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EDITORIAL

It might have been appropriate to begin these notes with a quotation from the editorial of October 1914; but that issue of the journal opened with a brief diary of events, an example which it is too early to follow at the time of writing. Here, instead, are some words written by George Borrow some eighty-five years ago which were copied out by the sender in August 1914 and are as apposite now as then:

"O England! long, long may it be ere the sun of thy glory sink beneath the wave of darkness! Though gloom and portentous clouds are now gathering rapidly around thee, still, still may it please the Almighty to disperse them, and to grant thee a futurity longer in duration and still brighter in renown than thy past! Or, if thy doom be at hand, may that doom be a noble one, and worthy of her who has been styled the Old Queen of the waters! May thou sink, if thou dost sink, amidst blood and flame, with a mighty noise, causing more than one nation to participate in thy downfall! Of all fates, may it please the Lord to preserve thee from a disgraceful and a slow decay; becoming, ere extinct, a scorn and a mockery for those self-same foes who now, though they envy and abhor thee, still fear thee, nay even against their will, honour and respect thee. Remove from thee the false prophets, who have seen vanity and divined

> lies; who have daubed thy wall with untempered mortar, that it may fall; who see visions of peace where there is no peace; who have strengthened the hands of the wicked, and made the heart of the righteous sad. Oh, do this, and fear not the result, for either shall thy end be a majestic and an enviable one; or God shall perpetuate thy reign upon the waters, thou Old Queen!"

Thoughts such as these must have been in the minds of most of us, though expressed in tones both less exalted and less gloomy. Members of the "services" are no more inclined than any others to welcome war; but the relaxation of suspense, and the feeling that war is less intolerable than peace under the only conditions on which we could temporarily have enjoyed it, have brought a certain relief. Whatever reverses and disappointments we may suffer—and it would be absurd not to expect both—there can be no doubt about the final outcome. The staying power and material resources of France and of the British Empire are immeasurably greater than those of Germany. They are far more developed and are likely to be more scientifically applied from the outset than was the case in the last war; but as in the last war, their effect will prove increasing and cumulative.

The Germans, on the other hand, have been existing under conditions approximating to those of war for some two years. They begin the struggle with a fully developed machinery which they clearly intend to use completely ruthlessly. Conquests may temporarily add to their resources, but otherwise their reserves must run down and their means of replenishment be restricted. It seems amazing that rulers such as Hitler who have given evidence of a certain hard, ruthless sense should believe that the democracies can be overwhelmed in a lightning war. One is driven to suspect that their actions are those of despairing and desperate men.

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Propaganda

More will be known, perhaps, by the time these lines appear in print of the effect of the propaganda leaflets which have been dropped on Germany. In the last war our propaganda service developed slowly and only showed its full effect towards the end. Then, as now, it was based on truth. The method followed two main phases: first, by providing the enemy with true and easily verified facts, a favourable

basis was laid for the acceptance of the second phase when the extent to which the common people had been betrayed and deceived by their rulers was made plain. At the outbreak of the last war, in Germany as in other countries, internal differences were forgotten, the oppositions voted war credits and nations became united. Propaganda made slow headway at first, and only truthful propaganda could prevail. Perhaps as a result of these experiences, there has been a tendency while discussing the setting up of the nucleus of the present Ministry of Information to lay undue stress on the necessity for propaganda to be truthful. When originally coined, the word described the proselytising activities of the Jesuits. In the period following the last war it began to acquire a faintly sinister implication. Now once more it is assumed that propaganda must necessarily be truthful. This is far from the case. A perusal of both the advertisement and news columns of the average daily paper affords ample evidence of the power of a propaganda which is based on what is not strictly truthful or what is in many cases deliberate falsehood.

In no country is the power of lying propaganda more evident than in Germany. There it has been amply proved that by shutting out the truth from the greater majority that majority can be made to believe one fantastic brand of nonsense one month and quite a different brand the next. The German State has for some time been cemented by lies. As the truth breaks through the reaction will be all the greater. But it will not break through easily or find ready ears. So we are wise to begin to put truth before the German people early. Our quarrel is not with them so much as with their rulers. With utterly faithless and utterly unscrupulous persons such as Hitler and his companions, there can be no peace.

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India

In our last issue it was suggested that India's share in bearing the burden of Imperial Defence could not be measured by the lack of any spectacular rise in her defence budget. Proof of the justice of this was soon given when early in August reinforcements from India arrived in Egypt and Singapore. Admittedly, as His Excellency the Commander-in-Chief pointed out in his broadcast speech on the Chatfield Report, the security of these gateways to the Indian Ocean is vital to India herself; but they are at least equally vital

to the Empire as a whole, and the promptness and smoothness with which these precautionary moves were carried out gave an instance of India's preparedness.

The possibilities for India at the present moment are considerable. No one in the British Empire could fail to be deeply touched by the spontaneous offers of service which have come from the humblest communities as well as from rulers and princes. These will not be forgotten. In the meantime leaders of nationalist opinion in Congress and in the Muslim League are faced with a difficult but momentous decision. They have proclaimed hostility to the British rule, yet by persisting in this hostility at the present time they will render direct assistance to aggression, imperialism and fascism which they have equally condemned, and they will also be acting in opposition to what has been clearly expressed as the wish of very large sections of public opinion. At the moment the Provincial Governments appear fully prepared to co-operate and to fulfil their functions. The manifesto issued at Wardha on September 14th after the lengthy meeting of the Congress Working Committee postpones a decision. It seems certain that if Congress decided to oppose the conduct of the war, it would risk loss of influence and stand to gain little; but if it decided to suspend opposition for the time being, advantage would not be taken of its forbearance; and if co-operation were decided upon, the British Government would be unlikely to remain unresponsive. A lead is called for. The Viceroy's address to the joint session of the legislature in Simla created a favourable situation. The suspension of federation, though only a suspension, was welcomed in almost all quarters. It is to be hoped that those responsible for India's political future will rise to the occasion.

The readiness with which rulers and communities have offered their services leaves no doubt that India has at her command ample resources of the finest man-power. The problems of finding commanders and equipment have to be overcome. India's industry is already able to meet many of the needs of the fighting forces and is on the verge of large-scale development. The expansion necessary to provide for defence and to meet the demands of the Empire and its allies round the Indian Ocean may well have to be very considerable. This stimulus may turn India into an industrial as well as an agricultural nation and have a profound effect upon her prosperity.

As regards officers, the material is undoubtedly available. The registration of European British subjects will help to discover it, and so should the efforts of the committee on the Indianisation of the officer ranks of the Indian Army whose terms of reference include ". . . to recommend such alteration in the system of recruitment to the Indian Military Academy as may be expected to lead to an improvement in the number of suitable candidates."

The Indianisation Committee

The committee concluded its second session in July after hearing a great deal of evidence, and on the 22nd left on a tour which included Karachi, Bombay, Poona, Bangalore, Mysore, Secunderabad, Hyderabad, and Nowgong during which educational establishments and Indianising units were visited. The committee reassembled in Simla on the 14th of August, but the pressure of business on its official members led to the adjournment of the session. It is hoped, however, that the committee will be able to complete its important work during the autumn.

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His Majesty's Government have now announced their acceptance of the main recommendations of the Chatfield Committee. The importance of this decision has naturally been overshadowed by the outbreak of war and it was unfortunate, though unavoidable, that pressure of business prevented the announcement at an earlier date of the extremely generous treatment of this country by the Imperial government.

The Chatfield Committee

It seems only logical that India should be at least jointly responsible for that part of her defence which must be conducted from outside her coasts. In the past her resources have only permitted her to cater for her immediate local defence relying on reinforcement by Imperial troops and on the protection afforded by the Navy and by the garrisons of the entrances to the Indian Ocean. Conditions on the frontiers of India have changed and potential threats to her coast increased. India can now distribute her resources differently and has already done so. This is not really so startlingly new as it might appear. We still rely on the British navy, on overseas garrisons of the British Army, and on the might of the British Empire in the background.

The gift of money and the generous terms of the loan which completes the sums needed to modernise the Army in India are therefore in no way one side of a business deal. Whether India

received assistance or not we should obviously have to dispose our available forces to the best advantage. There is now a prospect of increasing their efficiency by giving our man-power the weapons and equipment which it deserves. This has been becoming increasingly essential and it is hard to see how a country which is not rich could have continued to maintain forces of any value or avoided being almost completely dependent on outside help without this timely and generous assistance.

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The Gold Medal Essay

A total of four essays were received for the Gold Medal to be presented by the Institution this year. The judges have decided that none of them is deserving of the medal though monetary awards have been made. The subject-matter unfortunately makes it inadvisable to publish any of them. The number of essays submitted is not, we must hope, an indication of the degree of interest taken by members of the Institution and the defence forces in India generally in questions of the day concerning defence matters. If it were so, the outlook would be poor; but in fact, contributions on other subjects prove that this is not the case. The subject set for next year's essay is one on which it is hoped that people will have opinions to which they will be prepared to give expression.

Apart from the Gold Medal Essay, the pages of the journal offer to readers an opportunity of expressing their views on other questions. The paper is in no sense an official one, but it is believed that some members are chary of expressing opinions which they feel may not be acceptable to those in authority. It is true that under the regulations articles by serving officers have in some cases to be submitted for official approval to publication. This approval is rarely withheld though it may sometimes be necessary to make slight alterations to avoid making certain matters public or to protect tender susceptibilities. If an author is apprehensive that a lively article may incur the wrath of the authorities and secure him a black mark for life, he can test the reactions of the powers by asking us to submit his work under a nom de plume. We will undertake to keep his real name as secret as he wishes. Finally, while on the subject: there has been an absence for a long time of articles from our Indian members.

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The Frontier

The situation indicated above can be pleaded as an excuse for making this something of a "Waziristan Number" in publishing two articles on frontier policy. One presents the problem and its development, the other offers some immediate suggestions with which not all readers will agree. The only final solution of the problem is clearly disarmament, pacification, and improvement of the economic situation of the tribes. Unfortunately disarmament is not practicable in existing circumstances. For disarmament we must have pacification and for pacification it seems we must have disarmament. To spend money in endeavouring to improve the conditions of those who make the biggest nuisance of themselves seems hardly fair; and the example of the world as a whole has not been such as to lead the tribesmen to abandon the practice of investing their available resources in armaments.

It is probable that a final solution of this problem has now been still further postponed. One thing which can be resolved is to avoid wasting opportunities as we have done in the past.

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As for the immediate situation: there is a deterioration to be recorded. Early in July Ipi moved to Kharre within the Durand line and summoned his principal supporters. He was also visited by sympathisers bringing money and supplies, many from the Bannu district. He is reported to have ordered increased guerilla activity on the road between Bannu and Razmak: if so, his orders have been obeyed. During July and August the activities of hostile gangs have continued both in North and South Waziristan and the usual bomb planting and cutting of telegraph wires has been indulged in. A number of successful actions against these gangs have taken place and Ipi's efforts to rouse the tribes as a whole have met with no success so far. During August, air proscription drove him into Afghanistan whence he has since returned with the intention of opening hostilities on a large scale.

