on to appropriate authorities. Many of the people whom he sees can be guided by him to the appropriate source of help.

Now you will not have that equipment where you go, for in most of the occupied countries the social services will have ceased to exist. They may gradually come back to life and your first task will be to ascertain what social services do exist, what, if any, voluntary organisations are functioning and the type of assistance for which you can look to them. Apart from that, your greatest difficulty will be that of selection.

I speak of the difficulty of trying to superimpose case work on emergency relief work with some little experience. After the last war,

as your Chairman has told you, I went to Vienna and at the time of my visit an enormous number of organisations from various countries were trying to organise emergency relief. They were then attempting to grapple with family relief work. I went out with a small group of people to make suggestions for constructive relief and to do some form of case work. My first impression was one of utter and complete bewilderment. So far as one could see, the whole population was completely demoralised, their lives spent in going from one agency to another, often accompanied by a string of children, picking up meals here, a pair of shoes there, going somewhere else for milk, to another place for clothing, and I began to despair of making any suggestions that could be called constructive. Then there came to Vienna a little band of Friends, led by Mrs. Atherton Smith, and where everyone else was excited and rushing about hither and thither, they went about so calmly and serenely that we all began to look to them for guidance. They were completely detached; they looked at everything that was going on, then they took themselves away and thought it all out and, having thought it all out, they decided on a plan of action. They saw for example that the primary need was for housing and they set to work to buy materials with what money they had and to gather together a small group of people to build their own houses. These people had no money and had to work hard, to give time and labour, and to work with the group of Friends in building a number of houses, and later of flats. Very soon the solicitors, the small shop keepers, the bankers, and labourers, all kinds of people, were working together, and with this little group the Friends began to do constructive work. They brought us in to do case work and others joined the group, and though the houses could only be built gradually, something was done in this way to help a certain number of people to return to their normal lives. The numbers dealt with in this way were infinitesimal, but it did give a kind of core of people of whom one could say: now they are completely independent and will be able in their turn to help others in the same way.

A second experience is, I think, worth mentioning, because it concerns this country. You remember that in late 1926 public opinion was dramatically focussed on South Wales owing to the bad economic position of the Welsh coal miners. You may also remember that a very dramatic appeal was made on Christmas Eve by the Prince of Wales, asking for clothing, for money, for food, for commodities of every kind, to be sent to South Wales and to the Tyneside. Within three or four hours of that speech a van left Eastbourne for the Rhondda valley, loaded with clothing, food and so on. And when it reached the valley it had great difficulty in getting near its destination because every town in the country had had the same idea. Again a little group of us went down to see how far this work could be made constructive and of lasting value. When we got there I was vividly reminded of what I had seen in Vienna. It was almost precisely the same set of circumstances. This time people were racing down the mountain sides for soup, up the valleys for clothes, chasing each other and saying: "So and so is over there with a van-load of stockings, someone else has a van-load of food."

Again there came a group from the Society of Friends. This time they were led by Peter Scott and his wife, and they proceeded to do exactly what I had seen their companions do eight or nine years before in Vienna. They looked round, they saw what was going on, they went away and then they brought out their plans. Some of you may know the results of those plans: how they selected a town that had been more badly hit than any other in South Wales. They said, let us leave this relief work to other people and let us express our concern in some form of a constructive action. The very first thing they did was to call people together, and this time they provided materials for cleaning up the town, white-washing or colour-washing the houses, and then they found out that, however much the industry might improve, there was little, if any, hope of the coal ever being mined in Brynmawr. They decided to create new industries; they began furniture industries, factories for pottery, farms and various other occupations, and then they brought in my little group to start case work.

The history of all this has been told and written about and a good many of you know it.

These two very vivid memories stand out in my mind when I think of relief work in the pre-armistice and post-war periods. The glamour and excitement of rushing over to Europe to distribute food and clothing and every type of commodity will be difficult to resist. Much of it will be a vital necessity. Think of the plight of the people in Greece and of the Jews in Central Europe! Relief will no doubt be absolutely essential and at the same time it must be wisely applied so that out of this shall grow something constructive—the rehabilitation of the people, so that in the shortest space of time families may be able to lead their ordinary normal lives and play their part in the social reconstruction of their nation. I do not think there will be anything like the indiscriminate distribution of relief as after the last war, for already in this country at any rate we are wisely beginning to plan beforehand. As you know, the Societies most likely to be entrusted with this work are meeting together, discussing plans and agreeing on different schemes of action.

That is by way of introduction, because I think it most important to envisage to you that it is not going to be a piece of very spectacular work, that it is going to be real hard work if you are going to do any real lasting good to the populations of the countries to which you may be sent.

Having sounded this warning note, I pass on to explain to you what we mean when we talk of social case work, of family case work.

It may best be described as skilled methods of dealing with a person in distress or difficulty. Every profession, every craft, every trade, however simple, has its special knowledge and recognised skill. To the doctor it is a knowledge of anatomy, of instruments and drugs; to a mason it is knowledge of how to use tools with which to shape the stone to the form he desires; to the cook in the kitchen it is a knowledge of ingredients, fires and ovens; to a gardener it is a knowledge of plants and of fertilisers, of knowing when to give water and when to withhold it.

To every trade and profession there are its particular skills and by no other means can the craftsman do really creative work. And so the social worker who sets out to do family case work must have the tools, and the first of these tools is vocation, what the Friends call "concern." Unless you really feel this thing in your very soul, a desire to do something which will restore the independence of the people with whom you are going to work, it is very much better that you never leave this country. If you are going just in order to be there, to be a kind of Lady Bountiful to distribute gifts, it is very much better not to go at all. You must have this "concern," this vocation, and you must be prepared to do really hard work for the people whom you are going to serve. Unless you have this you have not the first tool or skill of the case worker.

The second skill is the capacity to understand the character and the circumstances of these people.

The third is the knowledge of the social agencies which may be evoked to help the person needing help.

Then there is the ability to inspire confidence in order to secure the co-operation of the person you desire to help.

I have spoken about the first qualification, vocation; the second, understanding, is not so easy to acquire as one might think. Some people have a natural insight into the causes of human behaviour, but for the greater majority it is acquired only by patient observation, patient listening, by trial and error. It has often been said, and I think with some truth, that most of the behaviour problems of people can be traced back to a lack of understanding when their behaviour first became abnormal, and that is particularly true of the juvenile delinquent. The more I see and work among them, the more certain I am that, if you can get right back to the first time when they began to go off the rails, you will find out that at a very critical period they were not understood. I remember very vividly some years ago that one of the Canons of St. Paul's telephoned to me just as I was leaving the office at night and said that a young man had walked into his study and told him that he had stolen twenty pounds from his employer and that if he did not return that sum by ten o'clock next morning he was to be handed over to the police. I waited for him and he came in—a typical pre-war young man of eighteen, with check suit and bowler hat, an evening paper under his arm. He told me first of all that he had had his wallet stolen, but it did not take long to disabuse his mind on that point, and then he told me the whole story. He was, he said, the chief cashier in a very big publishing firm that also dealt with stationery. It was in the city and part of his work was to collect the debts owing. He had taken the money bit by bit, a shilling here and a shilling there, until suddenly the head cashier had called for his books, found this out and had given him till ten o'clock to return it. I said to him: "Well, the first thing you must do is to go and tell your father." He refused, saying: "No. You do not know my father. He will turn me out. He never speaks to me." "Either you go, or I do, to-night," I insisted. I went and saw the father, an extremely nice man, a fitter, who said: "Well, let him have what is coming to him. He is no good. He thinks

himself above me and will not even speak to me. He goes about with all kinds of elegant young men and thinks himself above us at home, so I am having nothing whatever to do with him. He can do what he likes." I saw the mother, and found that the boy was the realisation of all that she had looked for through nearly thirty years of married life. She had been a very good servant in a very good house and had married this man and had always wanted one of the children to be something superior to the father. The children had arrived one after the other and as soon as they were able to earn they had gone into factories until at last came John, and now she was determined that her hopes should be realised; everything that she could she gave him, and got him a job in the city. She told me with great pride how he had got on until now, at the age of eighteen, he was chief cashier's assistant. The climax came next morning: the telephone rang and she was told that her boy was to be handed over to the police. I went over to the city. This "very large publishing firm" I found to consist of a small room, six foot by four, in the basement. The business belonged to one man and the boy was his own cashier, accountant, in fact everything, a kind of general factotum to this man, who seemed to leave everything to the lad who had painted this picture for his mother and told her these imaginary stories. He had created for her a series of clerks, girl typists and shorthand typists and he had taken money and given his mother presents which he said had been given to him because of the wonderful work he had done. The end of the story came months later when the lad was spending a week-end with us and we walked across the Surrey Downs. I had to speak somewhere on the problems of youth, and I asked John what he thought these problems were. He said: "There isn't any problem." "But," I said, "you ought to know something about these problems." "Nothing of the kind," he replied, "all the trouble was because Dad did not understand me and I did not understand Dad." Well, they were now very firm friends and still are. And that is the point I want to make: it is lack of understanding that is at the root of so many of our behaviour problems. You as a case worker will have to acquire that skill of understanding, the point of view of the people with whom you will be dealing, and you can only acquire it by this exercise of very great patience.

In addition to understanding the attitude of the individual, you have to understand something of his individual circumstances, and to do this you have to learn as much as you can about his environment; you must see him in his home or where he is staying and against the background of his family and those with whom he works. You will only acquire this by visiting the homes and families of those you are trying to help, by learning about the traditional modes of life of people, about their employment, about what they did before the war and what are their hopes for the future.

The third qualification is, as I have said, a knowledge of social agencies which may help you. This you will only be able to discover as you go along, and it will be your first duty to find out what, if any, statutory social services or voluntary agencies there are. I imagine

that you will be able to do so from your opposite numbers—the Red Cross of the countries in which you are serving.

The fourth skill is the ability to inspire confidence, and that can only be obtained from, and can only follow, a period of constructive thinking, after you have obtained the facts. You remember I told you that the Friends came and looked and then thought constructively and when they had thought constructively they came and explained their plans to the people whom they wanted to help, and in that way confidence was immediately inspired, almost to a pathetic degree. People brought their children to be cured, every kind of problem was laid before this group of Friends.

The art of successful case work lies without doubt in the degree of imagination which we can bring to bear on our thinking and planning and rarely does any one solution apply to two cases: for one convalescent treatment must be arranged, for another the mother of the family must be given a rest, another may need clothing and boots, someone else needs suitable employment—there are a thousand and one solutions which have to be thought of. But one word of warning: when thinking in terms of help, do not always think in terms of money, and do not imagine that that for which the individual asks is necessarily the only solution. Case workers learn very very early indeed that most people in distress believe that a loan of five shillings will solve all their difficulties, and quite frequently it is a fact that a loan of five pounds would not solve their troubles, but something quite different would be best. I remember a case when I was a student, of a coster who came to us for convalescent treatment as he was a nervous wreck. The man certainly looked a nervous wreck and the case worker wanted to know the reason for the state he was in. It proved to be the fact that the man was worrying on account of his donkey, which was going downhill, and so finally the donkey was convalesced and not the man. The Dumb Friends League were persuaded to take him and that proved to be the solution of the difficulty.

The war has taught us much of the study of human relationships, and the most important lessons were those which we learned during enemy air raids; we learned then something akin to what you will possibly encounter, that is, how to carry on case work under panic conditions. We found that everything depended on the right approach of the case worker to the individual; we learned under such conditions, when thousands of people were waiting to be interviewed, that case workers had to scrap many of their skills upon which they depended. People came straight from ruined houses, dazed and covered with dirt and debris, and it was quite impossible to classify them or put them into any social group. Every symbol of security had been swept away in a night, and in many respects they resembled helpless waves of humanity eddying to and fro in a sea of misfortune. It is not unlikely that such will be the people among whom your work will take place.

There are two alternatives with which case workers are faced: what can you do for these people, or what do you do with them?

It is only if you can do something *with* them that you can hope to do any constructive case work. You have to get a person to *do something with you* at the first possible moment. This requires much patience for the person must be helped to exert his own personality, his own will, to find the means to do all he can to help himself.

The best way to begin case work under those conditions is, by hook or by crook, to contrive to arrange for privacy, to get a man out of the crowd, to take him somewhere where he can feel he is talking quite confidentially. That is the first step in making a person once more an individual and not one of a great crowd of people who are homeless and to a certain extent helpless. Go even into a corner of the room or of the passage and at once you have set his feet on the road to recovering a sense of his independence. From the first, treat him as an individual and call him by his name—do not get into the way of calling people “granny,” or “sonny,” or “mother” or “Johnny.” Each person has got his own name and the very first step is to learn that name, and if it is Mrs. Jones, then call her Mrs. Jones and not “granny.” You will get at once a totally different relationship. I remember after one heavy raid seeing a very charming woman in the early fifties, a spinster, who had been bombed out of her home in Pimlico, and she had come to the Rest Centre. I asked her what was the matter, and when she told me, I suggested that she should go and talk to the welfare worker. “I am not going near her again,” she said, “she called out to me when she saw me: ‘Come here, granny, and tell me all about it’.” Now nothing could have given that woman confidence in that worker. It is very very important to restore a feeling of independence and evoke confidence in yourself and also to strain every nerve to remember and grasp what the person has told you. Avoid direct questioning, avoid taking notes during an interview unless it is absolutely necessary, for nothing disturbs a person more and tends to make him lose confidence in you than if you begin taking down what he says while he is talking to you. Train yourself on every occasion to remember as much as you can of an interview and only record it afterwards.