Conditions in the Bannu district appeared to improve slightly at the beginning of July. But that this was merely due to the absence of the leading bad characters on visits to Ipi, was proved by the marked deterioration which set in in August. Early in the month one Musk-i-Alam, a notorious outlaw, was shot during a raid on a village. Brutal reprisals followed and a number of incidents showed that the sympathy of many of the inhabitants of the

district are with the raiders from outside. Fear of such reprisals is enough to prevent any co-operation with the government from those who might prefer to be loyal. Subsequently a British officer was murdered while motoring from Dera Ismail Khan to Bannu and the prospects of bringing the criminals to justice seem slight. Measures to restore the situation are now being taken, but in the circumstances it may be some time before authority can be fully respected, confidence restored, and a return to normal conditions brought about.

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The Health of the Army in India

Volume II of the Annual Report of the Public Health Commissioner for 1937 shows a considerable reduction in hospital admissions both of British and Indian troops compared with the previous year. The figures of admissions have been dropping steadily; but they are still about double those in the United Kingdom. This is due partly to climatic conditions and partly to the more primitive methods of conservancy and sanitation generally which prevail in this country and which only time, money and education can improve, particularly in cantonments near densely populated areas outside military control. Untiring anti-malarial work and new methods of treatment have reduced malaria incidence to 44.5 per 1,000, the lowest yet recorded. This was in spite of the Waziristan Operations which were carried out in the hot weather and in areas notorious for malarial endemicity. These operations were the first on the frontier in which casualties were evacuated by air; eight British officers, 29 British other ranks and 64 Indian other ranks were evacuated by this means to Rawalpindi.

Some 25,500 recruits were examined: 35.73 per cent. were rejected. The commonest cause of rejection was trachoma. It is not known how the examination of recruits in India compares with that of the Militia in Great Britain, about which there has been so much argument by those interested in condemning or extolling the social system; but it is believed to be stricter. It compares satisfactorily with past figures for the British Regular Army.

A very good sign for the future is the increase in the numbers and popularity of child welfare centres. Money is provided by grants from funds under the control of Army Headquarters, by

the Red Cross and by the subscriptions of all ranks of units. Medical personnel give their time free. That the general health of the next generation will be improved is certain; equally important are the immediate effect of the welfare centres on the general conditions in cantonments and lines and their educative effect in inculcating knowledge and dispelling prejudice. Arrangements are being made to collect further information about the work of these centres which should increase the value to be obtained from them in future years.

The medical service may well be proud of their achievements in improving the general health of the army. India as a whole owes them a debt.

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The United States

It appears at the time of going to press that the United States of America intends to ignore the difficulties attendant on revision of her neutrality laws after the outbreak of war. The controversies over the Neutrality Act which preceded the war were unfortunately influenced to a certain extent by internal politics. In Congress, both the Republican and the Conservative elements in the Democratic party were anxious to weaken Mr. Roosevelt's position in view of the presidential election which is now approaching; and in the Senate, the vote in the foreign relations committee which declared postponement of consideration of the bill until January was swayed by two Senators against whom the President has displayed hostility. This does not alter the fact that Americans are determined to keep out of the war if they can, though some of them may have suspected at the time that domestic affairs were preventing them from choosing the best way. Ever since the present law was passed as a temporary measure in 1936 doubts as to its soundness have been expressed. It imposes an embargo on the sale to belligerents of arms, munitions, and implements of war. Such sales have always been recognised by international law as moral and as compatible with neutrality. Their embargo, as has already been proved in the case of Abyssinia and Spain, directly favours the aggressor who attacks a weaker nation. An embargo of this sort is also illogical, since it does not prohibit the supply of other materials essential for the prosecution of a war. Further, the

legitimate supply of arms is less likely to involve America in war than the entry of American ships into war areas which the law does not forbid.

These aspects of the case were pointed out by Mr. Cordell Hull when urging revision of the law so as to remove the embargo on the sale of munitions and to substitute provisions to restrict the movement of American citizens and ships, and to ensure that goods of any sort destined for belligerents should change ownership before leaving the country. The Congress, however, defeated the administration and rejected its proposals. Instead, it carried by a very narrow majority an amendment lifting the embargo from the sale of "implements of war," a term which has been held to include aeroplanes and their components but to exclude motor transport and medical supplies. It was this amendment which the Senate decided not to consider until next January. The original Neutrality Act thus remains in force and Mr. Roosevelt proclaimed its application.

He himself made it plain that he considered the amendment of the Act might conceivably have deterred the aggressor and prevented war. A large section of public opinion in the United States agreed with him and the *New York Times* criticised the Senate's action as an "invitation to war." This is almost certainly an exaggeration. Hitler was evidently convinced that any bluff would succeed, and it is doubtful if an amendment to the Act would have deterred him at all.

It now seems likely that the Senate will agree to revision of the Act on the lines recommended by the President. These alterations will tend to favour the democracies by giving them access to America's industry and thus adding considerably to our war potential. Our Navy can be relied upon to deny that access to enemy vessels. What is, in the long run, of even greater value to the democracies is the moral support of the greater part of the American Continent. No law can dictate to the American people which way their sympathies shall lie. We can count on the majority of these sympathies being with us, and this is as much as we have any right to hope for.

THE ECONOMIC AND FINANCIAL ASPECTS OF DEFENCE AND REARMAMENT

A Lecture delivered to the members of the Institution on the 20th July 1939.

By Dr. T. E. Gregory, D.Sc.

Lieutenant-General Sir Bertrand Moberley, K.C.I.E., C.B., D.S.O., *introduced the lecturer.*

Ladies and gentlemen,—I am going to divide up my subject into three distinct parts simply for the purposes of convenience. I am not one of those people who believe that it is possible to say of any subject that it is true in theory and wrong in practice. But I do think that there is very considerable advantage in distinguishing the bare bones of the subject from the very difficult detail with which it is clothed at any particular moment of time. And, therefore, I am going to begin by asking what are the theoretical issues involved in a policy of rearmament of the magnitude that we are witnessing at the present time.

And, first of all, let me deal with the economic aspects and pass on from them to the financial aspects. I am going to be quite general in my remarks to begin with and then I am going to deal with the grave situation which presents itself to the United Kingdom and to other countries in this particular year of grace. What from the economic point of view does rearmament involve? It involves the application of such resources as the country possesses in a certain direction. That is to say, it involves sucking into the military machine directly or indirectly a great mass of raw material and plant and machinery and at the same time a great mass of man-power. That sounds exceedingly simple. The point is—to use technical language—that rearmament must inevitably for the greater part rely upon *current* resources and *current* man-power. In other words, it assumes behind the military machine an economy in order to turn out from time to time the raw material and the plant and the equipment that the military machine desires. I emphasise this point because it has from the financial point of view extremely important consequences. But it also has from the economic point of view extremely important consequences. Rearmament involves dipping a huge bucket into a stream of things and the first and fundamental question, which economists ask themselves is as to whether this withdrawal of raw materials and plant and human labour leaves

the situation as it was before or whether it does not. In any community and in any country in which at the moment at which rearmament begins the entire stock of productive plant, the entire body of efficient workmen are already being employed, rearmament involves, and must necessarily involve, a diminution of what is available for other consumption unless—and this is an important point—unless you can increase the total depth of the stream. In other words, rearmament has a different effect upon the standard of life of the population according as to whether or not at the moment that rearmament is intensified there is available a margin of unemployed resources, and it makes also a great deal of difference to the standard of life whether or not when rearmament begins the size of the national productive machine can be increased. That is the theoretical issue. If, when rearmament begins, there are no stocks or raw materials left unused, if there is no plant or machinery left unemployed, if there are no reserves of human skill and human energy available, then the more intensive the rearmament campaign becomes the greater is the drain on the potential resources of the community and the lower therefore the standard of life must fall, given a certain volume of rearmament. Well, with the possible exception of Germany, at the present time there is probably no community which does not start the intensified rearmament of 1939-40 without a certain margin of unemployed reserves, and, I shall presently show that from the practical point of view, it is the extent of this margin which is the crux of the whole problem from the standpoint of public opinion. But even if the whole available reserve were already being employed, it is still possible from the economic point of view to pursue a policy of rearmament and yet leave the standard of life what it was before rearmament began, given certain assumptions. And I want to explain how this can happen. It can happen through the possibility of increasing the stream of productive resources, at any rate for the moment. And how can that be done? In the first place, it is possible to utilise existing machinery—and under machinery I include skilled labour and unskilled labour as well as physical plant—more efficiently than it was previously employed, and in this particular connection I want to emphasise how enormously important the element of human psychology is. The studies of the Welfare Department of the Home Office during the last war showed perfectly conclusively that output varied not only with the technical condition of each plant, but also with the state of health (including mental health) of the workers. And this kind of

psychological response to a situation, which is greatest in war time, may exercise a very considerable influence even in the shadow war period in which we are living at the present time. All sorts of vexatious little restrictions and practices which may interfere with output on the part of human beings are for the time being tacitly dropped. All sorts of trade union practices which are designedly introduced in order to restrict output may be removed by tacit or explicit consent. In other words, that much-used phrase "producing up to capacity" is one of those statistical figments of which the press is very fond, which in practice means that nobody can really know how much you can get out of the existing economic machine until you try; and the psychological response may mean that you can get a great deal more than is thought at first sight.

In the second place, it is possible to increase the current output of munitions of war by reducing the extent to which humanity makes provision for the more remote future. A large part of the resources of any population consist of things which do not wear out immediately but the uses of which are spread out over a very considerable period of time—if I may use a technical phrase, what economists call "durable consumers' goods." They include anything from a gramophone to a motor car, from an overcoat to a house. Now, it is possible to increase the immediate output of munitions by using part of the labour which would have been used in peace time for the production of durable consumers' goods for the production of munitions. Instead of the building trade building houses they can build munition plants, and instead of skilled engineers building motor cars they can build aeroplanes. In that sense, part, but only part, of the cost of rearmament is thrown on to the future. Because if you have a motor car, and if the life of a motor car is three years, you can only consume 1/36th part of the motor car in the next month and consequently by reducing the production of consumers' durable goods now and increasing the production of munitions you are in fact, if you like, drawing a cheque on the future. By making less provision for the future and more for the present you can in fact increase the aggregate output of munitions without necessarily reducing the standard of life at *this* particular moment of time.

A third way in which you can increase the margin of resources available for the production of munitions of war—and please understand that by munitions of war I do not merely mean rifles and shells but everything that the military force requires—is by deteriorating the inheritance of the past. Each generation enters

into a heritage bequeathed to it by the efforts of its ancestors and most people are unaware of how enormously important this heritage of the past is. The well-tilled countryside, the roads and railways and houses, the whole of what we call the physical apparatus of civilisation, is very largely an inheritance from the past. If you want to increase the supply of munitions, you can in fact partly do so by simply allowing this physical heritage to deteriorate in quality. And during every war, the physical heritage does deteriorate on a most colossal scale not only because of positive destruction but also because there is not the man-power available or the woman-power available to look after it. You can, if you like, not make repairs to a house. You can, if you like, not look after the drainage system of the agricultural world, and things of that kind. You can divert that particular fraction of the national population whose efforts are devoted normally to keeping this physical heritage in good order from looking after it into doing something else, and, of course, from the practical engineering and statistical point of view, the important question is, how much of the labour devoted to maintaining the physical heritage can you divert? The answer to that cannot be given in general terms, for the very simple reason that it depends on how urgent the necessity is to prepare for war and how little therefore in consequence the cost of the transfer is going to be regarded.