That brings us to a very important question, that of records. We work with case papers, and one of the things which case workers have to bear in mind is that someone else may deal with these another time so that whatever happens you must leave a clear record of what you have asked—a second person must never have to ask for information already given. Case papers must be built up as you go along and should be in such a form that any other worker coming along can pick it up and read it and carry on what you are doing. Much of your work will have to be done without that record and those case papers. You should make your own papers and keep your own records as you go along and keep them in such a way that others will be able, without causing any anxiety to the individual concerned, to carry on the case.

Then you should try to grasp the individual's approach to his own problem by imagining yourself in his place. Think of his position when you have heard his story and when you have seen something of his environment. Try to think what you would do if you were in his

place and talk things over with him, not as of a plan which is a *fait accompli*, but an idea which is the basis of a plan to help. Above all, do not attempt to give advice until you have heard the whole story, and even then do not give advice on that story; remember that it is unverified and that there may be another side to it, and it is essential to verify facts before you offer advice. You must take into account what has emerged during your conversations and your visits.

Then one word about people who are distressed. Again much of your work will be carried on in an atmosphere of acute distress. It is a golden rule in case work or in any form of social work to ignore tears. Take no notice of them, train yourself to do this; if they are real tears of sorrow the person who is shedding them desires most of all that you should not see them. Talk quietly and gently and do not refer to the distressed condition. If the tears are put on for your benefit to evoke sympathy, much the best thing to do is to ignore them and they are over more quickly.

Then remember as one fundamental principle, the case worker must never be frightened and must never be shocked; no matter what story is told to you, you are not there as a judge of other people's conduct and you must not profess to be shocked if, for example, a couple whom you thought were married are not so. That is not your "cup of tea," at any rate not at the moment. Especially under panic conditions you must never be frightened, you must be flexible and take a completely detached view—that is one of the hardest things to learn. You must not let the homeless and helpless people who come to you feel that you are little better than they are from the point of view of being able to help. Think of the doctor: if he were to feel all the aches and pains of every person who came to his surgery, how would he be able to bring his skill to bear? He can only do so in so far as he can completely detach himself from the aches and pains of his patients. And so it is with the case worker. You must not begin rushing about and saying: Oh, I can't sleep because of so and so. You must not allow yourself to be stampeded.

I am conscious that I have stressed the difficulties of the work that lies before you, but I can only tell you, as an off-set against them, that the joy of achievement will more than repay anything which you are able to give towards equipping yourselves, and once you try to put into practise some of these principles that I have attempted to outline to you, you will find case work is really a very great adventure.

DISCUSSION

Question. You said that we should not take too many notes in the presence of the person you are interviewing. What do you consider the essentials that we should take?

Answer. Do not take down anything at the beginning, only ask the person for his name, and then so far as possible do not take any notes during the interview unless there is something really important and quite technical, in which case you might say: Do you mind if I just jot that down, my memory is so bad? Always ask before you take any notes of any kind, and in that way you do not

lose the confidence of the person. At the end of the interview, just say: "Now, look here, I had better take your name and address"; and it is essential to have particulars about the family, but you ought to be able to remember them—what the man is working at, who for, and so on. At your next visit, which should be at the home, you can glean a little more information. The essentials are: name and address, the number of people in the household, what they are earning, what school the children go to, and later on various other things will emerge from the problem put before you. Do not try to get everything for the case paper at the first interview.

- Q. You spoke of training; what is the first step to take?
- A. Well, the first step is with yourself. You can do practical case work with the Invalid Children's Aid Society or with the C.O.S. or with any agency, provided you can give a fair amount of time consecutively. To be able to do anything satisfactory you should see a case right through and not give an hour or half a day now and then.
- Q. Is there any rule in dealing with people who are abusive?
- A. Yes. Your main idea should be to end the interview as soon as you can. Wait until the person has run down and then get up and edge towards the door. This has a very remarkable effect, for they always follow you to the door. One of my colleagues has found that you can always reduce an abusive lady by calling her "my good woman."
- Q. In work abroad is not the language a great difficulty in this kind of work?
- A. It is not nearly so great a difficulty as you might imagine. The ability with which people pick up a limited vocabulary is remarkable, so also is the way people make their needs known to each other. Generally there are people who can act as interpreters, and it does not take very long to acquire a working knowledge. I am assuming that none of you would go into a country without having at least a slight knowledge of the language.
- Q. With whom do we get in touch if we have a certain amount of time to give?
- A. You had better get in touch with me.

THE LOUSE

By PROFESSOR BUXTON

London School of Hygiene and Tropical Medicine

I would like to explain how I propose to arrange my talk. We have at the back of the room a demonstration of appropriate literature and in front specimens of living lice, pictures and so on. I propose to talk first about the louse and the way it lives and feeds; then I will break off for you to look at the specimens. My second short talk will

be about ways of destroying lice ; and while doing that my colleagues will put out a second demonstration.

It is quite useless to try to control or avoid any insect unless you understand fully how the thing lives. There are on human beings three sorts of lice ; they are very similar, so we can talk about "the louse" without specifying which. The three sorts are : the head louse, which is mainly found in the hair ; the body louse, which lives on the inner side of underclothing ; and the crab louse. Most of what one could say about any of these three is by and large true of all three in general.

First of all, how do they feed ? They are very closely dependent on man, for normally the louse requires to feed several times a day on human blood ; so that they live normally on the surface of the body or inside the hat or on the underclothes. You must therefore think of them as near to human beings and not living in the floor or on the walls or in cracks like bed-bugs, but nearly all the time on people themselves. Lice take a meal by piercing the skin with their tiny proboscis and sucking the blood several times a day. The blood must be from man, for the louse cannot feed on domestic animals or birds. That point is very important to entomologists who have to investigate the lice, for they have to rear the creatures on themselves in little flat pill boxes strapped on to their persons. We wear them seven days a week and we take them off when we go to bed. The men wear them in their socks, the ladies in little frilly receptacles above the knee. They have to be strapped close to the skin and feed through the gauze—one is aware of them feeding. Lice do not feed on dirt, and it is a popular error to speak of them as being bred in dirt.

If lice get away from man, if for example a hat is put in a cupboard or a louse drops on to the floor, it can live only for a short time without food. The length of time depends on the temperature ; if the temperature is high they live at the outside for a week, if lower ten days ; in any case, they use up their reserves quickly. So you see that this is a very important point, because the body louse cannot exist if human communities and individuals have facilities sufficient for them to change their underclothing regularly. Thirty years ago the body louse was common in the poorer parts of London, but they have become increasingly rare ; you can only get them now by working up a connection with tramps. That is not due to the Medical Officer of Health, but to the better distribution of wealth and the consequent possibilities for the changing of clothes. This is an interesting example of the very close interdependence of health and economic factors.

There are one or two silly superstitions about lice, and you should know about them. In England it is held by some people that there are individuals who are "breeders," and that lice appear on them. There is no truth whatever in that idea ; in fact, it is self-evident that it cannot be true, for lice are produced by other lice. I know how common this belief is, because I deal with tramps and other experimental material of that type. Then there is the Mediterranean superstition that lice are lucky : in Greece, in Gibraltar and the Balkans you find

people who resent being de-loused because they say that it takes away their physical vigour, and that the louse is a sign of good health and good luck. That is a point of view which you are likely to meet with ; we have met with it among some of the refugees in London.

In all insects, including the louse, the sexes are distinct and there are males and females. The female, after pairing, lays eggs which we call "nits" ; the only way to remove these is by a fine tooth comb. Often after the nits have been hatched the old shell remains and people who find them worry about them though they may be three months old. At the top of the nit is a little cap, a lid which pushes up when incubation is finished. When the embryo has developed it comes out as a baby louse. The egg is stuck on to the hair and the egg stage lasts nine days ; then it hatches and out comes a minute louse just like an ordinary one, but much smaller, and this young louse lives for nine days on the surface of the body. By then it is a full grown male or female, which lives about thirty days. The female will lay six to eight eggs a day, so that as a rough figure she may lay two hundred eggs during her life. Do a little mental arithmetic ; it is obvious that although her descendants are not all going to come to maturity and see their children's children (for in that case multiplication would be beyond belief), the rate of increase is terrific. Let us suppose that only half survive and let us assume that out of the two hundred eggs you get fifty per cent. left, that is to say one hundred eggs, the female will then have fifty sons and fifty daughters, who in their turn, reproducing at the same rate, each produces another hundred. Now you see what this means and what an awful rate of increase it is. You get the whole round of the life circle of the louse in less than a month, so you have only to contemplate what might happen if conditions were bad for people and good for lice, and what could happen in two or three months. This can only take place when people are living under bad and overcrowded conditions with either no hygienic standards or no possibility of changing clothes. Now in a country like this is in peace time, what is the position ? The body louse is very rare, for simple economic reasons, *i.e.*, because everybody has spare underclothes and changes, and things get washed, so that automatically the body louse has been nearly wiped out in the course of thirty to forty years.

The head louse is still much commoner than many people realise. There is convincing evidence in all the big towns and cities among the school children that about half the girls have got these head lice and a third of the boys. This has also been looked into in all the cities with regard to the pre-school child and the figures are not very different. In the young adult the figures are about as bad, and it is the same among the women going into the factories and uniformed services. This can be remedied.

If you get to a country which has been devastated by war, such as Poland or Greece, or even impoverished Algeria or Spain, you might find the body louse a common thing all through the community, and if you went and lived there in quite a clean and careful way it is quite probable that you yourself would pick up body lice ; for instance,

under those circumstances people travelling, who are themselves completely clean, are liable to get them. That may be your experience, and we want you to understand how you can protect yourselves and educate other people. One of the ways of getting information is from the bookstall at the back. There are three or four types of pamphlets dealing with social matters and the louse; among these you will find pictures that may be of use to you in some other part of the world, because pictures do not require translating; the poster shown may be of great service to you.

(A break occurred for the first demonstration)

Now let us turn to the personal problem. The reasons for which we want to control the louse are obvious for everyone has a dislike of having parasites on them. One has to remember that body lice are the only transmitters in Europe of two important epidemics that follow earthquakes, famines and wars; those two are typhus and relapsing fever, both of them likely to be major health problems in the Balkans and possibly in West Europe after this war. Typhus is the more often spoken about (remember that it is quite different from typhoid), but relapsing fever is just as important, and both of them are distributed by lice and not in any other way. You can only deal with them by de-lousing the people. From what you have seen and from what I have told you anyone living under crowded conditions and in bad circumstances, such as in bombed cities where there are limited water supplies and no means for cleansing clothes, can pick them up. Also it might happen that clean people get them on their persons from railway carriages or in 'buses; so one of the things that I want you to understand is that it might happen any day, and there is no shame whatever attached to it. The only thing to be ashamed of is to pick up the pest, breed it, and pass it on. Be rational and sensible, and know what you are to do about them, and how to get rid of them.

I am going to limit myself to very simple methods. You are seeing more elaborate methods at a demonstration in Kensington. I want to speak of the simplest remedies, which you might use in the parts of Europe you may go to. One of the simplest ways of getting rid of body lice is heat. Most insects are easily killed by raising the temperature; 150 degrees fahrenheit kills them in five minutes or so. That means that the temperature at which cotton clothes are normally washed is sufficient to kill the lice and eggs, so that the ordinary washing of cotton things as practised in hot water is in itself sufficient. As for woollen things, you cannot subject them to the same temperature without shrinking them, but there are other ways in which you can use heat. A very simple one is to put the garment inside out on a table and go over the seams with a hot iron. This is most effective if carried out thoroughly. Lice live mainly in seams and are hardly ever seen on the flat surfaces, so that you should pass a hot iron over folds and seams. There are certain types of woollens that cannot be treated even in this way; for instance, blankets are too thick for sufficient heat to get through with an ordinary hot iron, and the same applies to

the top of trousers where the cloth is gathered in several layers ; it is no use trying to iron these. One way is to make some sort of a chamber ; get a cellar and put racks in it and hang up your blankets with air spaces between them and put on some sort of heating (*e.g.*, braziers of charcoal). You can get a cellar up to a sufficient heat and it does not lose the heat so soon as a room. You can do the same sort of thing with an underground chamber, roofing it over to be heat-retaining. It is not very easy to carry that out, because if you heat it with a brazier or charcoal and wood it is very difficult to heat uniformly and without any scorching. Now the way of using heat in all parts of Eastern Europe, in Poland and in Russia, in practically every village, is by means of a bathing house which the people use themselves. In it they make a large fire. Then they pile rocks and stones over the fire and dash water on them, making the place full of steam. This is a kind of primitive Turkish bath, and the people all take their baths together once a week. Such a chamber, which is a source of great heat, might be adapted and fitted with racks on which garments could be hung and the lice killed. Another thing which kills lice is extreme cold. We have not any precise knowledge of what low temperature kills them, but it is somewhere about 20 degrees of frost ; so that in a Polish winter, or even winter in parts of Greece or Yugoslavia, you could put any infected garments out at night and the lice and the eggs would most certainly be destroyed. But, as I say, this point is being worked on at present and we have no exact knowledge. This question of parting with the clothes for disinfection is not so easy as it sounds, for in the cold weather people need them and they certainly do not wish to part with their blankets, but it can be done sometimes if you have a warm place for the people to live in.