There is a fourth and final way in which we can increase the resources which can be devoted immediately to the preparations of munitions of war. We can, if we like, extend the deterioration of the physical apparatus to the human apparatus by war preparation. We can, if we like, deteriorate the physical quality of the population in the long run, provided that we think that it is worthwhile to do that if only we can get munitions in the present. Now, it is one of the extraordinary episodes connected with rearmament in Europe at the present time that this fourth method of increasing the amount of equipment available for rearmament is increasing by leaps and bounds. If you read the last report of the Director of the International Labour office, you will find that he faces an extremely important question, namely this: Ever since the war there has been a general consensus of opinion that a reduction in the length of the working day is desirable, not only from the narrow sided considerations of profit and loss to the individual employer, but also from the standpoint of the increase of human welfare. In other words, that an increase in leisure by and large is a real advance in civilisation. And he asks the question how

is it that everywhere in Europe instead of the length of the working day being reduced the length of the working day is being substantially increased? And the answer is that the only general reason for this change is the pressure of the Ministries of War. We are, in fact. in addition to all the other methods of adding a cubit to our stature, beginning to draw, before the war has even broken out, upon the health and strength of the population.

Well, those are the methods by which an economy can expand the physical apparatus necessary for the production of munitions of war. But these things do not and cannot arrange themselves. Quite apart from the ways in which the thing can be done, there is the enormous question facing civilisation, namely, how it is going to be done, and from the economic point of view, therefore, there is a third general question, that is, the question of the kind of organisation which is necessary in order that the production of munitons of war can be increased. And here one comes up against one of the critical points of the whole movement. Broadly speaking, there are two possible solutions to the question of organisation. Let me explain what the problem of organisation is. It is the question of supplying the right things at the right time in the right place and to the right people. Considering the immense volume of requirements at the present time, this problem of organisation is obviously a very acute one. How can it be solved? Well, broadly speaking, there are two solutions and I shall not indicate at this stage which of the two solutions I prefer. The first solution is the classical liberal solution of leaving it to the price mechanism. If Government wants Rolls Royce engines for aeroplanes, then raise the price of Rolls Royce engines to a point at which it becomes impossible even for the richest millionaire to buy more than one a year. If it is a question of accumulating a stock of tinned food, then raise the price of tinned salmon to such a point that the ordinary man can no longer afford to buy. The higher price will increase the supply of tinned salmon on the one hand, and will reduce the consumption on the other. And, therefore, there has always been among liberal economists of a certain school the view that the problem of organisation has been enormously overdone. All you have got to do is to let prices go up and up and then people can whistle for their Rolls Royce cars and for their tinned salmon. They won't get them because the Government having always more money than the capitalists and customers can always outbid them. Well, I have not the time fully to explain what the psychological repercussion on modern

democracies of that kind of policy is. It leads, *inter alia,* to an enormous amount of recrimination and it takes the form of perfectly unjustifiable attacks on the manufacturers of various things for selling their things at the highest possible prices, and their being denounced as profiteers.

There is, therefore, a second and what I might call totalitarian solution of these difficulties. It is not to allow the use of particular streams of production to be decided by the question who can pay most for them, but to decide the question by the introduction of a system of controls. And that is why in Great Britain as elsewhere so much attention is rightly devoted to the question of ministries or ministers of supply. It is the duty of such an agency to determine, firstly, what shall be produced, and, secondly, to determine the order in which such things shall be produced; and, instead of leaving it all to the price system to determine, the Ministry of Supply attempts, successfully or unsuccessfully as the case may be, to decide these matters by reference to governmental *fiat.* We are, all of us, in other words, placing implicit faith in the policy of a parliamentary minister responsible to a not very coherent body of public opinion, assisted or not as the case may be by his colleagues and his subordinates, to settle by *fiat* what is the appropriate order in which the economic resources of 47,000,000 people shall be used. Now, of course, from the economic point of view, that is a frightfully fascinating thing to watch and I shall watch the new Ministry of Supply with the greatest interest, and it is going to be an exceedingly interesting thing to see whether or not a democracy such as ours can solve the problem of priority more or less successfully than the autocracies of Germany, Italy or Russia.

Side by side with an economic problem, rearmament involves a financial problem. And let me try and explain why it involves a financial problem. Even in Russia, even in Italy and in Germany, which in some respects are slave states because you have universal conscription of labour and no appeal whatever against the authoritarian decree as to where people shall work, even in those countries, but still more in the democracies, people have to be paid a price, even if it is only a low one, for the services which they render and for the goods which they produce. And the problem of finance is nothing more than the problem of trying to raise the necessary sums in order to reward these efforts. Now, from the financial point of view, just as from the economic point of view, there is no escape from one fundamental principle. The greater part of the real efforts, the sweat and blood

which is involved in producing munitions, has to be rendered now because it cannot be rendered at any other time. So from the financial point of view, it is utterly impossible by any known device to throw the financial cost of rearmament upon any generation excepting the generation which rearms. An enormous amount of confusion has been created by the popular delusion that you can throw the cost of rearmament, or throw the cost of a war, on to a future generation by some means of financial sleight of hand. Now, I say, speaking with such authority as an economist can command—which is not very much—that this is an absolute delusion. It is absolutely impossible to throw the cost of rearmament or of a war on to any other generation except the generation that undergoes the experience. It is quite true that, if war were to break out next week and London were bombed to pieces, the future of our children would be very different from what it would have been if London had not been bombed. Notwithstanding, it is people now living who would experience the full impact of the bombing of London and not the children who are going to be born in twenty or thirty years' time. Similarly, from the financial point of view, you do not throw the cost of rearmament on the future generation merely by borrowing the money instead of taxing the present generation. Let me make it quite clear that by no known method can you really throw on to a future generation the real cost of rearmament. Why? Because rearmament has to take place *now* and because the people who are turning out the armaments have to be paid *now* and consequently the real cost of all these things is what we sacrifice, in other words, what we would have got in return for spending money if we had not had to rearm, and that is a cost which can only be borne by the generation which is actually turning the munitions out. If there is any sceptic among my hearers I hope to pursue this subject with him later on. It is quite true, let me repeat, that in consequence of rearmament the position of our children and our children's children will be different from what it would have been if we had not rearmed, but that is quite a different thing from saying that the real cost of rearmament, whether you are thinking of it in human sweat and blood or in terms of financial sacrifice, can be thrown upon any generation except the generation which is going through the experience. That is my fundamental point.

Now, what is finance? I have already said it is a very simple thing. The only problem which the Ministry of Finance has to face is the problem of raising in terms of money the sums required to pay for the things which it buys; and the immediate general

question is: What are the methods open to a Finance Member? Now, one has got to distinguish between the position of a single country and the position of the world as a whole. There is one resource which is available to a single country which is not available to the totality of countries, and, therefore, the wider the area over which rearmament expands the less this ultimate residual weapon becomes of value to any one of the countries which are rearming. I want to make quite clear what I mean. A single country has got four possible methods of financing a war. Firstly, it can tax its subjects. Secondly, it can borrow from its subjects. Thirdly, it can indulge in a variety of monetary manipulations generally referred to by the generic term of inflation. It can inflate. And all countries taken together can do all these three things. If the whole world rearms, each country can tax its own subjects. If the whole world rearms, each country can borrow from its subjects. If the whole world rearms, each country can proceed directly or indirectly to increase the size of the monetary stream and, therefore, buy more for the moment without any interference on the part of any other country. But since the universe is only a globe circulating in space, the fourth remedy is only open to a few but not to all countries. The fourth method of financing consists of borrowing in a foreign country or selling part of the national property to a foreign country. For instance, the Treasury announced yesterday morning, I believe, that it proposes to take a register of the dollar securities owned by the English Investment Trusts—the first step obviously to what in the last war was called the mobilisation of the international investments of the country—the idea being that, if we are pushed to it, we control, or rather the Government controls, the entire stock of dollar investments held in the United Kingdom and sells them to the United States or some other country. And, alternatively, provided the neutrality legislation does not stand in the way, we can, in fact, add to the stream of things which we add to the pool of armament resources by borrowing in the United States and using the dollar proceeds of the loan to buy additional equipment in the United States or in any other country, such as Canada, in which the dollar is more sought after than the pound. In other words, a single country can borrow from its subjects and abroad, or can tax its subjects or can confiscate the property of its subjects, or can confiscate the property of its subjects by monetary inflation, which is nothing else except reducing the value of the money. But the world, *as a whole,* has not reached that height of civilisation where it can sell dollar securities to the stellar universe. The

world, as a whole, can only tax or borrow or inflate. Now, the theoretical question is: Which of these various devices ought you to use? Upon that particular subject there is no finality. There never will be. And, therefore, instead of trying to explain my own personal opinion about these matters, I want to turn to the second part of my lecture, when this issue as between borrowing or taxing or inflating will become of great importance, and to ask what are the immediately practical aspects of rearmament? Well, here I have one or two things to say.

Firstly, the intensification of rearmament began, at any rate as far as the British Empire is concerned, at a very fortunate moment. It began at a moment when, owing to the turn of the commercial tide, business and production and employment were at a relatively low ebb.

In 1937 business began to recede and, though the depth of the subsequent fall cannot be compared with that of the great depression, it was sufficient to evoke a considerable degree of foreboding as to the future. The announcement of accelerated rearmament was accompanied by an almost vertical upward movement in the index of business activity in the first two quarters of 1939.

We have wiped out as a consequence of rearmament practically the entire period of depression of 1937 to the end of 1938.

Now let me explain why I think from the long-run point of view this is a disaster. From the short-run point of view we have been saved from probably a prolongation of the depression by the expenditure of very large sums by the British Government. But from the long-run point of view the association of recovery with rearmament is surely one of the most sinister things that has occurred, from the economic point of view, in the history of civilisation. It has taught people to associate an increase in their weekly wages, an increase in the level of prices, a decline in the volume of unemployment, with a form of activity which when you look at it from the long-run point of view, is about as useful as taking the entire population now engaged in making munitions and asking them to dig holes in the ground and then fill them up again. For the first time in modern history, the great bulk of the common people, the great bulk of the wage-earners has been led to associate an improvement in their economic conditions with an increase in the production of weapons of destruction. I cannot help thinking that from the economic point of view and from the long-run point of view, this is a disaster. From the short-run point of view it has

been a Godsend. Not only because it has led to an immediate increase in the volume of employment, but because it has taken place at a time when the conjuncture of world events has been such as to prevent the emergence of a whole series of phenomena which would have been extremely unpleasant from the standpoint of Government under very many different heads. Nobody—certainly no economist—could, before the thing had actually happened, have believed that the United Kingdom could spend, or propose to spend, in the course of twelve months something like £730,000,000 on rearmament without profoundly affecting the level of prices and, therefore, the standard of life of the great bulk of the population. £700,000,000 is something like a fifth to a sixth of the national income. The Government is spending, in other words, at the rate of £2,000,000 a day over and above what it would have spent in the absence of a war-threat. That is bound —or every economist would have thought that such a rate of expenditure was bound—to aggravate rather than diminish social discontent.

In the last twelve months the acceleration of rearmament expenditure both in the United Kingdom and in other countries has been very great. Nevertheless, the prices of commodities have barely changed. The main explanation is that, whilst we have increased expenditure on rearmament in Great Britain, there has been a renewed depression in the United States and additional expenditure in England has in part at any rate been compensated by diminished expenditure in America. So far the going has been extraordinarily good. Everybody has experienced the good side of rearmament without having as yet experienced the bad. But what are the bad sides?

The bad sides are two in number—quite apart from the psychologically bad side, of which I have already spoken. The first is this: If there is no war, but if this shadow war continues on its present scale, there will come a time when the amount of investment by Government in munitions of war becomes so great that there is no margin available of unemployed raw materials, of unemployed machinery and of unemployed human beings, when, in other words, you have all the external phenomena of what we call a "boom" but when, in fact, the choice is between a decline in rearmament expenditure and output, or a reduction in the standard of life. And at the present rate of acceleration, that point may not be so very far off. Let me cite to you the unemployment figures. Registered unemployment among the males of Great Britain and Northern Ireland in January of this year was

about a million-and-a-half. In May (and the figures have fallen since) unemployment was down to a million. Now there has been going on in the British press a very vigorous controversy between two ex-colleagues of mine as to when we shall get to the stage when we shall be suffering in Great Britain from an acute shortage of man-power, and the whole thing turns upon one very simple point. What does this million or so-called million of unemployed persons consist of? At any particular moment of time, it is calculated that there are half a million people out of employment in Great Britain because they are changing their job or changing the place where they are living, and *these* are the people who are unemployed for a very short time. That reduces the so-called unemployed army by fifty per cent. straightaway. The question is, what do the other half million stand for? Well, it is argued that it is the old men who are concentrated in the old export industries like cotton and who are simply dying with the industry, whilst another group consists of young men who rose to maturity in the depression of 1929—31. Nobody knows how large these armies are, but supposing the assumption that they are 100,000 each then your army of half a million so-called unemployed reduces at once to a real army of 300,000 people. And as we have reduced the unemployed by half a million in four months at this stage of the rate of acceleration of rearmament, it will not be very long before we will have no unemployment at all. At any rate, that is what some economists of high reputation infer. Therefore, instead of thinking in terms that have become familiar to us for the last few years, *i.e.*, in terms of the past economy with large unemployed reserves available, we have now got to start thinking in terms of real scarcity economics: in terms of national effort which involves more man-power and more woman-power than is available. But for the moment all these problems are being forgotten, because of the immense acceleration of our expenditure and the immense repercussions which this expenditure is having upon the national unemployment figures. Therefore, I say we have got to face the fact that we are approaching a point when the problems of organisation will be much more acute than they have ever been before in the history of the last few years. That is the second point to which I wanted to draw your attention. The first was the psychological danger of associating prosperity with rearmament, and the second danger is that of extending into the new era the kind of mentality which is appropriate to an era which is already disappearing. And the last and, in some ways, the most serious consequence, from the economic point

of view, of this vast rearmament expenditure is simply the frightful distortion of the economic apparatus which it is bringing with it. It is a commonplace of thought among economists of every school that every boom in the past has been characterised by an exaggerated investment of resources in one particular direction. For instance, the 1928-29 boom was associated with a frightful malinvestment in such things as photomatons and artificial silk factories and other things of that kind. We are now engaged in turning an increasing and ever increasing proportion of the plant and equipment and human beings of the nation into one direction and one direction only. And every economist is asking himself what on earth are we going to do if this rearmament process suddenly or gradually comes to an end? Society is faced with very great difficulties of organisation at the present time, but those problems of organisation are nothing, believe me, as compared to the problem of organisation which will arise when you start demobilising the armament workers of the world: because the armament workers of the world are becoming day after day and week after week a greater and greater proportion of the total population of the world, and they are becoming a greater proportion because the expenditure on these things is becoming a greater proportion of the national income of the world.

Well, those are the practical economic sides of rearmament. And now I come to the practical financial sides, and here the ordinary man's question is this: Where are you going to get the money from? To that question certain eminent colleagues of mine have propounded a delightfully simple answer, namely this: Rearmament is bound to pay for itself. The one thing that nobody need worry about at all is where the money is coming from. Now some of you may be familiar with the terminology of the newer economics. What I am going to explain now is the so-called "theory of the multiplier." The argument is this. Supposing the British Government spends £100 on rearmament and employs a single additional workman in the process. That man gets £100 which he did not get before. Consequently he is in a position to spend that £100. Supposing he spends the lot. Then he will employ another set of people whose incomes will also now be £100 and as they have got more money in their pockets they can go and indulge in horse-racing or greyhound-racing or the pictures, and, therefore, the second set of people will in their turn also spend £100 so that ultimately the expenditure of £100 on rearmament by Government results, so long as people are willing to spend the money they get—and they are only too willing to

spend it—in the national income expanding by a multiple of the additional expenditure incurred by the Government. In other words, £100 spent on munitions may actually grow according to the size of the multiplier and the only dispute between Mr. Keynes and some of his colleagues is how much the multiplier is? So long as the people spend, the additional income must always be larger than the additional expenditure by the Government, so that, if the multiplier is 5, an expenditure of £100 by the Government leads to an increase in the national income of £500. If the multiplier is 10, the spending of £100 by Government means that the national income increases by £1,000. And, therefore, the fashionable answer to the question "Where are you going to get the money from?" is perfectly simple. The fashionable answer is: The more you cast your bread upon the waters, the more shall be returned to you. Only go and spend a thousand million pounds on rearmament, then, provided the multiplier is sufficiently high, you cannot help finding the money. Therefore, you can always borrow or tax as much as you like. I do not know whether I have made the point clear. The point is that the modern school of economists argues that we have all been breaking our heads on a problem which is as simple as falling off a log. If you ask where the money is coming from, they say: All you have to do in order to get the money is to spend more, because the more you spend and the higher the multiple, the more you get back. Now, I think all of us ought, as citizens, to inquire into what is true and what is untrue in this particular argument. I won't go into any controversies. I merely want to point to the limitations of the doctrine. I believe that within the limits of the argument it is perfectly true. It is quite true that, if the Government employs one additional munition worker and he goes and employs more people who run off to picture palaces and what not, then the additional pound spent by Government will add more to the national income in the long run than £1. It is based upon the assumption, which I won't investigate in detail, that Government expenditure of this kind is purely additive. That you can add this expenditure to existing expenditure without having to subtract it anywhere else. But that is not always true. For instance, in the United States, in the last five years, the Government of the United States has been proceeding precisely on the assumption that this doctrine is *universally* true, but it was forgotten that all spending of a lot of money in one direction does deter a lot of people in other directions, so that the total repercussions have not been as favourable as was thought. But the really important point from our stand-

point is that the mere fact that when a Government spends £100 the ultimate effect upon the national income is going to be more than the addition of £100 will have thrown no light upon what is the practical problem from the standpoint of the Chancellor of the Exchequer, namely, if the national income is going up and if I have got to pay for more munitions, how am I going to get the money? The income may be there. It may be increasing. But am I going to get my fraction of the additional national income by taxing or by inflation or by loan? The practical problem for Sir John Simon is not whether or not the total national income is going up. It is quite true it is going up. Very rapidly. The practical question for Sir John Simon is: If the national income in 1939-40 is going to be £4,000,000,000, instead of £3,000,000,000, am I going to get the additional thousand million that I want by taxing or by borrowing or by increasing the monetary stream? And all these fashionable doctrines intended to reassure the public about how wonderful an age it is in which we are living throw no light whatever upon what is the fundamental point from the standpoint of any ministry of finance. How are we solving the problem in Great Britain? The answer is that the weight of unofficial—and to some extent of official—opinion is being thrown on the side of increasing borrowing as against taxation. And I want to say quite frankly that here is one of the real conflicts—although a veiled and concealed conflict—between what it is right to do, and what the public thinks ought to be done. The decision to borrow rather than to tax is based primarily to my mind upon the good old American maxim, "Don't rock the boat." Don't upset the public. Therefore, as the public is liable to be upset if the income-tax is raised by another shilling, don't raise the income-tax. Borrow the money from the public or from the banks, and if you *have* to borrow, borrow from the banks rather than from the public because the longer you put off either additional taxation or additional borrowing from the public, the longer will they welcome the rearmament which is going on. Now, having been brought up to some extent in the austere school of the British Treasury, I think this doctrine is a fatal doctrine. If it is true that we are shortly going to be faced with a real shortage of equipment, human man-power and raw materials, what we ought to do is to deprive the public of their ability to compete with the Government at the earliest possible opportunity. I have tried to explain how you can do this through rationing and through totalitarian methods, and that you can also do it through a rise in prices. But there is a third and the simplest way of doing it, which is to

deprive the public of the money which they might otherwise put in competition with Government by means of higher taxation. For, if a gentleman whose income rises from, say, £1,000 a year to £1,500 as a consequence of rearmament expenditure, has to hand over the entire £500 which he has just made, in the shape of supertax, he cannot afford to buy his wife a new motor car. That, of course, is a very regrettable fact. But, nevertheless, this is the ultimate effect of the tax system that the plant required for the motor cars can be turned to the manufacture of aeroplanes and therefore the simplest way of depriving the public of the possibility of competition with Government—which, from the economic point of view, is the same thing as saying that the best way of achieving the desirable utilisation of economic resources—at the present time is to tax and tax and tax. But you may take it, I am afraid, that this austere doctrine is not going to be followed either in the United Kingdom or anywhere else. But it has, nevertheless, you will agree with me, profound practical consequences.

So far I have talked about certain theoretical and practical aspects of rearmament. I want to finish by asking: What does it all boil down to in terms of statistics? I would like to give you some answers. In 1935-36, taking the British fiscal year as a basis, the aggregate national expenditure upon Defence was £137,000 000. The estimated expenditure at the begining of this fiscal year, 1939-40, upon Defence in the United Kingdom was supposed to be £655,000,000. Now, last Friday, Sir John Simon, in moving the third reading of the Finance Bill, announced that in the forthcoming financial year, 1939-40, expenditure upon national Defence would be in the neighbourhood of £735,000,000. That is something like one half the total expenditure of the United Kingdom on any kind of governmental activity. Now, if you ask what proportion of the total national income are countries like England and France and Germany spending upon rearmament at the present time, of course the answer is not very simple—first of all because we have no accurate statistics of national income and secondly because national defence and rearmament expenditure are not self-explanatory terms since the definition of defence varies in different countries. Nevertheless, the other day the International Chamber of Commerce held its biennial meeting in Copenhagen, and a very distinguished French industrialist tried to answer the question of the proportion of national income which the nations are spending on rearmament as compared with what they did in the old days. In 1913, four

per cent. of the German national expenditure was upon the armed forces of the State and Germany was already in 1913 a pretty heavily armed power—at least we thought so in those days. At the present time, the expenditure is probably between twenty and thirty per cent. of the German national income. France in 1913 spent five-and-a-half per cent. of the national income on defence. In 1939 she will probably spend twenty per cent. In Italy in 1913 some three per cent. of the national income was devoted to expenditure upon armed forces. In this year the estimate is somewhere between twenty-five and thirty per cent., and the probability is that if we are really going to spend £750,000,000 or so on national defence in this year, since our national income is likely to be between £4,000,000,000 and £4,500,000,000, we are also going to spend something between twenty and sixteen per cent. on national defence. Taking the whole of Europe and the whole world into account, because you must remember that the Dominions are also accelerating the rate of expenditure, so is the United States—it is probably unsafe to say that anything less than one-fifth of the total income of the more advanced areas of the world is being devoted at the present time to the purposes of contingent warfare. Well, of course, when you get to figures like £750,000,000 it means nothing whatever to the average man, any more than seven thousand shillings mean anything to a child of three. I have, therefore, tried to compare this figure with some figures that may be more familiar to you and then one gets to some rather startling results. For instance, on March the 31st, 1914, the last pre-war fiscal year, the total national debt of the United Kingdom including unfunded debt and the capital value of annuities was £694,000,000. That is to say the total accumulation of debt less repayments through sinking fund throughout the nineteenth century was less than one year's expenditure on rearmament at the present time. I cannot vouch for the complete accuracy of my historical recollection but I think the national debt after the battle of Waterloo stood at £680,000,000. The cost of the Boer War was, I think in terms of debt, £300,000,000, roughly about half of what we propose to spend in the year 1939-40 upon a single military year's rearmament. But if you compare this figure of £750,000,000 with some other figures you realise what an enormous drain upon human welfare these figures represent. The total expenditure in every part of the United Kingdom upon University education in the year of grace 1936-37 was £6,500,000. The expenditure of local authorities in England and Wales (including national subventions) for all forms of education in the same year

was £96,000,000: that is to say, considerably less than one-seventh of the total expenditure on rearmament. If you want to know the expenditure upon general hospitals, it was in the year 1936-37 £6,000,000; that is to say, you could increase the expenditure upon hospitals in Great Britain by a hundredfold and yet not be within £150,000,000 of what we are going to spend in the course of this year upon rearmament.