There are a number of valuable disinfectants of which I will speak. One is cresol which, used with the right amount of soap and water, can be used for steeping clothes for a certain period (at least an hour) ; this will kill the lice and the eggs. You can follow this up by ordinary washing. If this is available the method is likely to be an important one.

In the last war on the Western front the body louse was present practically all through the troops. They would take a battalion behind the lines and de-louse them ; when the men went back to the trenches, within forty-eight hours they were lousy again. A large number of lousy people are the most difficult to deal with. We believe that one needs something more lasting and effective, so that we could break the chain of the people who had been cleaned only to be re-infected. The only way to do that is by the use of lasting insecticides which go on killing the louse as long as possible. We have been looking for such an insecticide and we have found more than one. They are likely to be very widely used.

With regard to using the new insect powders on clothing, turn a garment inside out and rub the stuff along the seams, rubbing the powder into the substance of the cloth. That is a very simple thing

to do. This powder cannot be shaken off and will remain for some time (at least a week) and kill the insects.

There are also other insecticides of different types, among them a liquid which is still more lasting. We made experiments with a tramp's garments and can make him louse-proof for several weeks, which is remarkable. Some of these new materials are available in commercial quantities, and we hope that they will be extensively used after the war. This also applies to dealing with the head louse. The new oily insecticides are very effective in killing lice and nits, and also prevent the head from becoming again infected for about a week. In the ordinary way if a person has his head cleaned and then goes back to an infected pillow or bed he will become re-infected and it has not been much use to have cleaned his head. But with this new stuff it is quite another matter, for even if a few lice have been left in the bed or in the pillow, they will go on to the hair which has been treated with this dressing, and so get killed. This liquid has no bad features, it does not smell unpleasant, it is not conspicuous, and it is proving of great value, especially in schools. You know what happens now in some schools: much time is spent in cleaning some particular family, then they go home and pick up more lice from the little brother or elder sister. Here at last is something effective and lasting. Tens of thousands of heads are being treated with this stuff, and it is going to wipe out the head lice in every properly constituted municipality in a few years. There are one or two other points worth mentioning; for instance, there is the fine comb. It is not a grand method of control, but will, if used carefully and intelligently, comb out all the lice and crush the nits on the hair. It is not one of the best methods, because it gives a person no protection in the future, but the little comb is so small and light that it can be readily carried with the kit.

Now, as to personal methods, one of the best ways of avoiding infestation by head lice is to have the hair short. If you go to a country where conditions are bad, do not be content just to shorten your hair, but have a real eton crop. It is much less likely, if you do this, that you will get lice in the hair, and if you should get them it is certainly easier to get rid of them. This is not advice that all of you will accept with readiness, but it is definitely known that when conditions are bad the people with short hair are the ones who come off best.

If one was in a typhus unit and dealing with patients, the very best sort of protection would be to wear some garment such as the one I will now show you. It is a one-piece anti-typhus suit and you get into it through a back opening. It has sleeves and gloves with gauntlets. There is only one way into it and it goes completely over the feet. This means that there are very few gaps through which the louse can get on to the person. It also has a hood with a little draw string. This gives a large measure of protection. It is made of cotton and should be changed twice a day, and it can be put in hot water and sterilized.

NUTRITION

FEEDING IN EUROPE AFTER THE CESSATION OF HOSTILITIES.

By MISS ABRAHAMS

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It is impossible at this date to speak definitely about many of the details which we shall need to know when we come to carry out our plans for feeding Europe. Much depends on how long it will be before we can go abroad, and therefore how long shortage of food and malnutrition will have worked their havoc. The time of year when we can commence work will decide whether we shall find the crops still growing, or whether they will already have been harvested or destroyed. There are tremendous regional differences in food habits, and we shall have to adapt ourselves to that portion of the Continent to which we are sent; not only do these food habits vary from country to country, but also from region to region, and in many cases between one social group and another. It is certain that we shall be feeding distressed and disorganised people, and it will be our duty not only to supply them with food, but also to restore their confidence in themselves and in their ability gradually to take over the work that we shall begin.

For practical purposes we know the nutritional needs of the human body. We must find out how these can be supplied by the foods that are likely to be available. We must learn too all we can about the methods of cookery in the countries we expect to serve. These menus and methods of cookery may appear mysterious, but when they are denuded of their foreign phraseology and expressed in our familiar cookery terms they will probably not be at all difficult to follow. The Governments of the United Nations know the needs of the different countries, and they will do their utmost to supply their requirements, but there are two serious difficulties with which they will have to contend, first how to grow and store enough foodstuffs for the great needs of the Continent, and secondly how to obtain the transport to send them where they are most needed. In some districts during the winter, roads may be impassable, in others military operations may have drastically reduced the rail and road transport available.

It is important that we should keep before us the fact that certain substances in food are essential for the maintenance of health, and that proportionately more of them are needed by children and expectant mothers than by grown-ups. You will find Dr. Geoffrey Bourne's "Nutrition and the War" useful in this connection, as it includes the value of most common foods and other up-to-date information.

The essentials in food are usually divided into three. Firstly, those that give energy so that we can use our muscles; to breathe, to move about, or for more strenuous exercise. Three kinds of food give energy, the starches and sugars, the fats, the protein from meat, fish, milk, cheese, egg, as well as from pulses and flour and oatmeal.

Secondly, the body-building and repairing foods, the chief to remember being protein to build and repair our flesh, calcium chiefly from milk and cheese, but also from green vegetables and pulses, for building and repairing bones, and iron from liver, eggs, wholemeal bread and pulses, for healthy blood. Thirdly, the protective foods: Vitamin A, which protects the mucous membrane from infection and is essential for seeing in dim light. This vitamin comes from whole milk, butter, vitaminised margarine and cheese, and is also made in the body from carotene found in carrots, tomatoes, cabbage and other green vegetables. Vitamin B is really several substances usually found together in such foods as wholemeal bread and flour, oatmeal, yeast, whole or skimmed milk, the lean part of pork, ham and bacon, and in nuts and pulses. Part of the Vitamin B complex is needed for the healthy functioning of the nerves and of the digestive tract. A shortage of another part of the complex, nicotinic acid, causes a skin disease called pellagra, which is seen amongst the poor in maize eating countries. If sufferers are not supplied with the foods they need, they become mentally deranged, and eventually die. Vitamin C is the anti-scurvy vitamin, but a shortage of it will give rise to many ills, such as painful joints and bleeding gums, which develop long before true scurvy. It is the only vitamin which is easily destroyed by cooking. Nature, on the other hand, has been very prodigal in providing it. It is found richly in black-currants, rose hips, citrus fruits, all berries, tomatoes, Brussels sprouts and other green vegetables, sprouted pulses, potatoes, etc. Vitamin C in vegetables and fruit is destroyed by age, so that they should be used as soon after picking as possible. Potatoes have to be kept, and therefore their Vitamin C value steadily diminishes. Cutting and leaving either in the air or in water reduces the Vitamin C value of fruit and vegetables. For salads, vegetables should be covered with vinegar or dressing as soon as possible. Warming without boiling also destroys Vitamin C. Vegetables should be cooked with the lid on in a little boiling salted water for as short a time as possible. In cooking vegetables for large numbers, in order to prevent the water from going off the boil, experts have worked out a method by which a quarter of the vegetable to be cooked is added to the boiling salted water, when it is boiling fast again another quarter is added, and so on until all is cooking. A deliciously crisp and tasty result is obtained with cabbage, for instance. Fat is very useful in preserving the Vitamin C in vegetables, and adding to their flavour, for instance chipped potatoes cooked immediately they are prepared are richer in Vitamin C than boiled, but we can only expect to have these occasionally for some time to come owing to the shortage of fat. Another good recipe if you ever have enough fat is to shred some cabbage, green or red, and put it immediately into steaming fat, adding some salt. Add a little boiling stock or vegetable water if necessary, and if desired a little vinegar and sugar as well. The flavour can be varied by frying onions or apples with the cabbage, or by adding carraway seeds. Vegetables should always be used as soon as possible after cooking, otherwise Vitamin C will be lost. A distinguished American nutritionist once said in defence of our habit of eating potatoes and cabbage so often, that they were

both excellent vegetables, and that he had heard of people dying of malnutrition, but never of monotony.

Vitamin D is the anti-rachitic vitamin, and comes direct from sunlight, being formed under the skin by the action of the ultra-violet rays. The richest sources in food are halibut and cod liver oils, liver, butter and vitaminised margarine, whole milk, fat fish and eggs. In relief feeding fish liver oils would probably be reserved entirely for the cure of rickets and its adult counterpart, osteomalacia. Direct exposure to sunlight might also be used if the atmosphere is clear and the weather suitable.

Vitamins B and C are destroyed by alkalis such as bicarbonate of soda and baking powder, and they should therefore be used as little as possible. Yeast should be used as a raising agent wherever possible, as not only does it not harm the Vitamin B in flour, but it brings with it an additional amount of this vitamin. Vinegar, being acid, helps to save Vitamin C from destruction in salads, etc. It is also useful in making stock, as it extracts a high proportion of calcium from bones and makes it available in the soup. Add a quarter of a pint of vinegar to 20lb. of bones and four gallons of water, and then simmer them for eight hours.

Energy needs vary with age, size and physical work. Children need more in proportion to their size than grown-ups, and adolescents actually need more than adults. Old people need less than their juniors. If they are bigger, men need more than women, whilst in the same way people like the Swedes, who are of a big build, need more than smaller built people. Expectant mothers, as their size increases, and when they are feeding their babies, need increased amounts of energy foods. The larger the muscles used in physical work, and the longer they are used, the more energy food is needed. For instance, cycling requires 66% more energy than typing, and running four times as much as sitting.

At first it will probably be difficult to obtain enough food of any kind, but as soon as more becomes available we must see that adolescents and heavy manual workers receive the largest portions of energy foods such as bread and other cereal foods, potatoes, pulses, fats and sugar, or whichever of these is obtainable. Portioning food when it is short is extremely hard, and that is why it is so important to have an instructed and disciplined body like yourselves who can give to everyone according to their special needs. Discrimination will probably be necessary at first in order to give sufficient food to those who can work. Self-denial on the part of workers is most unwise, and you in particular should regard it as your duty to eat well so as to keep yourselves fighting fit, and so remain able to cope efficiently with the difficult work you will undertake.

The materials that are likely to be available must be considered, and how all the food essentials can be obtained from them. It seems doubtful whether vitamin concentrates will be available except for use under doctors' orders, for those suffering from the more serious forms of nutritional deficiencies. You can, however, build a perfectly

satisfactory diet from adequate supplies of whole cereals, pulses, dried milk and local or dehydrated vegetables. It will take culinary skill and a knowledge of local food habits to make these into enjoyable menus. Whilst aiming at obtaining the highest nutritional value possible you will want to conform as far as possible to local food habits, and use available ingredients to satisfy the consumers' tastes.

We shall probably find cereals one of the foods most likely to be available. They form, as you know, a large proportion of human food all over the world except in the Arctic. The kind of cereals varies: we use wheat, in Western Europe they eat rye as well as wheat, the Chinese eat rice, and the Yugo-Slavs eat a great deal of maize. With the exception of maize, all whole cereals provide good amounts of iron and Vitamin B. As was seen, maize is lacking in nicotinic acid, an essential nutrient in the Vitamin B complex. It should therefore be supplemented by such substances as milk, fresh or dried cheese, liver, fish, eggs, or green vegetables to prevent pellagra, and nicotinic acid can be used in the pure form to cure the disease.

Milk and cheese form for us the corner stone of good nutrition at all ages. They supply not only energy, but abundant calcium for bones, Vitamin A, the anti-infective vitamin, some vitamin B, and good body-building protein. Skimmed milk is almost as good as whole milk, and the Vitamin A and the few Calories contained in the cream of whole milk can easily be replaced by a few carrots. In Madras, Dr. Aykroyd improved the health and growth of large numbers of children by adding only dried skimmed milk to their usual diet. The absence of Vitamin A renders skimmed milk unsuitable for babies because they live entirely on milk, and cannot obtain this vitamin from a mixed diet as older children and adults can. As skimmed milk keeps well, it seems likely that it will form a great part of the milk supply for Europe. Whole milk will probably be kept for infants and invalids.

Cheese is, for practical purposes, as good as milk for all who can digest it. For older people, and for very young children, it is best to grate it. If it is over-cooked it tends to disintegrate and become indigestible, and therefore it is better not to cook it in bulk except in such dishes as potato cheese when it can be added at the last minute. A little cheese may be made to go a long way by grating and adding it to soups or to savoury dishes just before serving; the flavour is also much improved by the addition.

Potatoes deserve a place to themselves as they are a good energy food, and also a rich source of Vitamin C, the anti-scurvy vitamin. This Vitamin is reduced as vegetables age, but even old potatoes are valuable as anti-scorbutics if they do not stand long in water, and are cooked quickly in boiling salted water, or fried.

Peas, beans, and lentils are good sources of energy, of iron, and of Vitamin B. They keep well, and are easy to transport. In case of a shortage of Vitamin C they can be sprouted when they will become a satisfactory source of this Vitamin. The sprouts should not be allowed to grow more than half to three-quarters of an inch long.

Green and root vegetables you will hope to find growing where you go, otherwise you may be forced to use imported dehydrated supplies, which from the nutritional point of view are as good as or better than their fresh counterparts, and which save considerably in transport. Swedes, cress, and all green vegetables supply Vitamin C, as do many wild salad plants which can be picked and prepared with the help of local country folk. Care, however, must be taken that they are not contaminated in any way by the results of military operations that may have taken place where they grow.

Onions, leeks, garlic and chives are more valuable for their flavour than for their food value, but it is impossible to overstress the importance of flavour, especially when you have to use foodstuffs that are unfamiliar to the eaters. In some cases garlic or onions will make the dulllest soup popular, whilst in others carrots and parsley provide an attractive flavour besides giving a good supply of Vitamin A.

Meat, fish and eggs will probably be scarce in most places and will have to be used to flavour large amounts of cereals or vegetables. They will very likely be imported in dehydrated form to ease transport and to ensure that they will keep. Fat and fresh white fish and shell eggs, if obtainable, will probably be reserved for children and invalids. Dried eggs may also be very scarce, in which case it will perhaps be best to keep them for dishes such as scrambled eggs, omelettes, baked custards, or egg sandwiches in which nothing else can be substituted for them, rather than in cakes and puddings which can be made without eggs.

We must anticipate shortages of all kinds. We might for instance have to make soup without either flour or pulses. Would potatoes take their place? The energy would be the same, but their protein value would be much lower. A little dried skimmed milk would supply this if you had it, and with the addition of a little parsley or onion you would have a delicious and nourishing thick soup.

Another emergency you might be called on to deal with would arise if it were impossible to build an oven and you could therefore not bake bread. You could instead make biscuits of the oatcake variety on top of a field oven. If it was raining even these could not be made unless the hotplate could be sheltered. You could, however, then steam cake mixture or yeast dough in a jar standing in a saucepan and so provide a substitute for bread. You must be prepared for all kinds of break-downs and be ready to make rapid changes, considering as far as possible nutritional values and flavour in preparing the best meals possible in the circumstances.

We must anticipate a shortage of cooking staff and equipment, and so should expect to concentrate on cooking one good course for the main meal of the day. In peace time all over the world workers generally had only one cooked course at their main meal, and it is only on Sundays or holidays that a second course was served.

A knowledge of nutritional values is important in planning and cooking satisfactory meals. It is equally important to know local food habits and cookery because people generally find unfamiliar dishes hard

to eat once the worst pangs of hunger are satisfied. The food habits we have learned ourselves as children are very hard to change, and it is equally hard for Poles, Yugo-Slavs, and Czechs to change theirs. Our object must be to understand them, and to reproduce the flavours to which they are accustomed as far as possible without losing precious food values. This will not be easy but it will be well worth while, for we shall be able to learn as well as to teach, and to obtain a better knowledge of national tastes and food habits. This should help us towards a better international understanding, as well as towards a permanent improvement in the nutrition of Europe.

NORWAY

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I have been asked to give a description of the life of the Norwegian people, their ordinary standard of living and the sort of life the majority of them are accustomed to lead in Norway, and also to tell you about the Social and Medical Services which are available to the ordinary citizen.

In order to do this, I find it natural to begin by telling you a little about Norway's geography, population and language.

As you know from the map, Norway lies on the North and West of the Scandinavian Peninsula, with frontiers to Sweden on the East and to Finland in the North-East. Except in those two directions, Norway is bound by the sea: the Skagerak to the South, the North Sea and the Atlantic to the West, and the Arctic Ocean in the North.

From the North Cape to the southernmost point, Norway extends for nearly 1,100 miles, and the distance from the most southern town in Norway to the most northern is the same as the distance to Rome or Moscow.

The country extends over 15 degrees of latitude, reaching the same degree as Northern Siberia in the North, and the same latitude as the North of Scotland in the South. No other country in Europe, with the exception of Russia, has such great distances. A large part of the country, however, the so-called North-Norway between Trondheim and Finmark, is only a thin coastal strip not more than eight miles wide at the narrowest part. The area of Norway is therefore not very large, in spite of the great distances.

If we leave out the Islands of Spitsbergen and Bear Island, as well as some other small islands belonging to Norway, the total area is only 124,500 square miles, which is approximately the same area as that of the British Isles, Poland or Finland.

The coast line, which is nearly 1,700 miles long in a straight line, is almost seven times this distance if one includes the hundreds of fjords.

There are thousands of small islands situated along the South and the West coast.

Norway is a vast mountain plateau, intersected partly by deep fjords which penetrate far inland, up to one hundred miles, and partly by valleys, all of which are more or less steep. Only in the more eastern parts of the country and in the districts round Trondheim are there no mountains.

Both in South-Norway, especially in the south-eastern portion, and in Northern-Norway large forests are found, except on the highest mountain plateaux and in the cultivated low-level districts. About 21% of the country is forest land, practically all the productive wood being spruce fir.

The rivers running through our valleys are mostly swift and turbulent, rushing through valleys and rocky gorges often of great depth, and punctuated by lakes and waterfalls, which, to a great extent, give us our so-called "white coal," the electric power for our houses and industries.

Some time ago I found a very good description of the Norwegian climate in an English book called "This is Norway," where I read :

"The climate of Norway is, for visitors, one of the most delightful surprises. It is natural to fall into the mistake of supposing that a northerly country must, of necessity, be cold and dark, even though we know that the Gulf Stream runs warmly along the coast. All the same, it is surprising to find that tobacco plants and other exotic plants are cultivated in some places and that the inhabitants of Oslo are accustomed to the luxury of out-of-door cafés—a thing we think impossible in the cold climate of England."

As I have mentioned, the country stretches over 15 degrees of latitude and the climatic conditions vary accordingly, but, generally speaking, the coast district enjoys a mild winter and a cool summer, while the interior has a cold winter and a hot summer.

For most of the people from Eastern Norway now in England, I think one of the most surprising experiences has been to find that there is no really hot summer like we have at home, where bathing and swimming in the fjords goes on for months.

Nature seems to have intended Norway to have a much colder climate than she enjoys, for other countries lying in the same latitude are not so fortunate. Siberia cannot grow crops anywhere beyond 60 degrees North, whereas Norway cultivates barley up as far as 70 degrees. Similarly, the latitude which killed Franklin in Arctic American Seas is free of ice all the year round in Norwegian ones. Only the fjords flowing from the White Sea in the most northerly extremities of the Peninsula are frozen every winter.

The population of Norway is nearly three millions, and during the past hundred years the population has been increasing rapidly due to the strong economic growth through which the country has passed during this period. The strong upward trend in the number of inhabitants has not been so marked during the last few years as

previously. The birth-rate at present is relatively low, and with the death-rate at its present figure the earlier increase in population will not be kept up. The average age of the people has risen strongly during the later years, resulting in our having a fairly high percentage of old people.

Of the total population, about two millions, or 72%, live in rural districts, and only 28% in the towns. Norway has only three cities of more than 50,000 inhabitants—Oslo with about 280,000, Bergen with about 105,000 and Trondheim with about 55,000.

Sixteen other cities have more than 10,000 population.

If we look at the Norwegian population as a whole, we find they are divided into the following large occupational groups—37 per cent. in agriculture, lumbering and fishing, 27 per cent. in industry and handicrafts and about 20 per cent. in merchant shipping.

Agriculture is thus the most important occupation in Norway. Most of the farms, however, are comparatively small and their management is based on a system of freehold farming. They are usually run by the farmer himself and his family. Only the larger farmers employ labourers to help with the work. They produce enough for the needs of the farmers as well as a number of products which are sent to the nearest towns and suburbs. Only about 2½ per cent. of the country is arable. The crops consist of wheat, rye, barley, oats and peas and, of course, potatoes. In 1939 about 400,000 tons of corn were raised and 600,000 tons had to be imported. Potatoes are grown all over the country, even as far North as the Arctic Ocean.

The growing of vegetables has increased greatly in the years prior to the war, and the farmers often add substantially to their income by selling vegetables.

The livestock consists mainly of cattle, horses, sheep, goats, pigs and poultry.

Norwegian farms often lie far apart, spread over the countryside, and are frequently found lying high up on the sides of the mountains. The habitations are not usually gathered into villages and hamlets as is the case here in England.

Communications between the rural districts are therefore often much more difficult than here in Great Britain, and on many of the remote farms people are forced to live much more isolated existences than in more densely populated countries.

As more than 20 per cent. of the country consists of forests, lumbering is a very important industry. In 1938-1939 the output of timber was 8.5 million cubic yards, and as you are doubtless aware, timber wood-pulp, paper and cellulose were largely exported from Norway before the war.

The people who get their living from the forests have a very strenuous existence, particularly because the work is mainly carried out during the winter, often in very cold weather. We know that it is these people who suffer most under the present food situation in Norway

as, obviously, lumberjacks who are employed all day in strenuous physical labour in intense cold need many more calories than workers in warmer countries.

The Norwegian fisheries are the biggest in Europe. During an average year the total catch is 1.1 million tons. Most of this is cod and herring, 50 million cod fish being caught in the northern part of Norway alone. Most of the fishermen are independent and own the whole or a share in their boat.

A tendency towards capitalisation has been counteracted partly by giving economic help to the independent fishermen and partly by legislation designed to prevent the development of trawl fishing.

Many of the people who are employed in fishing also own small farms, which they themselves run in between the fishing seasons.

The women take an active part in the work on those small farms. The farmers cum fishermen rarely employ labour. They own their own farms and boats and run them both by themselves. The farms are, as a rule, very small, and lie spread along the various fjords and out on the numberless small islands which surround the coast. On account of the situation of the farms a large number of people live such isolated lives that weeks and months often pass without their seeing anyone besides the people belonging to the family.

Quite a few of the coast population are engaged in the whaling industry. The modern pelagic, or open-sea whaling, has been developed largely through Norwegian initiative, which, until the war started, gave the Norwegian whaling fleets a virtual monopoly. More than 10,000 whales were caught in 1939, with a total production in oil valued at nearly two million pounds sterling.

A considerable number of the coast people and also of the rest of the population are seamen who spend a larger or smaller part of their lives outside Norway's boundaries and are only at home in their mother-country with their families at long intervals.

The Norwegian merchant fleet is the fourth largest in the world. In 1939 it consisted of nearly 2,000 vessels representing about five million gross tons. This is equivalent to more than 1,600 tons per head of population, as compared with 450 tons per head in Great Britain and less than 100 in America. Most of those ships are now, as you know, in the service of the Royal Norwegian Government, and have taken part since the first day of the war in the carrying of vital products and food stuffs for the Allies.

Those of the inhabitants who are engaged in industry are mainly concentrated in the larger towns. Our industrial enterprises are of fairly recent growth, but, before the war, they were increasing rapidly. Electricity is to a large extent used instead of coal in our industries. Norway has Europe's greatest water power resources, calculated at 9.2 million "all the year" kw., and most of it comes from easily developed water-falls.

It is obviously very difficult to give a general survey of the living standard in a country like Norway, with its great geographical

differences and with so many differences of economic and living conditions generally.

By and large, however, it can be said that the standard of living of the population as a whole was very high before the war and was rising continually. The difference in the living standard of the various classes of people was not so great as in most other European countries. In the first place, we have a comparatively small financial "upper class," and apart from this the difference in the standard of living of the large "middle-class" and that part of the "working-class" which was in continuous employment was small.

Even though the living standard was comparatively even, the ways of living were highly divergent.

It is enough to point out the huge difference between the mode of life for the fisherfolk in large portions of the West-country and Northern-Norway—who lived a relatively isolated life and subsisted to a large extent on the products of their own labour—the fishing and the tiny farms they possibly had and for industrial workers in the towns with all their opportunities for companionship, organised living and pleasures, and with the comparatively uniform economic standard which gave them the opportunity of a more varied catering and better housing than otherwise usual. We know that the German occupation authorities have found our standard of living too high and that their programme has been to lower this standard by pressing the people to greater production for smaller profits.

Before I begin speaking about the social and medical services in Norway, I should like to say something about the Norwegian language and the facilities for education as well as about the means of communication of the country.