And if you take Indian figures, the comparisons become almost grotesque. This figure of £750,000,000 or so upon rearmaments is equal to seven times the annual expenditure of both the Provinces and the Central Government. It is £100,000,000 greater than the total capital at charge of the entire Indian railway system. And when I compare it, of course, with other fields in India, the comparison becomes still more grotesque.

Well, ladies and gentlemen, that is why an economist speaking of rearmament is aware of the fact that he is a member of a lunatic asylum.

DISCUSSION

General Sir Bertrand Moberly: Would anybody like to ask Dr. Gregory any questions?

Mr. Puckle: I should like to ask where the original £100 comes from.

Dr. Gregory: Oh, that original £100 can come in several ways. You can borrow it from the banking system. There are various complexities which I won't go into but the simplest way of accounting for the first £100 is this: The banking system always keeps a cash reserve. If the banking system reduces its cash reserves by £100 and hands it over to the Government, the wheels can start turning. There are other alternatives but I take the simplest.

Mr. Tymns asked: Why should the reduction of unemployment be regarded with apprehension?

Dr. Gregory: Well, my answer to that is quite simple. I am sorry I gave a wrong impression. I do not regard the reduction of unemployment as *in itself* a bad thing, but I do say two things about it. Firstly, it would be infinitely better if the reduction of unemployment would come in consequence of expansion in some direction other than rearmament. Secondly, is it the case that the day when we have a really serious problem of rearmament is remote? After all, we have been brought up to think in the last six or seven years that there is a vast reservoir of people wasting

away. That way of thinking is out of date and it is just as well to face the fact that the economics of scarcity of human labour are very different from the economics of unemployment. That is all I meant.

Lieutenant-General Sir Bertrand Moberly: Ladies and gentlemen, I think we must thank Dr. Gregory for a most extraordinarily interesting lecture, which certainly will give us a great deal to think about and I only hope that we won't feel really so pessimistic as possibly he might have led us to feel this evening. When we think it over, rearmament is a terrible problem when it all comes suddenly and the answer to future generations must be to keep the level steady and not to disarm and rearm by fits and starts as we seem to have been doing since the last war. I hope you will all join in thanking Dr. Gregory very much.

THE APPRECIATION

By Brigadier C. A. L. Howard, d.s.o., m.v.o., m.c.

It was with the liveliest interest I read Brigadier Howell's important article, "The Form of Appreciation and Orders," which appeared in your July issue; this paper is concerned with Brigadier Howell's remarks on the Appreciation aspect of the article only, a subject, among others, on which no one is more competent to write, and on which his views, if I may say so, are worthy of the greatest respect. The Appreciation is the foundation, the walls, the windows, which go to produce the completed edifice of the plan—which, in turn, is the culmination of all our teaching and training in leadership—and as such its importance is paramount. In its present form it was originally evolved as a "guide" to the mental process of arriving at a reasoned, logical, and, consequently, sound decision in any given set of circumstances; indeed, it was claimed that no one who observed the rules could fail to reach the best conclusion in the shortest time. In due course, in accordance with the best traditions of the British military mentality, the guide was reduced to the usual basis of a precise drill operated "by numbers." The greatest problem facing our trainers in these "extensive" days is the lubrication of the military engine; and anything that savours of our besetting sin, mental rigidity, is anathema. But, curiously enough, the appreciation of the situation is the great paradox, the one occasion on which a precise formula can usefully and legitimately be applied to a mental process; the reason is not far to seek in that the formula in question is less a precise drill than an analysis of a reasoned line of thought, and, therefore, of a normal mental reaction.

I think it is accepted that the introduction of the appreciation has raised the standard of leadership to a level which it could never otherwise have attained; it caters for all types of mentality; it restrains the imaginative mind and prompts the unimaginative; it guides them both into sound and practical channels through a subsoil of hard facts. Yet many of us have felt for some time that our existing line of approach is due for an overhaul; difficulties do exist, and it is essential they should be removed. Simplicity and absolute clarity are the keynotes of any military mental process, and yet, as Brigadier Howell maintains confusion of thought, and consequent failure in its logical application, are frequently

encountered. He suggests ways and means by which these difficulties may be overcome. He advocates the retention of the object in its present key position and no one, I think, will quarrel with him here. He suggests the next step in the sequence should be the consideration of a general plan, and maintains that this follows our natural inclination; he further implies that "factors affecting the attainment of the object" occupy an unduly influential position in the development of the plan, and should be relegated to secondary rank, to be considered only after a general plan has been formulated. Although there is naturally a great deal in this conception, I cannot follow him all the way. It seems to me that to formulate even a general plan, without considering factors any one of which may subsequently turn and stab it in the back, is to tempt providence. I am reminded of the perfectly authentic case of the general—now, unfortunately, no longer with us—who handed his staff a slip of paper with the remark, "Here is my plan; all you blokes now have to do, is to write the appreciation." The fact that our natural inclination is to get down to the business of making plans is not, in my view, sufficient reason for ignoring or minimising what may be vital factors. If, in pursuance of our natural inclinations, we were to produce a better plan by sidetracking or overriding relevant factors, I should agree every time. But do we do so? Do we gain anything? Do we not rather lose? Do we simplify the process? Do we not rather complicate it further? None-the-less, I agree with Brigadier Howell that all is not well with the "factors" paragraph; and it is in connection with this paragraph that confused thinking and loss of sequence most frequently occur. In the first place the heading, "factors affecting the attainment of the object," is a misnomer; at this stage, these factors do not necessarily affect the attainment of the object in the smallest degree, but they do affect the *method* of attainment. For instance, to quote Brigadier Howell's example, "The ground is open and any advance across it will be liable to suffer heavy casualties." Assuming an attack, that particular factor will only affect the attainment of the object if it is decided to attack over that particular ground; if it is decided not to attack, or to attack in another direction, the factor is irrelevant. On the other hand, when "courses open" come to be considered, this factor assumes enormous importance and will probably decide the commander not to "attain his object" by attacking over the ground in question. This is the correct use of the factor. And this brings me to another common cause of confusion; the above quotation, with its

deduction, really decides a "course open," and there is often difficulty in determining at what point "factors" end and "Courses open" begin. The "appreciator" often finds that, by the time he reaches the "courses open" paragraph, he has already discussed "courses open" in the "factor" paragraph, and it seems foolish to him to repeat what he has already considered; he feels he must have committed the court-martial offence of putting something in the wrong column, and tends to lose his nerve and, with it, his train of thought! Can these spanners of confused thinking be removed from the machinery and smooth running be restored? Fortunately, they can, and very simply, by a reversion to the mental process of appreciation—as it was originally intended to be implemented; by the relegation of the "factors" paragraph to its correct perspective and function. To elucidate: When the appreciation was introduced in its existing form, the "factors" paragraph was intended to comprise a summary of prominent points which, it was important, should not be overlooked, and which, it was essential, the "appreciator" should keep in the forefront of his mind; the object was to tabulate all available facts and information, in readily accessible form, for ready reference—a normal, practical and indispensable form of *aide-memoire* in the consideration of any problem whatsoever. So far so good; presently, however, someone evolved the high-sounding axiom that no factor was of value unless a deduction could be drawn from it, that this was the test of a good factor, and that in future the process should be completed and the deduction drawn and recorded.

This displays a complete misunderstanding of the mental process and of the function of the factor; it is the seat of all the trouble—the appreciator finds it difficult to understand to what purpose he should draw a deduction at this stage; indeed, he very often finds difficulty in drawing a deduction at all, and the result is mental confusion. The axiom is true as far as it goes, but it is only a half-truth, and ignores what is the crux of the whole question, *i.e.*, no deduction is of any value except in its relation to a tentative or concrete course of action; it is the subconscious realisation of this fact which is responsible for the mental confusion as between "factor" and "courses open" paragraphs, *e.g.*, Brigadier Howell in the example above, which I have borrowed from him, has had to introduce a tentative course of action into his "factor" to enable him to draw a deduction—he could not have drawn one otherwise—yet we have not yet even begun to think of courses of action! Is it any wonder the appreciator is sometimes bewildered?

As I see it, the "factors" paragraph is intended to comprise a summary of known facts in categories such as enemy forces, our own forces, country, time, space, etc., and any other important point which requires to be emphasised; deductions obviously do not come into the picture at this stage; the heading should be changed to read "Notes" or "Important Points" or "Relevant Factors"—probably the last would be the most suitable as relevance is sometimes overlooked, and a reminder would not be out of place.

The "Courses Open" is the discussion paragraph; here "factors" are applied and it is at this stage that deductions are naturally evolved: *e.g.*, to quote once more Brigadier Howell's example, the "factor" would be "The ground is open;" in the "Courses Open" paragraph the ground would be considered in its relation to an attack over it, and the deduction would be that "any advance across it will be liable to suffer heavy casualties." The appreciator may here throw out this course, or he may go on to consider it further and to draw deductions from other relevant factors, and will then be in a position to discuss the pros and cons, and decide whether this attack is feasible, desirable, etc.; eventually, if it is still "in the hunt," he will weigh it in the balance with other "courses" and will then make a selection, having covered all the ground.

This seems to me a simple, straightforward and intelligible process; it strikes me as natural and quite clear; it is practical and easy to handle; there need be no complications or mental confusion.

Personally I see no reason to amend the present form of appreciation, if it is applied as it was originally conceived.

We have a good thing here; do not let us weaken the machinery by tinkering.

NORTH-WEST FRONTIER POLICIES

By Major W. E. Maxwell

[*A lecture delivered to members of the Institution at Simla on the 13th July* 1939.]

The Chairman, Lieutenant-General Sir Roger Wilson, K.C.B., D.S.O., M.C., introducing the lecturer, said:

"When any one is rash enough to lecture on the North West Frontier, the question is always asked: "What does he know about it?" No doubt it has been asked in the case of our lecturer to-day. The answer is that, judging by results, nobody can possibly know less about it than the experts who have been responsible for the frontier during the last few decades.

With that mild attack on the pandits of the Army Air Force and Political Department who may be among us to-day, I will leave you in the very capable hands of Major Maxwell."

Lecture

In the first place, I must stress as emphatically as I can that this lecture is entirely personal. It is for me a very dangerous experiment to run the risk of exposing any knowledge I have about a subject so profound and complex as the North-West Frontier and heaven alone knows if—when I finish this paper—you will put me down as a fool, an enthusiast, an amateur, a professional—or any combination of these terms which may arise in your minds.

I would like to admit that I am a fool to tread a path which has fooled so many angels before me; I confess I am an enthusiast—as we all are who have lived in India for some years and tried to understand this particular problem. As for being an amateur on the subject, I would quote an official document addressed by the Government of India to the administration responsible for the North-West Frontier Province: "It appears to the Government of India that the time has arrived when it becomes of extreme importance that an effort be made to bring under our control, and, if possible, to organise for purposes of defence against external aggression the great belt of independent tribal territory which lies along our north-western frontier and which hitherto has been allowed to remain a formidable barrier against ourselves."

These are the encouraging, heartening words that all servants of Government love to hear. All of us want our statesmen on the wireless or in newspapers to declare a positive programme of progress; and you may be quite certain that when the Government of India declared this invigorating policy a prayer of thankfulness

went up to heaven from all soldiers and civilians engaged on the far side of the river Indus just as enthusiastically as our hopes and prayers are swayed to-day by any decisiveness shown by our statesmen in larger defence measures.

That it was declared in this official language fifty-two long years ago in 1887, when the Punjab Government was officially in charge of all administration north of Delhi shows—when judged by the progress made—that I am not so amateurish after all. I see now that this argument has driven me logically to the imputation that the Government of India is an amateur one; I will amend this word and say "immature," because from my slight acquaintance with Simla and Delhi for the last nine years, and having seen the extraordinary changes which occur every year in all the great official posts I cannot see how the Central Government can ever achieve maturity.

As for being a professional on the subject I there lay myself open to personal abuse and criticism. The little knowledge I have is dangerous because it is so personal. All I know is a little of Quetta at the end of the war; later Chaman where I had a chance of meeting the Achakzais and Political officers almost as a mediator when they both were at each others' throats over two annas, and where, incidentally, my wife and I found that the only place to ride on decent going was about a mile over the border. That is all my Baluchistan experience. In the summer of 1923 I served at Saidgi in the Tochi with no great distinction but certainly with an increasing amount of knowledge and interest. It was a desperately boring experience for young officers despite the long days on road protection duty. Once the prison doors were slammed at six o'clock each evening on the fort our interests were confined to writing letters, talking, drinking or studying for the Staff College. It was so dull that three of us, one night—and I tell you this story in the strictest confidence as both my colleagues now occupy big places—stole three sheep from a neighbouring convoy of mutton going up the road. It sounds a silly story—but there are probably only two people—both Australians—in this audience who have ever fielded a live, full grown sheep standing in the middle of an apron of barbed wire at midnight with armed sentries prowling through the flock. I had darkened my face with "Kiwi." As my first sheep knocked me over and my pants were torn to ribbons, I thanked God that sheep, like the Navy and all good soldiers, were dumb when frightened. I tell the story only to show how desperately boring these camps become for young officers.

That was my first earned medal, dated 1923.

In 1929 and 1930 I was again in Waziristan, in Razani and the reoccupied Wana, and found the country pacified to an extent which made all the supporters of the Forward Policy lie back and purr with satisfaction. I remember motoring from Wana to Dera Ismail Khan and having lunch by myself in the Shahur Tangi. At the time I was working for some wretched examination so I climbed a hill, spread a map and tried to envisage one of the most stirring battles in our Frontier history and the scene, just two years ago, of one of its greatest tragedies.

A few years later I visited Kabul where there was a splendid British Minister whose opinion of the governments in London and in Simla had to be heard to be believed. Naturally I sat at his feet and imbibed knowledge. He had a very great Imperial outlook on the vital importance of a friendly Afghanistan, and he reiterated this aspect of international policy so often and so logically that I became bored and thought he was making a fuss about nothing. Last year at home during the September crisis, when a world war seemed inevitable and I was wondering what the reactions in India would be, one of the few bits of silver lining I could see was that British-Afghanistan friendship and mutual respect which have grown up and grown strong on the foundations laid after 1919.

It is therefore with this slight knowledge as my personal background that I am now going to offer some eggs to my grandfathers among you to suck.

* * * *

The International Aspect

Those of us who are careless, ignorant or uninterested in the frontier can always shut our eyes and put our fingers in our earholes—to prevent sight or sound of this unfashionable subject. Kipling and Winston Churchill managed to give it glamour-appeal forty years ago to a British public who at that period required the romantic, adventurous stimulus which is now supplied by the cinema.

Kipling focussed British attention on a part of the Empire which had been neglected and unsung; Mr. Churchill, by breaking certain rules and regulations which have made his character suspect ever since, attracted, through excellent journalism, the attention of thinking people. Both Kipling and Churchill are Imperialists in the best sense of that maligned word. No matter what we latter-day ideologists—what a word!—may think of British imperialism in the past, no matter how our consciences

are apt to be pricked by the queer practices, the rough and ready justice meted out to our early colonies and dominions, no matter how we deprecate our economic excesses of the last five hundred years over the seven seas of the world—we are all heirs to that system, and we have all been brought up to improve that system and fortify it, because we believe it is a good thing.

Therefore, as regards India, my attitude is slightly diehard. While prepared to be friendly towards its inhabitants and my fellow subjects I resent being treated as a hostile by its politicians. This anti-British policy is being pursued and has grown to large dimensions even in the last twenty years. Its tendency is to increase with the growing communal dissension between the Hindus and Muslims, and we should guard ourselves against it.

One of the danger spots of the British Empire is this small frontier stretching about 1,000 miles from Chitral to Persia, of about 25,000 square miles in area and inhabited by some three million Pathans. "The North-West Frontier is not only the frontier of India;"—the Simon Commission reported—"it is an international frontier of the first importance from the military point of view for the whole Empire."

The fundamental reason for this importance is Islam. There are roughly about 300,000,000 Muhammedans in the world and all of us here know the great unifying force of their austere and vital religion. A bad slip, a blunder in diplomacy or a military reverse in the little Tochi valley might have its reverberations in Kabul, Teheran, Baghdad, Haifa, Ankara, Cairo, and as far west as Morocco. With all these Muslim peoples the British Empire has close contact and one of the few keystones discernible to the layman in British foreign policy has been friendship with the Muslims of the world. It has been a friendship always worth having and working for. During the last war when cultural relationships between world Muslims were not so close as they have since become, roughly half the world population was pro-ally and the remainder either neutral—like Persia—or pro-German. It needs very little reflection or imagination for us to understand clearly how important and indeed how vital for our preservation is this question of friendship with Islam.

In the event of a general war we will always have this running sore of the North-West Frontier to remain a source of annoyance—perhaps of deadly infection—if we go on accepting its condition as chronic and incurable.

Before leaving the international aspect of the subject it might be convenient now to refer to Afghanistan—as this country is as much involved in the frontier's pacification as we are.

I believe I am correct in saying that it was Napoleon who first made the British take a serious interest in the defence of India and to realise that friendship with our neighbours, Persia and Afghanistan, was part of that defence. After Marengo in 1800, Napoleon and his ally, the Tsar of Russia, examined a scheme for the joint invasion of Hindustan. This particular scheme was dropped when the Tsar died the following year, but until 1809 energetic diplomatic and military French missions were busy in Persia and the Indian Ocean stirring up trouble for the British.

Napoleon broke his word to the Persians in the Treaty of Tilsit in 1809 and French influence subsided considerably, creating a favourable atmosphere for the Viceroy, Lord Minto, to conclude a firm treaty with Afghanistan and Ranjeet Singh, the great Sikh ruler of the Western Punjab. Thus was the "buffer" state defence policy first initiated.

Looking back one hundred and thirty years ago to these our first relations between India and the states beyond the Suleiman Ranges (Turkey, Arabia, Iraq, Iran, Afghanistan are in their places to-day) it is easy to realise that any enemy of England who either by conquest or alliance gains solid footing there will play a dangerous role in either diplomacy or war.

Our relations with Afghanistan during the last hundred years have been pugnaciously flirtatious based on that common enough theory of courtship that the best way to woo a girl is to treat her rough. The less said about the first Afghan War of 1839-40 the better. Ranjeet Singh pinched Peshawar from the Afghans and Lord Auckland suggested that Dost Mohammed should discuss the matter amicably; the Russians intervened with their active support for Dost Mohammed, and war—one of the most disastrous in our history—ensued. We began the war to replace Dost Mohammed by Shah Shuja, and we ended it by replacing Shah Shuja by Dost Mohammed at a cost of 20,000 lives and £15,000,000 sterling. That should have been a lesson to us but unfortunately it was not. For the next few years confusion reigned.

The Afghans joined the Sikhs against us in the Second Sikh War on the promise of regaining Peshawar. Thereafter, we supported the Afghans against Persia, and then Sir John Lawrence, the great protagonist of the close-border policy, appeared on the scene and due to his diplomatic handling Dost Mohammed remained staunch during the Mutiny. Until 1869 our relations were uneventful. Dost Mohammed was succeeded by his son Sher Ali. Gradually however a deterioration set in and by 1875

there was marked coolness between both countries. This was more the fault of Sher Ali than of the Government of India. In England in 1874 Disraeli became Prime Minister, and Salisbury Secretary for India. This brought the Russian bogey back on the stage to the delight and satisfaction of the Forward Policy School, who were all always for advance over the North-West Frontier passes to meet the Russian army on Afghan soil. That, I think, is the origination of what we now loosely call the Forward Policy.

The first step in this forward movement was the appointment of a British Resident in either Kabul or Herat to give England political domination in Afghanistan, and the Secretary of State, Lord Salisbury, pressed his views upon the Viceroy, Lord Northbrook. The Viceroy, supported by his council and the earnest advice of his frontier officers, opposed this policy and warned the home government that it was likely to provoke war. His advice was unacceptable so he resigned, and Lord Lytton came in his stead. In 1878, we declared war on Afghanistan for refusing to accept a British Envoy, and in 1879, having defeated the Afghan forces in the field, a treaty was signed giving us the right to have a Resident at Kabul. Three months later this resident was murdered in Kabul and our troops again advanced to another campaign of great glory but little profit.

Abdurrahman Khan, a nephew of Sher Ali, was discovered and put on the throne and, after Roberts' great victory at Kandahar over Ayub Khan, both countries settled down to lick their wounds.

For the next ten years, when Abdurrahman was consolidating his position, a serious effort to stabilise our frontier conditions was made by the demarcation of the Durand Line in 1894. A growing willingness to accept the fact that Afghanistan was an independent country became discernible in the attitude of the home government. This undoubtedly was due to the character and personality of Abdurrahman, the great Amir. Official history slurs over with neat dexterity the appalling amount of intrigue carried on during this period by the *Maliks, Powindahs* and *Mullahs* of all our Frontier tribes with the authorities in Kabul. For Abdurrahman, then finding his feet, it was obviously safe to placate with money any influential leader on the precarious border of the two territories. His successor, Habibullah, preserved this irritating, suspicious and wholly successful policy during the Great War—and we, whose policy was far plainer at that period in our history than it can ever be again, missed the bus . . . .