Norwegian is closely related to Swedish and Danish, and with those languages constitute the Scandinavian branch of the Teutonic language group. There are practically no difficulties for Norwegians, Swedes and Danes to understand each other both in speech and in writing. A fairly large proportion of the population have a working knowledge of foreign languages, especially English and German.

In comparison with other European countries, education is of a high standard in Norway. At a very early date claims were raised in Norway for a general education of the people as a whole and schools providing for this education were established in Norway at an earlier date than in most other civilised countries.

Children attend primary schools from the age of seven until they are fourteen. Attendance in these schools is compulsory.

After concluding the elementary school training a large percentage of the children go on to secondary schools, which cover the different systems of higher education.

Private schools are practically non-existent. All compulsory education is free and most of the state education is free also, the pupils attending High Schools or Universities are assisted by generous maintenance grants.

In order to obtain a picture of living conditions in Norway, and particularly if this is to be done to assist with planning relief-work in Norway after the war, special attention must be paid to the system of Communications which are characteristic of the country. As Norway, more than most countries, is a coast-country, sea transport plays a more important part there than in most other European countries. Both passenger and goods traffic between the south and the north of Norway has largely been kept up through the years by coasters, partly vessels which run up the whole coast from Oslo to the northernmost parts and partly by local-boats which have shorter runs. Apart from those of the inhabitants who live on the islands, quite a large number of the population of the fjords in the west and north are completely dependent upon ship communications.

The interior is joined up by railways and a fairly wide network of roads. Up to some few years ago the railway from the south only went as far as just north of Trondheim. Several stretches of the intended railway from Trondheim are now completed, but there is, as yet, no comprehensive railway communication with the far north of Norway. From the eastern counties and to the west country there are railways connecting Oslo with Stavanger along the south Coast and also from Oslo to Bergen and from Oslo to Trondheim. All the railways are State-run. Should Norway be invaded, one must expect that railway communications between the various districts will be more or less cut.

The road-net is quite well developed and covers a total of about 26,000 miles, of which about half is main roads. Only a small portion of the roads are paved, however, and even the main roads are not by any means so broad as to take the same amount of traffic as say the British main roads. Many of the smaller roads are only just, or not at all, suitable for motor traffic. Further, a small number of people live in such a way that they have no direct connection with the road-net, but have only access to the wider roads through very narrow byways or footpaths.

In the winter, particularly, the very thinly populated districts are sometimes cut off for weeks at a time. The larger roads are usually kept open with the help of the snow-ploughs, but even in peace-time this is often difficult in certain places during the very cold weather. Communications can be specially difficult during war-time and immediately afterwards, on account of a lack of petrol and oil not only to keep private cars and lorries going, but also for the ploughs needed to keep the roads open.

The medical and social services in Norway differ in many ways from the equivalent services in other countries, as for example in Great Britain. The things that characterise the Norwegian services are due to the peculiar geographical conditions prevailing in that country and the peculiar means of communications which I have just mentioned.

The widespread population in scattered districts is the reason which has made it necessary to organise the administration of those services in quite a different way than in other countries. The most

obvious difference is that in Norway the State and County Councils have taken over a larger part of the medical and social services than is usual elsewhere.

The result has been that the medical services are, in many ways, more centralised. A further characteristic is that we have a larger number of qualified doctors than any of the Scandinavian countries, or for that matter, most of the European countries. All in all, in Norway there are at present about 2,600 doctors, which is an unusually high figure in comparison to the size of the population.

As we have only one University in Norway giving medical education another characteristic is that the standard of education among doctors is more uniform than in other countries where there are several universities and numberless hospitals.

The Public Health Services are in the hands of 380 Public Health officers. In order to give you an idea of the administration of those services, it is necessary for me first of all to give you a resume of the ordinary system of local government.

The whole country is divided into 65 urban and nearly 700 rural districts ranging from Oslo and Bergen—each of which forms one town council—to small towns and country districts containing a few hundred people only.

Each district has an elected council and is granted certain taxation rights by the state, together with wide powers of self-government in such matters as health, under government control. The large number of small sparsely populated districts with such large powers of self-government is worth noting.

The rural districts unite in forming larger governing bodies called "fylker," which are more or less comparable to counties. There are 18 of these. They are ruled by a county governor and a county council and have their own income.

The above-mentioned system is of special importance in connection with the economic side of the Public Health Services.

The public liabilities connected with expenditure on the health services are always borne by one of these three: the urban or district council, the counties or the State.

The Head of the Public Health administration for the country is the Director of Public Health, who is subordinated to the Ministry of Social Welfare. In addition to the supervision of all medical activity of the country, he prepares the Medical Budget, submits bills and regulations regarding health, proposes qualified candidates to official medical posts and generally acts as professional adviser to the Government.

The said 380 Public Health Officers preside over the local Boards of Health, supervise the general sanitary conditions and report to the Director of Public Health. They also supervise the care of all patients suffering from tuberculosis and epidemic diseases as well as those of the insane who are cared for outside hospitals. Finally, they attend to

the indigent sick of their districts and examine all school children at regular intervals.

In many sparsely populated districts the Public Health Officer is the only doctor and is, to a large extent, engaged in ordinary practice. Usually he has one or more Public Health nurses as his assistants and in larger towns or districts several assistant-doctors and sanitary inspectors. Many of the districts are fairly large, especially in the sparsely populated parts of the country where there are districts covering an area of up to about 4,100 square miles. Each of the 18 counties has a County Medical officer, who acts as consultant and as an intermediate between the Public Health Officers and the Director of Health.

The local authority for Public Health is a Local Board or Health Council. These bodies are typically Norwegian and were established by the Public Health Act of 1860 in order to arouse public interest in, and responsibility for, matters of health and also to give the people a say in the settlement of local sanitary and hygienic conditions.

This law is still in force with a few comparatively unimportant alterations, and it is the basis for the whole of our sanitary and hygienic system. Within the frame of these laws we have built up our Public Health Services and have kept pace with the great developments which have of late taken place in this field. On certain points, as for instance in food control, special laws have been voted, but those are all framed according to the system laid down in the Public Health Act. According to this law there shall be a Local Board of Health in every urban or rural district. As you will remember, there are about 60 districts and accordingly an equal number of Boards of Health.

In the rural districts the Board of Health consists of the Medical Public Health Officer as chairman, of the entire District Council, or a part of it, as members, and further, if necessary, two others who do not belong to the District Council. One of the members must be a woman.

In the towns the Board of Health also consists of the Medical Officer as chairman, the Magistrate, the City Engineer and four other members, including at least one woman. The four members are elected by the Municipal Council. The duties of the Board of Health are to safeguard the Public Health, to preserve and to improve it.

The Board of Health is endowed with great and independent authority and may interfere in various public and private matters—if necessary, with the assistance of the police.

If the decisions of the Board mean financial expenditure, these must first be agreed to by the Local Council, this if the law has not decided from which of the public funds the expenditure is to be met.

If I have spoken at length about these Local Boards of Health, it is because any medical or relief work carried out in Norway after the war will have to be done in co-operation with those bodies to a greater or lesser extent. The Boards of Health have proved to be very effective, particularly perhaps in the larger towns where there is a fairly large staff of doctors, nurses and other medical personnel attached to them.

In many country districts where the Chairman of the Board—that is the Public Health Officer—is the only medical authority and is consequently largely engaged in private practice, the Boards are not as effective as could be desired.

Just as we have a relatively large number of doctors in Norway, so we have a large number of nurses. Only a few of these, however, are trained in Public Health work, and further, except in the larger towns, we have very few sanitary inspectors.

We are very well equipped for peace-time conditions as regards hospitals. The greater number of those are Municipal or County Hospitals.

Practically all the hospitals for the insane and those for people suffering from tuberculosis are run by the State. There are still some private hospitals in Norway, but they are very few in number. Some of them are owned by religious bodies or voluntary organisations. The private hospitals, most of them situated in cities, were much more important half a century ago. Now they are of very little importance and many of them are associated with County or Municipal Hospitals. Some of our public hospitals are still mainly concerned with surgical work, but they are more and more being fitted with facilities for general medical work.

Almost all our Municipal hospitals and our County hospitals are fully up to the standard found in other countries, and they give the best medical service available in Norway.

The result is that the public has a very strong confidence in these hospitals, which are preferred by rich and poor alike to the private nursing homes. In spite of the fact that the public hospitals have only one kind of accommodation for all, they enjoy the greatest popularity. In the few more expensive private nursing homes one may enjoy greater personal comfort, but the rapid advance of medicine during recent years has brought with it an ever increasing demand for modern and more expensive equipment, so that the smaller private nursing homes cannot compete with the public hospitals in these matters.

When speaking about medical and hospital conditions, it may be best to say a few words regarding public insurance against sickness in Norway.

This was instituted in 1911. During the first twenty years only those who were working regularly on low wages were included, but in recent years the limits for compulsory and voluntary membership have been widened so that the groups of the population who are not insured are very small and unimportant.

I do not have time enough to go into details here, but I can confidently say that we have a fairly effective insurance system against sickness in Norway.

Before the war the standard of health was very high and was rising continually. In this connection it may be noted that the actual physical growth of the population was also on the increase, for instance,

with regard to height and weight. The average height of Norwegian conscripts before the war was about 5ft. 8in., which is the highest figure for the Northern peoples. It may also be of interest to note that this question of height is also of importance in connection with the working out of the need for calories, in as much as Norwegians, partly on account of that average height and partly on account of climatic conditions, need approximately 10 per cent. more calories than the populations of other countries.

The average age of the population in Norway has also increased during the past 40 years, and is now approximately 62 years for the population as a whole. This high age average is to a great extent due to the low level of sickness in Norway, and particularly to the low rate of infant mortality. In 1936 the infant mortality was lowest in New Zealand, where it was 31 per 1,000. Holland came next with 39 per 1,000, and then Norway as number 3 with 41 per 1,000.

Unfortunately I am not in the position to give the figures for Norway after 1939, but from the latest figures in my possession, those from 1936 to 1938, the figure for Norway had been reduced from 41 per 1,000 to 37.5 per 1,000. The infant mortality rate for *Oslo* has been the lowest in the world for a number of years and is at present about 25 per 1,000.

The total number of deaths in Norway has fallen from 15 per 1,000 in 1930 to 10 per 1,000 in 1934.

The many reasons for this favourable development are a number of factors which have helped to reduce and counteract sickness and death risks. I would first of all mention the higher standard of living as a whole and particularly the betterment of nutritive conditions. The large development in agriculture, better communications and the increasing amount of international exchange of produce all have helped to give a quantitative and qualitative betterment of Norway's food conditions. The Germans are now trying to destroy this improvement.

The reduction in the death-rate is partly due, doubtless, to the innumerable social and medical enterprises which were started in Norway during the past 40 years and also to the comparatively widespread propaganda on health matters which has been made during the same period.

The most frequent cause of death is cancer, then senile decay and tuberculosis as number 3. About 15 to 20 years ago the most frequent cause of death was tuberculosis, but the frequency of this disease has been greatly reduced during the past few years. Death through epidemics is comparatively rare in Norway as our country has for a number of years been exempt from the most serious epidemics such as smallpox, typhus, cholera and plague. Since the German invasion of Norway we have had a few cases of typhus among the Russian prisoners of war.

With reference to the fight against tuberculosis, I would mention that the number of new cases was also greatly reduced during the years prior to war, *i.e.*, by about 27 per cent. from 1926 to 1935. In certain

counties tuberculosis had been more or less eradicated before the war. In spite of this, however, the number of new cases was still fairly high, about two per 1,000 of the population. Before the war intense work was being carried out to discover sources of infection and to improve the conditions for the treatment of persons already infected with tuberculosis, and this work, together with the improved social conditions and improved nutrition, enabled us to hope, before the invasion, that tuberculosis would be successfully defeated in the next few years.

The war has destroyed these hopes as well as many other possibilities.

The standards of living and health have altered in many respects since the Germans have occupied the country. Unfortunately I cannot give accurate figures as those are not in my possession. I will, however, mention only those conditions which I know for certain.

We know that the conditions of nutrition have become much worse since the German occupation. The most striking thing at the moment is the deficiency in calories, which causes malnutrition. Trustworthy reports from Norway show that the calory consumption is now between 50 and 60 per cent. below normal. These figures cover adults. With regard to the children the situation has been better as they have, in most districts, been able to get a sufficient amount of milk. For the older children and for the adolescents the position has been, however, much worse.

The natural result of the large loss of calories for the adults is a large loss in weight. We are informed by doctors and hospitals in Norway that the normal loss in weight is one to two stones, although we hear quite frequently of much greater emaciation involving a loss of between three and four stones.

This is particularly true of tall elderly men, who, as a result, often have a pre-senile appearance. Usually this loss of weight is followed by a feeling of inertia, tiredness and decreased ability to work. The epidemics have increased strongly. This is the case in particular with acute gastro-enteric fever, which has become unusually frequent during the last years. The same applies to diphtheria, which prior to the outbreak of war was seldom met with in Norway. Epidemics of diphtheria were notified all round South Norway during 1941 and 1942. We have also had confirmation that there has been a remarkable increase in the number of cases of pneumonia. Scabies, which before the war were seldom found in Norway, have now increased by several 100 per cent.