Just as easily as we created at Versailles the countries of Czecho-Slovakia, Memel, Austria and a small city called Danzig—just as easily could we have awarded Afghanistan her border tribes and probably avoided the third Afghan War. Until his assassination in 1919, Habibulllah remained the staunch friend of England despite many temptations, and all of us know how valuable that friendship was in 1914 and the following years.

The Third Afghan War of 1919 was a mistake by the Afghans this time, based on faulty information regarding the internal situation of India, for which Amanullah, the impetuous young Amir, eventually paid for in exile.

From this brief sketch of Afghan history three points emerge to which I may have to refer again:

1. Friendship with Afghanistan should be the keystone of our frontier defence.
2. During the last century the Close Border policy was more successful more economical and more in keeping with modern conceptions of statesmanship than the adventures to which a forward policy kept driving us.
3. The circumstances in which the Durand Line was fixed.

* * * *

The North-West Frontier

As I begin this chapter of my lecture the more overwhelmed I feel by its intricacies and its dangers for one so ill-equipped in knowledge and experience to draw conclusions.

Here is an outline map showing Chitral in the north and Fort Sandeman in the south. Here is the river Indus, which since the very dawn of civilisation—the remains are still being dug out of its banks—has been the natural frontier of India. Here are the rich Peshawar and Derajat plains which lured the Sikhs and then the farm-loving English to cross the Rubicon and settle. Here is the Sikh demarcation which we call the frontier of our administered areas. And here is the Durand Line—a mysterious frontier marked with white-washed piles of stones stretching for over a thousand miles.

Between this Sikh Line and the Durand Line live a conglomeration of barbarian tribes whose record of heinous crime—murder, rape, assault and appalling treachery—during the last hundred years is probably unequalled in any other region of the world. They are like cornered rats fighting for their existence with only the weapons they know—tooth and claw. The history of the Pathan races is obscure. There is a picturesque legend connecting them with the lost tribes of Israel, but there is nothing

to support this theory except a semetic type of feature in some of the tribes, and the name "Yusufzai" which has the same root as Joseph.

It is not possible in a few words to describe the characteristics of these tribes. Those of the plains brought up in contact with civilisation are very different from the warriors bred in the harsh hills. The character of the trans-border Pathan is of a stronger fibre than that of the plainsman. Life in the rudimentary republics of the tribes develops self-reliance, resource, courage and a Spartan contempt for the luxuries of civilisation. Blood feuds, faction fights and raiding sharpen the wits and make them opponents always worthy of our steel. There is no caste; every man is as good as the next. The arrogance of the Pathan you see swaggering about the towns of India is not assumed; it is part and parcel of his character. Their most intractable characteristic—and to us the most incomprehensible—is their contempt for human life. That attractive person, with whom you can laugh and joke and make friends, will—for a trivial imagined slight—put a bullet through your back. The history of the frontier is full of such tragedies.

Their system of government—if such words can be used at all in this connection—is far more democratic than that of the great democracies. Each tribe is a small republic acknowledging allegiance to no one—neither to Kabul nor to Delhi. There is complete equality among the tribesmen. This principle was carried so far that lands used to be redistributed every thirty years to prevent any tribesmen exploiting his neighbours. As regards the law there is a system called *Puktun-wali*—the law of the border which governs the relations of tribesmen among themselves and of one tribe with another. In case of dispute—if the case is not settled out of court beforehand with a bullet—the matter is decided by a *Jirga* which may consist of the whole tribal body. The Pathan has a remorseless code of honour with its rooted customs of asylum and intercession, hospitality, safe-conduct and the inherited vendetta of his forbears.

Most tribes are honeycombed with feud and faction which is the main fundamental reason for their cultural, educational and economic backwardness. They appoint *maliks* to represent their interests, but as often as not repudiate the decisions taken on their behalf. The only strong common bond that links them together is their religion, and that is often exploited by their *mullahs* for irreligious purposes.

In this lecture to-day I cannot cover the whole range of this great subject. I am not going to refer to Baluchistan except to draw the red herring of Sandeman across my path. I have not time to recount the history of our successes and failures with the Swatis, the Yusufzais, Orakzais, Mohmands and Afridis, nor to draw any conclusions therefrom. Instead I would like to concentrate for a little on Waziristan. I have been able to study this problem in a privately published monograph written a few years ago by a distinguished frontier officer. Reading this book I found to my joy that it narrated in miniature all the policies which have been attempted, tested, tried and abandoned on the North-West Frontier from 1860 to the present day. That its main conclusions are hotly contested by another equally eminent political authority only shows that one can almost say what one likes on the subject and find supporters and antagonists.

* * * *

Waziristan

For convenience sake I will divide the history of Waziristan into three parts: The first period from 1860 until 1895: the second period, the reign of the Mulla Powindah which lasted until his death in 1913: and finally, developments since the war.

1. *1860—1895.*—In reading the history of this turbulent country, one of the most striking features is not the military expeditions, nor the tragic murders which stain most of its pages; but the faith, energy and devotion of political officers in their pursuit of a solution to the problem which faces us, despite all their efforts, as stubbornly and as bleakly to-day.

In 1865, a Major Graham, Deputy Commissioner at Dera Ismail Khan, recognising that hunger was at the root of the trouble carried through two schemes—one for colonising certain waste lands in his district by Mahsuds and the other for enlisting a few for border service. This was in the nature of an experiment and, though not unsuccessful, was not extended on account of the Amir's disapproval. A Major Macaulay revived it in 1877 in the Gomal, making the Mahsuds responsible for the pass. About this time the Mahsuds captured a Hindu child, and this Macaulay—one of the great frontier administrators—put the whole tribe under their first blockade, which was so surprisingly successful that they submitted unconditionally after six months and brought the child in saying, "For God's sake take away this curse from us."

Feeling he was on the crest of the wave, Macaulay then carried out a more ambitious scheme and colonised the town of Tank with one hundred and eighty-three Mahsuds and their families.

But the thought and sight of this peaceful community were too much for the other Mahsuds who came down in the night and sacked the town of Tank utterly.

A blockade for two years, followed by an expedition, restored the uneasy peace for some years during which political officers devised new and ingenious methods for the distribution of tribal allowances. The subject of tribal allowances is a study in itself which I do not pretend to understand, but its place in our frontier policy is one of great importance.

In 1888, a Mr. Bruce became Deputy Commissioner under a Mr. Ogilvie, who was Commissioner, and very soon things began to hum. Bruce effected a new settlement with the tribe which was approved by a *jirga*, claimed to be the first representative *jirga* ever produced by the Mahsuds. In 1889, Mr. Bruce, the energetic pupil of Sir Robert Sandeman, now got going properly and convinced all concerned that the Sandemanisation of Waziristan was both desirable and practicable. The Viceroy, the Commander-in-Chief and the Governor of the Province—Sir Robert Sandeman—toured the Derajat, explored part of the Gomal, and a practical scheme for opening up this route to Khajuri Kach was formulated.

Next year Afghan emissaries became active and divided the tribes into pro-Afghan and pro-British factions, and the old tale of outrages started again. Afghan influence, backed up occasionally by Russian money, was always dominant, and the absence of any fixed border made British control or influence in the hinterland impossible. This untenable position, existing the whole length of the border from the Pamirs to Persia made a forward policy impossible. The demarcation of an international frontier between the two countries became essential, however distasteful it was to the Amir. In 1893-4, the Durand Line was fixed. I might say here that this demarcation was the cause of many of our subsequent expeditions. Its most serious defects are the exclusion of the Kunar Valley from the British side, the division of the Mohmands between the two governments, the denial of a strip of territory from Lalpura to the Sufed Koh which would have helped the strategical encirclement of Tirah, and the retention by the Afghans of the Waziri province of Birmal. The Mohmands, the Afridis, and the Wazirs have all got safe bolt holes into Afghanistan when they are naughty.

To return to Waziristan—outrages continued and the government's policy wavered from strength to weakness and back again, and the Sandemanisation experiment received a knock-out blow

from which it never fully recovered on the 3rd November 1894 when two thousand Mahsuds, under the Mulla Powindah attacked the recently occupied Wana.

Another successful expedition of three columns from Wana, Jandola and Bannu entered the country and inflicted about one-and-a-half lakhs worth of damage. The Mulla fled to Afghanistan. Garrisons of regular troops, intended to be permanent, were left at Jandola, Sarwakai and Wana. The indefatigable Mr. Bruce assumed chief political control and produced a new settlement. He had now been for seven years in close contact with these tribes and was an expert on their problems. He recommended the increase of Mahsud allowances from Rs. 51,000 to Rs. 61,000, and produced an elaborate distribution list which has been the basis for many subsequent lists. It is also regarded by the *Maliks* as a warrant of precedence and gives rise to just as much heart-burning. Mr. Bruce also recommended the building of a strong central cantonment at Razmak with outposts at Sheranna and Wana. He got snubbed for this proposal as it was "contrary to the existing orders of Her Majesty's Government."

2. *The Mulla Powindah.*—From now, 1895, until the outbreak of the Great War, the history of Waziristan centres round that remarkable man, the Mullah Powindah. For nearly twenty years this stormy petrel ranged from Bannu to Kabul in his intrigues against the forward policy in Waziristan. He succeeded only too well.

Lord Curzon summed up his character in the simple phrase "a first-class scoundrel," but those who met him pay tribute to his forceful character, striking personality and persuasive eloquence. Determined, astute, champion of Mahsud independence for two decades, he cannot have been a small man who kept his head—both physically and mentally—in the tortuous intrigues that flourished during those bloody years. He is the father of all those *Hajis* and *Faquirs* who have kept popping up on the North-West Frontier ever since, and I have no doubt that the Mulla's methods and experience form the classical curriculum for these latter-day holy men.

When the Durand Line had been fixed the Mulla returned from his spiritual home, Kabul, and wrote to Mr. Bruce asking to be included in the Mahsud settlement. Mr. Bruce sent a verbal reply that any representations he cared to make should be done through the tribal *Maliks*. So the Mulla went to the *Maliks* representing himself as a friend of the Amir; helped them in their rough and ready jurisdiction; gave sanctimonious decisions on

tricky cases of behaviour; raised a bodyguard for his own personal use and very quickly rose to prominence.

During 1897 and 1898 the Mulla steered a tricky course warning government against its forward policy and inciting the tribes to mischief. The political officers had been ordered not to reply to his addresses except through the *Maliks,* so the Mulla began to write direct to the Lieutenant-Governor of the Punjab, who also ignored his advances. On the other hand the Amir sent him encouraging messages from Kabul which helped to maintain the prestige denied him by Delhi. After a full account of his activities had been reported by the Political Agent at Wana in 1899, the Government of India decided to acknowledge his existence and influence. At a *jirga* at Sarwakai the Mahsuds petitioned the Lieutenant-Governor in person to pardon his past acts and to condescend "to treat him with kindness as becomes kings."

The following year was a continuation of raids and offences. Between April and July fifty-three offences by Mahsuds against British subjects were recorded, half of them in British India. In the more serious offences the Mulla was strongly suspected, but no definite proof was forthcoming. He came in himself this year and shyly intimated to a Political Officer that he was prepared to accept an allowance of Rs. 100 a month provided the affair was kept secret "as between kings." To this proposal the Viceroy, Lord Curzon, agreed after considerable hesitation. "Since it is a first-class scoundrel," he wrote, "that we are taking under our wing."