Further, it would appear that cases of lice are now also frequent, although those were very rare before the war.

There has also been an increase in the number of notifications regarding other epidemics. To what extent those have been due to malnutrition it is very difficult to say, but there is at any rate reason to believe that malnutrition has contributed towards them. The spread of certain diseases has doubtless been helped by the lack of soap and of other means of keeping up the high standard of cleanliness which was usual in Norway before.

With regard to tuberculosis, there was at first no apparent increase in the number of new cases. This state of things appears to have changed lately and a number of doctors and of hospital nurses state that the cases of tuberculosis now met with are usually more serious than previously.

From information received it would appear likely that the food situation in Norway will deteriorate in the Spring, and that the situation then will be quite catastrophic.

I would like to say a last word about certain voluntary organisations in Norway, which are interested in health and social work. As previously mentioned, medical work is under State control to a larger extent in Norway than in other countries. There are thus very few private hospitals in Norway that are run as private institutions. A number of the social and medical enterprises which are now run by the State were originally started by voluntary organisations and were only taken over and enlarged by the State after the private bodies had got them going by their own initiative.

One of the largest voluntary organisations in Norway is the Norwegian Red Cross, which was established in 1865. During the first few years of its life the work of the Norwegian Red Cross consisted in helping the various war-torn countries of Europe in the form of money, medical personnel, doctors and nurses. The Norwegian Red Cross has continued this work during all the later wars, among other things by sending out complete ambulance units.

During and after the last Great War the Norwegian Red Cross gave assistance by transporting and looking after war-invalids, and by sending money, food and clothing to the countries ravaged by hunger. In 1894 the organisation turned its attention to the training of nurses, and the Norwegian Red Cross has at present seven or eight colleges for nurses in various towns. In a majority of our hospitals a smaller or larger number of the nursing staff consists of nurses trained in those colleges.

A number of the smaller hospitals, sanatoria for the treatment of tuberculosis, and small wards in various parts of the country are run by the Red Cross. Apart from this work, the Red Cross had before the war large stocks of medical supplies and equipped field hospitals for dealing with epidemics and disasters during peace and war. The members of the Norwegian Red Cross before the war numbered some 100,000. The Norwegian Red Cross had its headquarters in Oslo, but it has local clubs in most towns and in a number of rural districts.

The Norwegian Red Cross is continuing its work during the war, even though the Germans have placed many difficulties in their way. The Central Offices in Oslo are under strict control and pressure from the Germans and we cannot therefore feel the same confidence in the Norwegian Red Cross now as we had before.

The local organisations are in most places freer from German interference and can therefore continue their work to the advantage of the community.

Another large voluntary medical organisation I would mention is the Norwegian Women's Health Association (Norske Kvinners Sanitetsforening). As far as I remember, this organisation has a larger membership than the Red Cross and more local groups. This Association, however, is not an international organisation like the Red Cross. Apart from the international objects of the Red Cross, both organisations are interested in the same aims.

The Norwegian Women's Health Association also runs a number of smaller hospitals, runs nursing schools and has a large number of nurses working round the country.

A third large medical organisation is the Norwegian People's Aid (Norsk Folkehjelp), which was started a few years before the war and which was growing very rapidly until the Germans stopped it after the invasion.

This organisation was a by-product of the Norwegian National Trade Union and was interested in various matters within the medical framework.

Apart from the larger medical organisations I have mentioned, there are numberless other organisations, some of which run general enterprises for the betterment of the health of the population or who have concentrated on special aims.

After the beginning of the war in Norway a central organisation was established to co-ordinate the activities of the various medical organisations. This organisation, which was called the National Aid (Nasjonalhjelpen), took over independent objects little by little and is now a half official organisation practically speaking, under Nazi domination.

Consequently it is receiving less and less support from the Norwegian population.

In planning post-war relief, it is obviously of the greatest importance to know to what extent one can depend on the assistance of the voluntary organisations. Even if they are now wholly or partially controlled by the Nazis, we can assume that they will be more than willing to take up their previous work or to continue what they are now doing under the German control.

Should part of the country become free before the whole, we can likewise assume that the vast majority of the local organisations will become completely trustworthy under the direction of Norwegians, and take part in the relief work to the fullest extent of their existing stocks, etc., and that they will certainly do this in loyal co-operation with the legal Norwegian authorities.

Acting on the assumption that Norway will be freed in a comparatively short time, we may presume that we will have a fairly large number of medical personnel at our disposal on the spot to assist in the relief work.

Further, we can assume that the voluntary organisations will place unqualified personnel at our disposal for work which does not demand special qualifications.

If, however, Norway should continue to be occupied for some time to come and the nutrition situation and the standard of health became even worse, and if the Germans continue to terrorise and remove the best of our people from their jobs, then we will doubtless need help from the exterior.

Unfortunately we have not sufficient men and women outside Norway to train suitable persons for relief work. All the Norwegians now outside Norway are engaged in vital war work from which it would be difficult to release them. Any English or American women who are willing to do voluntary relief work in Norway after the war would therefore be welcome if the situation should deteriorate to such an extent that we could not provide sufficient personnel ourselves.

DISCUSSION (Norway)

Question. Do I understand from the last part of the lecture that Norway is so very highly organised and efficiently run with regard to social services that, if the country were to be liberated within a comparatively short time, the Norwegians could carry out the necessary relief work themselves? Would outside personnel be of help, such as welfare workers and social workers? Would nurses be needed?

Answer. We have a fairly high number of medical personnel and also of unqualified persons who can deal with relief work. If Norway is liberated soon we should not need help of this kind from other countries, but there are lots of other things that we shall be very glad of indeed. I mean then that at the moment we should not need special personnel. Of course, it is very difficult to say how long the Germans will remain.

Q. Is Norway doing what the Dutch Government is doing, accumulating a reserve of clothes for post-war use? Is there a depot for this purpose?

A. Yes, we have done something towards that, particularly over in the United States, and we have also been on the market and bought things from the Ministry of Supply. I think that when the war is over there will be a very great shortage of clothes. People who have just come from Norway tell us that all clothing is very scarce and that it is quite impossible to get, for instance, a new pair of shoes, specially for children. So we are trying to meet these needs.

Q. About the language, would the medical officers speak or understand English? Is Norwegian very difficult to learn?

A. As far as I know, most foreign people think Norwegian difficult. All the medical officers speak English more or less fluently, they understand it and also the students. A fairly large percentage of the population understand English.

Reverting to the first question, the lecturer said: About the question of personnel; as you know, I am a member of the Technical Advisory Committee on Medical Supplies and Services to the Inter-allied Committee on Post-War Relief, which is dealing

with such things, and I have told the committee what I have told you. We are not asking for outside help if possible, because we feel that most of the other countries will need much more help than we shall. As far as we know, the need of personnel is greater in some countries than in ours, and we do not wish to take help from them more than we need.

DEFICIENCY DISEASES

By DR. R. B. HAWES

Consulting Physician to the Colonial Office

The most important thing to define is what is meant by a deficiency disease. If you had had nothing to eat at all you would die of starvation, but you would not show signs of deficiency disease. If, however, we fed you on white bread alone or on maize alone, with perhaps a little protein, you would suffer from deficiency disease, due to a lack of fats, proteins, minerals and vitamins. The symptoms you would show and type of deficiency would depend largely on how the grain was being milled and how much other protein and fats you were taking. From the point of view of symptoms, these would vary from person to person and from place to place, depending upon many factors.

Now the first type of disease, starvation, I mentioned I am not going to deal with. If I fed you on whisky alone you would only take carbohydrate and you would suffer not only from a deficiency of no fats, protein and vitamins, but also from alcoholic poisoning, a deficiency and food poisoning. You may see on the Continent cases where you get malnutrition and poisoning from eating grain that is not properly milled and is contaminated by a poisonous fungus called ergot. Again, often people who are starving are not careful about the kind of fungi or mushrooms they eat and there occurs actual illness from eating poisonous varieties.

What I want to deal with is deficiency disease due to unbalanced diet. It is not necessarily the starving or the very ill or the under-nourished person who gets a deficiency disease. From my own experience, having looked into the matter from the point of view of our present diet, I can pick out from among a group of children, rather fat very well nourished boys and girls, examine them and they would all show certain signs of deficiency in a very mild condition, from the over-eating of perhaps bread in proportion to the remainder of their diet. The great thing is to get a diet in the right proportions. Those children's diet is unbalanced, although not sufficiently so to do any damage.

Vitamin shortage, which gives many of the symptoms, forms only a small part of the problem you will have to deal with. I intend to speak of a few of these and very shortly for the time is limited.

First, I think, in importance is vitamin A. Now this vitamin is made up in the body by changing the colouring matter in various vegetables, carotene into vitamin A. This carotene is present, as

Lord Woolton has told us, in carrots, in yellow maize, in the yolks of eggs and in some oils, and it is changed into vitamin A in the body. If you take milk and butter you get vitamin A itself, for it has been made from the carotene in vegetables eaten by the cow and then secreted in the milk. Now what are the results of deficiency? The first symptom you notice is a lack of adaption to the dark, so that if you go from a bright room out into the black-out for a few seconds you cannot see much, and if you are suffering from a deficiency you take a long time to adapt yourself or you cannot see at all. No man or animal can see in the real total darkness. The same thing happens if you are blinded for a moment by the glare of a car and cannot see for a few seconds after it has passed, if there is a deficiency you cannot see for a long time afterwards. It is not always, however, deficiency disease that will give dark adaption difficulties, so that in treating such cases you do not know sometimes whether it is due to vitamin A or not. But you can give cod-liver oil or something containing vitamin A and you will find that the condition is cured very rapidly. I have, in fact, been accused of magic by people who have been treated because the cure is so rapid. Why does vitamin A do this? Actually part of the pigment at the back of the eye is made up with a compound of vitamin A, and this becomes exhausted as you look at the light and is re-made afterwards. Very bright light exhausts the vitamin quickly, so that if you have not much in the body it takes a long time to restore. Vitamin A is stored in the body and a person who takes in a considerable amount of it has a lot in the liver and can go for six months or so without it and show no sign of a deficiency. On the Continent there have long been defects of vitamin A in the diet, and you will see the results.

What happens to growing children when they have a deficiency disease produced by lack of vitamin A is that it causes a change in the epithelium or lining membranes of the body. Now, the first thing you notice is the change in the skin of the eye, and if you get a child to look sideways you will notice that it is crinkled and dry, and this is known as Xerophthalmia. This gets more marked and eventually the cornea becomes diseased and cloudy, it suppurates and blindness results. This is a very serious condition when the cornea is affected, and is known as keratomalacia, and is a cause of blindness. This is more often found in young children. The lining of the skin in the air passages, the trachea and bronchi also become affected, and the child becomes liable to pneumonia. When you get a dearth of vitamin A you find the death rate in children from pneumonia starts mounting up. Giving vitamin A to a case that already has pneumonia has no effect at all, even though the patient is suffering from a deficiency of it. You want to give it to prevent the disease. The same is the case with puerperal sepsis. If you give vitamin A to the mother before the child is born, that helps, but it is no use as a curative. So that the important thing is to treat such cases beforehand; in other words to see that everybody has sufficient vitamin A.

Stunting in growth also occurs and you will notice many children have middle ear disease and discharging ears, the lining membrane in the middle ear having become affected due to a lack of vitamin A.

In the treatment of cases of a deficiency of vitamin A give butter, eggs, liver, which are animal products, and also cod-liver oil. Then you should give carotene, which is changed into vitamin A in the body and which can be given in fresh green or coloured vegetables. This is a natural method as the body makes its own vitamin A with carotene. Now to give an idea of what the diet should be: Enough for a growing child is contained in half a litre of milk, one egg, three-quarters of an ounce of oil or butter and a medium dish of green vegetables or carrots. You will see that some of this food is difficult to get (eggs, and in some places milk, are scarce and green vegetables are not eaten in adequate quantities). Now there is one unfortunate thing with regard to some of the cases you will get, namely, that you may give a child plenty of carotene, but he will have lost the power of turning it or some portion of it into pure vitamin A. You must then give cod-liver oil, the vitamin in oil, or even in serious cases inject pure vitamin A because the absorbing part of the mechanism of the body has been so severely damaged that it cannot function and take up enough vitamin.

Next comes vitamin B. We have very recently learned about this vitamin, and it was originally imagined a single substance in the outer skin of wheat or rice grain. We now find that vitamin B consists of a large number of substances, and we call it vitamin B Complex. Complex B is contained in the outer husks of wheat and rice and most cereals. It is very important to know that Complex B is destroyed very largely in milling. We hope that in relief work in Europe we shall be able to supply a lot of yeast powder, which supplies this Complex. A common preparation of it is sold in England as Marmite, and this is made from yeast. You will see a type of deficiency disease, a lack of B Complex, in people who eat a lot of white bread or highly polished rice or maize on the Continent. I do not think that you will see what we find so much of in the East, beri-beri, which is caused by eating large amounts of rice and bread. I do not think that there will be sufficient white flour or bread to make this disease possible in Europe. You may see a mild form of beri-beri, but not the fulminating disease that kills very rapidly.

You will, however, see what has been in existence in Europe for many years, another disease due to absence of another fraction of Complex B—pellagra (rough skin). This has existed in Southern Europe, in Italy, France and Rumania for many centuries. Until recent years, when the cause was discovered, it was a great scourge also in the Southern States in the U.S.A. We found that a very large number of cases of pellagra occurred each spring, then died down and again the number went up the next spring and each spring the patient became worse. Very frequently in Italian villages the men who went to work in the fields got it and the women did not. This was a great puzzle and all kinds of insects and infections were supposed to be the cause, until we found that the whole thing was due to diet and that there is a substance that cures it called "nicotinic acid." Pellagra occurs very frequently among maize eaters, for maize has very little nicotinic acid in it. It does occur in England in very rare cases.

The disease itself tells you what it is—rough skin. It usually shows itself in symmetrical eruptions on both hands and feet and round the neck, and it used to be called the “sickness of the rosary.” As it occurs on the areas which are exposed to sunburn it can be mistaken for sunburn. If it only affected the hands and feet it would not matter so much, but it causes diarrhoea and mental changes. The patient becomes morose, irritable and dull and often gets worse each spring and eventually has to be taken into an asylum. If you want to find out if there is any pellagra about, look in the lunatic asylums. Sometimes these skin changes, like very severe sunburn, turn into blood blisters. In the intermediate period when the patient is better the skin on the hands and feet is wasted, dry and shiny, possibly like a washerwoman’s hands. It is dry and brown or more pigmented than the rest of the body in the period when the rash is not so red. The patient becomes very weak and sleepless and has tremors of the neck and hands. The cure for this disease is to give an adequate quantity of nicotinic acid or nicotinic amide. It is extraordinary in what a short time the patient’s mental troubles normally clear up in every way. It is one of the most dramatic things in the treatment. Nicotinic acid is very common in food; it is in liver, milk, eggs, cheese and yeast. All these contain nicotinic acid in big quantities. Meat contains some, and so in feeding cases of this kind you use ordinary food. Milk, meat, canned fish, wheat grain, kale, green peas, turnip greens and tomatoes are very good in preventing the onset of this disease, and in cases which are severe and require treatment you have actual nicotinic acid or amide to give by the mouth. This disease pellagra is the most common deficiency disease you are likely to see, so always be suspicious of deficiency of vitamin B in mental cases and ill people with rashes like sunburn.

Then there is also scurvy, an old disease; it was Captain Cook in the English Navy who discovered the treatment. It is due to a lack of ascorbic acid which is present in green vegetables and citrus fruits. In the old days on long voyages one-half of a ship’s crew often died of scurvy, until the time when Captain Cook found out that if they took fresh limes on board they stopped the trouble. You are likely to see quite a number of cases of scurvy owing to the lack of green vegetables. If you cook vegetables for a long time you are apt to destroy the ascorbic acid. Potatoes contain a considerable amount, especially new potatoes, and as these are eaten in large quantities now it may stop a lot of scurvy.

Now, in this disease, what are you going to see? The first thing is that this deficiency is one of the causes of slight anaemia, so that if you see anaemic children this may be due to a lack of ascorbic acid. In the early cases using greenstuffs or citrus fruits will prevent it. Severe cases are very different. Bleeding or spongy swollen gums appear which bleed at the slightest touch. Blood blisters appear under the skin and you sometimes get haemorrhage into the muscles which causes a great deal of pain and the patient suddenly becomes paralysed and cannot move his legs—a child will scream if you look at him or if you touch him. There is a living membrane round the bone which

keeps the bone alive and growing, and if haemorrhage has occurred under that, tight painful blisters form and the patient appears to be paralysed because the slightest movement causes intense pain. You will see that in cases that arise where there is a lot of scurvy. Remember that haemorrhages under the skin and muscle and bone cause simulated paralysis; the treatment of it is again dramatic. You will notice an improvement inside a few hours and in a few days the haemorrhage will have dried up and the picture will be a different one.

One of the gratifying things in treating vitamin deficient cases is that once you have got the diagnosis and put in the required drug or medicament or food, the cure is dramatic.

Another condition you are likely to see is lack of riboflavin, due to another part of vitamin B Complex with inflammation of the eyelids and roughness at the corner and top of the lips. These are of not much significance, but it may cause also a serious nervous condition and must be treated. For riboflavin give liver, yeast, eggs and milk, and some vegetables such as spinach and kale.

Vitamin D is very important. It has been made synthetically and has been put on the market as a drug called calciferol. It is contained in various oils, milks, eggs and butter, and in this country we have added it to margarine to keep up the supply in food. After the last war in Vienna they suffered very severely from this deficiency of vitamin D, which causes rickets. In this disease the bones become badly developed and you may notice a lump where the cartilage joins the bone. There is a rickety "rosary," lumps on the ribs where the rib and cartilage join. What happens is that in some cases the bones get soft, the legs bend and the pelvis becomes deformed. Another condition which occurs and which is comparable to rickets and due to a shortage of vitamin D is osteomalacia; you get this in pregnant women where the bones become soft and the pelvis deformed, which makes childbirth difficult and causes a large mortality among mothers. That is an extreme case of softening of the bone. The whole question of rickets is the question of deficiency of vitamin D, calcium and phosphates. Usually the deficiency in diet is lack of butter, milk and cheese. Give calcium and you can give some chalk or other of the various preparations of calcium and vitamin D, which cures osteomalacia and rickets. If you should not be able to get enough vitamin D or cod-liver oil or butter, then you can use sunlight or, as they do in hospitals, ultra-violet light. Cod-liver oil in the last war was sent in large quantities to Vienna and saved many of the children who would otherwise have died.

Vitamin K. When you get under-nutrition you get premature birth and premature babies, and when you get premature babies one of the frequent causes of death is cerebral haemorrhage; in such cases where premature birth is likely vitamin K is of use.

It is present in green vegetables and liver and is now being made up so that it can be injected and given as medicine. In these cases the expectant mother has to be properly fed with green vegetables which

contain vitamin K or have the actual vitamin before the child is born. This stops some of the cases of infantile paralysis and congenital disease which occur at birth and are due to haemorrhage.

The only other point that there is time to mention is protein deficiency or famine edema, where people have too little protein. If you give salt food to such people they become dropsical and you must cut down their salt and supply them with non-salted proteins. Salt fish and salt meat is often eaten in large quantities in starving areas and people get this famine edema. In prison camps in Japan the prisoners must be suffering from something of this nature.

Give sufferers from this deficiency skim milk, cheese, soya beans and lean meat and then they can go on to a normal diet, but very salty food must be stopped.

DISCUSSION

Question. You stated that pellagra shows more in men than in women in Italy when the men are in the fields and the women at home. Why is this?

Answer. We do not know. I do not know what the women did or ate in their homes. In those days we did not know that pellagra was due to a deficiency of diet, and they looked for some insect which might be the cause.

Q. Is there any danger of giving an overdose of vitamin D as a food?

A. Not as a pure vitamin. I have noticed that sometimes we are afraid that vitamin D, which we know is connected with calcium, might cause hardening of the arteries if given in large doses, but you would have to give an enormous quantity to do harm. I have never seen any sign that it is possible to give too much pure vitamin, but in certain cases I have had children coming in ill—children who have been treated and had bottles of stuff containing vitamins A and D and they have had too much of it. That illness is, however, due to the oil and not to the vitamin. You can make a child ill by giving it too much cod-liver oil.

Q. What are the signs of osteomalacia in adults?

A. Great pains in the bone and later bending of the bones as in rickets.

Q. Is it true that a person cannot make vitamin D if they have not got sufficient fats in their own body?

A. Well, you would have to be very very short of fats for that. Vitamin D is a compound of ergosterol and the greasy fats you have got in the skin contain some of it. To be so very short you would have to have a dry skin. It is made in the body by sunlight. There is quite a possibility that you might have too little of the vitamin due to lack of sunlight.

Q. What is the meaning of synthetic?

A. Made out of chemicals.

Q. Is it equally good?

A. Yes. The chemistry of vitamins has progressed very far.

Q. What is scurvy-rickets ?

A. It is usually called this when a child has haemorrhage under the lining membrane of the bone which causes simulated paralysis. Of course, you can get both diseases together. Originally the name of scurvy-rickets was a misnomer due to the fact that the haemorrhage gave it the appearance of a disease of the bone.

Q. Can rickets be completely cured ?

A. Yes, but bone deformity cannot.

Q. When the skin is affected, do you treat it externally ?

A. No, you treat the person by mouth. It is no use treating the skin in such cases.

Q. Is there any great advantage in introducing fats into diet ?

A. Yes, but one of the great difficulties is going to be the shortage of fats and oils.

Q. What is the advantage of fats ?

A. We are only just beginning to learn about them now. They are extremely important to the general metabolism of the body. You can make fats out of carbo-hydrates and the people who eat enormous quantities of potatoes get fat. Fat is not a pure substance.

Q. Does restricted diet make the bones knit more slowly as in orthopaedic cases ? It does seem as if some cases take much longer than others.

A. Probably, but the actual knitting of the bone is quite possible with our present diet. In Europe with very poor diets you get slow healing.

DISCUSSION AND CLOSING SPEECH

By VISCOUNTESS FALMOUTH

Chairman, War Organisation Pre-Armistice Relief Overseas

I told you at the beginning that we had arranged this course, not in any sense as a finished training, but as an introduction to the training that is required for relief work. It is obvious and must be so to everyone here that so vast a subject cannot be dealt with in a week. We have tried to give you as wide and general a picture as we could for several reasons, one being that we want you to see how much there is to learn, and another to see how much you have got to know before you can really undertake this work. I hope you will fill up this introduction and training with further training. What I want to talk about is what general lessons have emerged from these lectures, not in the technical sense, but the general impressions that have been created in my own mind and in yours. I would like to put those under two main headings : the general impression, and those impressions as translated personally and individually to ourselves.

5/ The general impression that I got was that there is one guiding principle that we ought to keep in our minds very firmly when we are considering this work, a principle that whatever we do—in whatever branch of work, and wherever we are—we are there to help other people to help themselves, not just to distribute relief. We are there primarily as stop gaps in a state of emergency, until people can get going and until the social structure is once more in working order. Mr. Astbury made that point clear to us, and I valued his lecture enormously, because he brought out the vital necessity of re-establishing individual families and people in their normal lives so that they should be ready to take over themselves. I think we want to bear that in mind, whatever we do and in whatever state of emergency we find ourselves; we want to deal with such emergencies from the point of view of what is behind them, to build up and get the people themselves as quickly as possible back to a normal state of life. When the transition period is over, and the country is beginning to stand on its own feet, we do not want there to be any break, any sudden ending of one state of affairs; we want to be able to slip away and for the people not to realise that we are no longer there and that their own people are running the country in the accustomed way. I think you will agree with me that one point emerged in all the lectures given by members of the Allied Red Crosses. Did you notice how everybody emphasised first of all the extraordinary value of their own countries' services for general relief work, and secondly, no one was ready to admit that they had been very much altered by the war? Now I am very much afraid from what one has heard that the picture is not as rosy, but I am perfectly certain that behind all the rosy pictures was a feeling—"We do not want a lot of foreigners pouring into our country, telling us what to do!" That feeling was behind every one of those talks. They hope a certain amount of organisation will still be there and, although they would be most grateful for any help to get the machine running again, it is *their* machine they want to run and not one which we have created.

That is one of the most important things, and then there is another—the need for really trained workers. If there is one thing that is more shocking than another, it is the thought of untrained eager enthusiastic English men and women setting out and settling down in an unfortunate country, trying to do relief work in it. Miss Pye brought that out very well. We must have a knowledge of the work that we are going to do. If we do not, quite apart from the fact that we may do real physical harm and we may kill more than we cure, we shall do an enormous amount to destroy the confidence and good relationship we want to establish in the countries we go to. It is always very difficult to help somebody else. Those of us who have ever done any social work and tried to help with money or gifts or advice, know that beneath all the gratitude is a certain glimmering of resentment that the giver is in a position to help instead of being on an equality. That feeling is going to be very strong. Only by really knowing our job and really proving that we are efficient and can carry out our share shall we deserve the gratitude of the people we are trying to help.

Thirdly, I am convinced that it is a very strenuous job ; it is most exacting work, work which will call for every ounce of our energies, of body and of mind. Only the most efficient and suitable kind of people are going to be able to do it.

I think that those are some of the things which we have learned quite apart from the actual instruction, and they are vital to our work.

On the personal side, how do those things affect us ? We ought to ask ourselves the question : "What do I require, bearing in mind the need to be really efficient ?" First of all we want to have the right attitude of mind and the right approach to our work—I mean the right approach to the country we are concerned with and the particular problems of the relief work. We ought to know as much as we can about any country we go to. When we go we ought to have some reasonably good knowledge about the place and the people, how they live and what work they do, something about the standard of life and what they are accustomed to. Remember that those who have never been abroad before are alternately delighted and shocked, delighted to see certain things, shocked by apparently low standards which do not necessarily present grave problems to the people themselves.

Another point is that we must be sympathetic to the people we are going to help. Now it is not always very easy ; one thinks that one is going to be desperately sorry for the people who want help, but those of us who have seen people in certain circumstances of great distress know that these circumstances do not always bring out the best in people, in fact, often they bring out the worst. The homeless and the starving are not always attractive, so that we must have real sympathy and real understanding not only of their misery and distress, but also of the causes of all this. These may explain their tiresomeness and make us overlook those difficulties and feel a real understanding.

We must have technical knowledge in order that we may deal with the problems and have such knowledge at our fingertips. Nothing but experience will teach us entirely, but if we know the sort of thing that we are up against and how it should be dealt with it is wonderful how we can manage. We have got to have plans and we must not be easily carried away by emotion and tender-heartedness or by feelings of horror, because great disasters are a terrible thing to see and those of us who have never seen them do not realise at all how dreadful they may be. We must keep level-headed, and there I think we have had a good object lesson in Mr. Astbury's lecture. You noticed how he made the point when he was describing the work of the Friends in Vienna and in Wales, how detached they were, they came and saw what the problems were, then they went away and thought about them and then came back and applied their solutions wisely. I think we had an epitome of it in action when we heard Miss Pye's lecture. We have got to cultivate wisdom and detachment.

Next we must have health of body and mind. It is a work for the young, and in what we may call disaster conditions it should be younger people who go out—men and women between 25 and 45. As to women below 25, I am doubtful whether they are sufficiently

toughened and if their nerves would stand it for very long, for they are not always sufficiently formed to be able to face the emotional strain, nor have they had the experience. At a later stage there may be room for the older people because one hopes that there will not be these disaster conditions always, and later we can envisage more settled work. Then, too, there will be very important work to be done. Of course, there are always exceptions, some people are fit to go though older or younger, if they have special qualifications and experience; and there may be work with less physical hardship and more responsibility for people with these special qualifications. We must choose people who have had some experience of roughing it, such as Scouts or Guides or those who have been in one of the Services and knocked about a bit or had hospital training—that applies of course to many of you. Anybody who has never been away from home, has always had a comfortable bed and regular meals and possibly an uneventful life, is not going to find it easy to settle down and keep fit in conditions of great hardship.

Then with regard to health of mind: You want a quiet temperament, steadiness and above all not to be temperamental. That is one thing for which there is not much use in a unit—too much temperament in the sense that one minute one is up in the clouds and the next looking for the nearest river to drown oneself in. You want a capable sort of person who in an emergency is of use, does the right thing by instinct, a person who is sympathetic but not sentimental, someone who is cheerful and who has a sense of humour and sees the funny side. Above all, we need people who are really single-minded, who are there because they want to help, because they think it is a splendid thing to do, not because they think they will have a wonderful story to tell; people who are not self-seeking. If you want a more complete picture read St. Paul's famous description of love in the Epistle to the Corinthians—there is the ideal relief worker.

Thirdly, we want what one lecturer described as a sense of vocation in our work. You have got to be determined to give up everything to your work, your strength, your thought, your time, your physical energy, possibly your health and even your life. You have got to envisage yourself as a soldier envisages his service, regardless of cost. Of course, we hope that your health and life will not be asked for, but the relief worker has got to be prepared for it and, what is sometimes more difficult, to give up the little things that make life pleasant. It is easier to die well than to live well. Those are the lessons that we ought to get from the talks we have heard.

Now what about the future? What is the next step? You heard the present position from Sir Frederick Leith-Ross: he told you quite clearly the general lay-out and plan. Where people are wanted, when, and who are wanted is made known to the Council of which the British Red Cross Society and Order of St. John of Jerusalem are members and the Council discusses which Society is best suited to go to that particular part, so that there should be no overlapping and no understaffing and we should be able to provide workers

when and where they are needed. The War Organisation of the Red Cross and St. John will be under the general orders of the army before the close of hostilities.

I have had a number of questions on points on which people want enlightening, and we will take some of these questions first, and then I am going to ask you to raise other points—the more the better.

Q. Where will units be wanted, when will they be wanted?

A. First, when wanted, and where. In general, I think you have got to look at your papers and see the military situation. Remember we are not in a position that we have got the greater part of Europe, that our armies are approaching Berlin and that a great many countries have been liberated from the enemy and require help! If we really were in that position my answer would be easier, but the main facts are that until the military situation becomes clearer it is impossible to say where people will be wanted. All we can say is that as we see it now it will take some time to train people and that is not going to be done in five minutes and the sooner we start the better. Personally, however tiresome, I would far rather have people ready too soon than not soon enough.

Q. How will the personnel be selected?

A. By a selection Board. We shall ask anybody who volunteers and who is otherwise suitable in age and qualifications and availability to come before a Board which will consist partly of Red Cross and St. John's people and partly of experts who know conditions and will be able to judge whether volunteers are suitable. They will also have to have a medical Board to see whether they are fit, as this is very necessary.

Q. How many will be wanted?

A. It is impossible to say. Taking the state of the world at present, I should say a very large number. I do not think that we need be anxious about enrolling as many as possible, because I am quite sure that a large number will be needed.

Q. Will those who are doing war work be released?

A. I cannot give you any definite answer on that. The Council is going to raise the question with various Government Departments concerned. Even when we get an answer, it will depend on the individual case, but speaking entirely personally, I think that if the Government requires a large number of relief workers it would be very difficult to get them without releasing personnel from some other kind of war work. We should be quite prepared to put forward requests, but we cannot say with what result. The War Organisation would also be prepared to ask for suitable people or special units.

Q. Will they be paid?

A. Yes, if people are not in a position to volunteer the organisation will be prepared to pay up to a reasonable amount on an agreed basis. I cannot yet say what, as it has not been decided. It is hoped that a maintenance and subsistence grant will be provided.

Q. How will people be trained? How long will they be wanted for?

A. I want to defer the answer to the first question until later.* It is impossible to say how long you will be wanted for, but people should be prepared to do this work for some time. Later on when things are more or less fixed and we know more than we do now it may be possible to give people an idea of the period for which they will be needed. At that stage people must go for a definite period. I imagine that you will have to have a contract of service with a provision for resignation. You will not be kept for ten years without any option, of course! I do not think that the person who offers for six months only has much chance of being chosen quickly, although they might be later on. I do not want to put anyone off, but if you can say that you can go and stay as long as you are wanted, that is the best.

Q. If trained, are we certain to go abroad?

A. We cannot guarantee anything, as we do not know the numbers required, but those who are suitable and who have trained we hope to be able to send. I would remind you that if the soldiers were to say: I am not going to train unless I can go abroad and see active service—unless there was an invasion—we should all be in a bad way. Personally, I think you should be willing to take the risk that you might not be able to go and train in the hope (and very good hope) that you would get out.

* About training. We are going to send round a rather detailed questionnaire to people who have attended the courses, as we feel that we ought to have more information than we have got already. Among the questions are going to be some of these: Have you any special work that you are either qualified for or which you want? Secondly, is there any country you know or that you want to go to? Is there any particular language that you know or are studying? With regard to the first, if you have any special qualifications, we shall be glad to know of them and to take them into account, but if you have no special qualifications, and a great many will not have, then you will obviously be wanted to turn your hand to anything useful. Try to cultivate some special bent, as though you may be technically on general duty, if you have a special kind of work you like, you will probably find your way into it. We are going to try and arrange special courses and training through the country, as people cannot always get to London. When we get in the questionnaires we shall know where people are and be able to make arrangements for training in social work, feeding and so on. Our planning will depend on the answers and numbers of students available and lecturers.

Secondly, with regard to the country. We should pay attention to the people having a knowledge of certain countries and do our best to get them there if and when a unit goes. Do not say "I would love to go to Norway," or "I only want to go to Greece," and so on. We do want people who will go where the

need is greatest, they are the most useful to us, unless they have a special knowledge.

Thirdly, with regard to languages. If you have got a language, specially one of the lesser known ones, put it down. I agree that a language is most vital for some of the work. I am a little loth to recommend your learning one of the lesser known before you know whether there is any chance of your using it. I know that people are keen to start learning now and that you cannot learn a difficult language in a few weeks ; on the other hand, I am not sure that the disappointment and confusion that will arise if, say, somebody knowing Norwegian goes to Greece will not be worse than waiting a little longer. Start with French, which will get you to many places.

Do read about the different countries, whether you go to them or not ; it is very valuable to know something of the peculiarities of the different countries.

- Q. Is there any insurance for personnel who break down ?
- A. This is for consideration by the War Organisation.
- Q. Do you think it premature if those people who wanted to go to particular countries got together in groups of the countries chosen and pooled their information, books, etc. ?
- A. I think the idea can do nothing but good, so long as you remember that it is not certain that you will be able to go to the countries you choose. Any contacts and information are valuable and, all things being equal, we will try to put people with contacts in units. But it must be remembered that some countries may not need units.
- Q. Would horse transport be used and, if so, would some knowledge of horses be useful.
- A. Dr. Mackenzie said that in certain parts of Eastern Europe only horse transport can be used, but there is a great shortage of horses. A knowledge of horses could not possibly come amiss, even if you did not have to use it.
- Q. Do you think there will be any opportunity for visiting hospitals to see deficiency diseases in their early stages, so as to get a working knowledge of what they look like ?
- A. That is a very good point. I will take that up. It is not very easy to find them, but I will enquire about it.
- Q. It is quite obvious that a considerable training is required, but most of us are already in jobs. How are we going to get that training and carry on with our work ?
- A. That is difficult, but I think a certain amount can be done by lectures, and it is possible that something could be done by correspondence. There are various ways that we could explore, and I think that if people are likely to be going they might be able to get special release for training.

- Q. You mentioned a contract of service. When would that have to be signed? If it were signed before one was needed, home conditions might change when the time came to go.
- A. I think it would be signed when you were actually called up. If we call somebody up for a selection Board we should expect them to consider themselves bound to some extent—not legally but morally—unless there were some really good reason for withdrawal.
- Q. Do you think that actual experience of camping is essential?
- A. This is very important indeed, and I hope we shall be able to make some arrangements for camping experience.
- Q. Might I suggest that if we are to be immunised, we could get it over now, as I understand that everybody does not "take"?
- A. Our training is for selected candidates. I do not think we shall be able to judge people until we have seen their questionnaires, and I do not think that we should make a condition that they should be done beforehand.
- Q. Is there any way of testing people as to how they react to diet?
- A. Yes, there are various tests for diet, but I do not know whether it is possible for it to be done. I think we shall have to judge a certain amount by people's previous experience and whether they have been abroad or knocked about and proved whether they have good digestions. Of course, if they are known to have any particular weakness it would be different.
- Q. Will there be some standardisation of training over the country suitable to all?
- A. That has not been discussed yet. My own feeling is—but I am not speaking for the Council—that certain societies have extraordinarily good types of training, camping courses, etc. The Friends have a very good course, excellent lectures and social work, and it is quite possible that we could exchange students. We have several members of the Society of Friends taking this course.
- Q. Is all relief work likely to be voluntary or will some be done by the Government?
- A. I can only say vaguely, but I think that the Government will have to undertake some relief work. If conditions deteriorate voluntary work will not be enough and the Government will be obliged to undertake some form of relief through military and other personnel.
- Q. Will there be a possibility for further instruction for those who have been fortunate enough to attend this conference?
- A. Yes, I hope that you will put down on your questionnaire what special kind of training you would like to take.
- Q. Is there a definite age limit for immediate volunteers?
- A. I shall be able to answer that better next week, but I think probably volunteers will have to be on the youngish side.

Speaker : I have made notes of all the questions which I thought were useful and helpful, and though I am sorry not to be able to give answers to all the questions, I will bear them in mind and where possible we will go into them and deal with them.

Now we have come to the end of this course, and I want to thank everybody very much indeed for their attention and interest and their perseverance. You have, by your friendliness and co-operation, made our task of organising very pleasant and easy.

I am afraid you have had rather a grim picture of relief. We have been told to exhaustion that there is no glamour and no romance about it, that it is often very monotonous and terribly tiring, uncomfortable and sometimes very depressing. But I do not think it is ever entirely true to say that it is without gleams of brightness, because at the back of it all—through all the discomforts and distress and boringness—you have got the remembrance that through your efforts and your exertions, and your labours and perhaps your sacrifices you are bringing new hope, new health of body and peace of mind, new relief to what are perhaps the people most to be pitied of all to-day, the people who are homeless, starving, miserable and unhappy, and who, but for you, would have no hope of a better time to come. However little you can do at the actual moment, the very fact that you are there shows them that somebody cares and is trying to do something for them, and that is perhaps going to make all the difference between despair and hope, and help them to feel that perhaps after all there is something in the world worth living for. That is the attitude of mind that those of you who are going to do this work must try to have. I hope many of you will go and do the work well, for you will find it well worth while, indeed, it may well be the very best thing that most of you here to-day will ever do in your lives. The good wishes of us all will go with you.

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