In 1900, the Bruce scheme of Sandemanisation was finally abandoned as unsuitable both to the nature of the country and for the inhabitants. Lord Curzon noted: "The Government of India will only observe that the best method of dealing with the Pathans of Waziristan appears to be still a matter for experiment." And *that,* ladies and gentlemen, after forty years' hard work. Actually the main feature of the Sandeman System—penetration and occupation—had never been applied.

An ultimatum was given to the Mahsuds that unless they paid a fine of one lakh for their sins they would be blockaded. This blockade lasted for over a year, and succeeded only when reinforced by four columns of troops who went into the various valleys and destroyed crops and property to the value of about two-and-a-half lakhs. During this period there was a succession of ugly incidents, raids, ambuscades and murders.

In 1901, the North-West Frontier Province was created, and placed under the charge of a Chief Commissioner.

In 1902, there was an unprovoked attack on a party of the 27th Punjabis, by a gang of Mahsud outlaws living in Birmal, in Afghan territory. The Mulla was suspected and the Mahsuds were ordered to bring him in for trial. He was tried at Sarwakai and acquitted. About this time also the regular enlistment of Mahsuds was extended to two Companies, one in the 124th Baluchistan Infantry and the other in the 130th Baluchis. These were the only two companies in the Indian Army until 1910. About this period also the Waziristan Militias were formed and by their good work in 1903 and 1904 gained not only the confidence of the Government of India but of that more sceptical body, their immediate officers.

Alas for the high hopes cherished. In 1904 Captain Bowring, the Political Agent, was murdered at Sarwakai while asleep by a Mahsud of the South Waziristan Militia; next February Colonel Harman, the Commanding Officer of this Corps, was murdered by another Mahsud sepoy at Wana. This was a more serious conspiracy among the Mahsuds of the Militia who had planned to murder all the British officers at Wana, seize the Fort and hand it and its contents over to the Mulla Powindah, who now styled himself "King of Waziristan."

The Mahsuds were disbanded with commendable celerity by the Political Agent, and in the absence of proof an open breach with the powerful Mulla was avoided by the higher authorities.

In 1905, the behaviour of the main tribe was on the whole good except for various minor raids and incidents committed by *badmashes* under the Mulla's instigation. These culminated in the murder of the Brigade-Major in Bannu who was shot by an ex-militiaman, one of a gang out for revenge for the punishment meted out to Colonel Harman's murderers. Mr. Crump, the Deputy Commissioner, supported by the Chief Commissioner, reported that in his firm opinion the Mulla was at the bottom of the trouble. The Government of India were disinclined to accept this view and rewarded the Mulla with a grant of land in British India, which he accepted, and then went off in fine fettle to tell of his success to his friends in Kabul. It would be of great interest to know the real reasons which prompted the Government of India to make this astonishing gift.

It obviously disturbed the flouted Mr. Crump who was provoked to make out a full dossier of the Mulla's activities. This showed clearly that the Mulla was training a gang of murderers to kill government officers. The Government of India was then persuaded and gave orders to withdraw the grant of land and the Rs. 100 a month allowance.

The Mulla now became the open enemy of Government and from this year—1906—until his death in 1913, kept Waziristan in a continual state of tension and unrest. I will not weary you with a recital of his crimes save to point out that his frequent visits to Kabul were always rewarded with handsome presents of money and ammunition.

I have sketched the Mulla's career at some length because he appears to have set a frontier example which has had a continuous stream of imitators. I doubt if we can learn anything useful from his life except to observe the peculiar gift which Governments of India had of transforming their holy men into holy terrors.

3. *The War and Afterwards.*—It is a common enough belief amongst us that during the War we were lucky in having a peaceful frontier with the exception of the minor expedition to Waziristan in 1917; but the other side of the medal shows us an appalling picture of treachery and crime which was overshadowed naturally enough by the publicity given to the bigger scale productions taking place in other theatres. In 1915-16, one hundred and eighty major offences were committed by the Mahsuds. The Viceroy in a public speech in March 1916 said: "The cup of the Mahsuds' misdeeds was already overflowing and the day of retribution only delayed till our preoccupations elsewhere should be relieved." The tactics of the Mahsuds (improved by their training in the militias and Army) became superb. For instance, the incident of a disguised party of seven, two dressed as girls, capturing the post of Tut Narai in the Tochi and getting away with fifty-nine rifles and eight-thousand rounds of ammunition.

Strong measures had to be taken. An expedition fortified with aeroplanes, Lewis guns and the proclaimed approval of the Amir (who stopped all his allowances to the Mahsuds) entered the country from Jandola and reached Torwam in the Khaisora with little opposition. The Mahsuds submitted and accepted the severe terms imposed. This expedition was probably one of the most well-timed strokes of our frontier history. Its effect reached far beyond the borders of Waziristan and the results lasted until 1919. The Mahsud crime bill was reduced from one hundred and eighty to fourteen.

This lull was, of course, too good to last, and in 1919, when Amanullah preached his *Jihad,* the Wazirs and Mahsuds rose almost as one man, deserting from the militias wholesale—taking with them from Wana and its outposts alone 1,200 modern rifles and three quarters of a million rounds of ammunition. Afghan

propaganda and intrigue was strong enough to make them reject the easy terms imposed upon them when peace was signed between the British and Afghans, and once again an expeditionary force—this time composed entirely of Indian troops—took the field. I need not go into the history of that stirring campaign here. By 1921 the main battles had been fought and G. H. Q. were established at Ladha with long lines of communications to India. The troops sat behind barbed wire and any carelessness or inexperience was severely punished by the watchful tribesmen.

The building of roads then started and Razmak decided upon. The Royal Air Force was introduced as a new instrument to promote the policy of occupation—at last decided upon by the Government. A large garrison was stationed at Razmak and on the lines of communication and by 1929—when the scurvily treated Wana was permanently occupied, for I think the third time—we all felt that at last we had solved the problem of Waziristan. It was at this time I started taking a rather indecent but enjoyable interest in journalism and advocated as a necessary corollary to occupation penetration of the country by friendly troops. I became slightly Sandemanised, but got snubbed for my loose dreaming.

There were a few difficult incidents during these next few years when the tribes showed too ready an instinct to involve themselves in Afghan dynastic affairs but these were smoothed over by firm action. After 1930, however, political developments in India gave a new twist to their meddling instincts and with the rise to power of another holy man called Ipi, coupled with a decision given in a British law court regarding the conversion of a Hindu girl to Muhammadanism, we became involved in operations from 1936 until just recently. These cost two crores and twenty lakhs of rupees, and the results are indiscernible.

* * * *

Conclusions

I have now come to the end of this historical survey. If I had dipped into the history of the Mohmands and Afridis the impression on our minds would have been, I think, much the same. That impression would be a long similar tale of outrages, expeditions, schemes, counter-schemes and road-making since the War. Fundamentally the reason for this disorder is the same—economic. I have not touched either on the Malakand agency which includes Dir, Buner, Swat and Chitral, small Khanates

ruled by personal rulers who have been generally loyal to the British. They also have their special problems akin to those of the more southern territories.

I have not touched either—and do not intend to do so—on the vexed questions of air, political or army control. They are the instruments of policy when a policy has been chosen, and have nothing to do with the subject matter of this lecture.

There are four main policies adumbrated by various schools of thought. Firstly, we have the "Back-to-the-Indus" school which asserts that as the River Indus is the natural and ethnographical boundary, making a sharp division between the races which live on either bank, that this river should be our frontier. I don't think I need waste your time discussing this old school cry as I do not know one single argument in favour of it.

Secondly, there is the school which says, let us retire to the old administered boundary line, put up a line of fortifications to protect the plains-folk, reform the old Frontier Force and use them with the police and militia to punish the tribes who overstep this mark. There is something to be said for this backward policy. It is comfortable, it is lazy and it would not be as expensive as the forward policy. Since the Third Afghan War military operations (exclusive of the cost of maintenance of the normal large garrisons) have cost over twenty-eight crores of rupees. Personally, I have no use for this close-border policy because it is one of despair and leaves the sickness uncured. You might as well abandon a child with a broken leg because you don't know how to mend it. The reason why the forward policy school increased so tremendously since 1914 was the failure of the close border policy to prove its own efficacy. But if such a policy seems expedient now in these troublous years in which we are living, if such a policy gives us, in India, temporary relief from the tension of the war preoccupations we are experiencing, then let us accept it, and leave the aftermath of suffering and debt to our children—like our fellow subjects in England.

Thirdly, there is the present policy of half-forward-betwixt-and-between, called the complacent policy, which appears to me to be a good old British compromise. So far as I can see, this particular policy is cyclical like monsoons, locusts and trade depressions; to these disturbances it reacts automatically and is content to bury, thereafter, its dead, its ruined crops, its trees and its overdrafts.

The steady progress made with roads both in the Mohmand country and in Waziristan has undoubtedly made the punish-

ment of the tribes easier but—so far as I can judge—has done little to civilise them. Indeed the payment made for the roads has only excited their cupidity.

This policy, as I mentioned in several articles in 1929 and 1930, is bound to fail so long as the troops are cooped up in their camps like so many sitting birds. The tribesmen cannot look upon them as anything else except inveterate enemies, and *vice versa*. In the piping days of peace ten years ago we had an opportunity of taking a risk which might have had far reaching results in our relationships. If troops had then been allowed and encouraged to mingle more with the inhabitants, to play games with them, to run *khud* races with them, subsequent history might have read differently. We missed that opportunity and have drifted into a series of periodical expeditions which are expensive and have very little civilising value.

Some of you may remember that some years ago I advocated a twenty-year plan which was, in effect, the gradual absorption of the tribes piecemeal, culminating in their disarmament. As nobody paid the slightest attention to this proposal except the newspapers, it is probably impracticable, but the idea behind it —a definite long-range plan, aiming at the pacification of the frontier and the elevation of its inhabitants—is surely not a bad idea, and better than this slipshod acceptance of circumstances and events which we think we cannot control.

Before any plan can be made to operate, the Durand Line will have to be redrawn. With goodwill on both sides I cannot see why Afghanistan and England should not re-affix this boundary which would lead to greater homogeneity among the affected tribes themselves and make them more susceptible to control by the governments concerned.

Overshadowing the whole problem is the economic plight of the tribes which I believe tends to grow worse yearly. This poverty is largely their own fault as they prefer shooting their neighbours to looking after their crops and flocks. Successive governments have, I know, made extensive economic surveys, examining and promoting irrigation schemes, developing forests and exploring the possibilities of oil and mineral extraction. The results of these surveys have not been promising. Let me tell you a final story.

Last year when I was at home I spent a week-end in Hampshire with a retired Lieutenant-General who was in charge of the escort many years ago when the road up the Gomal to Khajuri Kach was being surveyed. He told me that in one of the gorges

of the Gomal was an engineer's dream of delight for the perfect dam which would irrigate thousands of acres of at present desolate waste land, and give employment and prosperity to the inhabitants. He said that the scheme had been taken up by the Punjab Government but that so far as he knew nothing had been done.

I spent the next night in the house in Sussex of an old friend in the Political Department—Sir William Barton, whose recent book on the Frontier I can commend to you. I told him of this Gomal dam. He remembered the scheme being discussed and examined but, so far as Sir William remembered, it had to be rejected on technical advice as the silting up of the dam would make the distribution of the water uneconomical.

I know nothing about irrigation and its problems but I cannot imagine anything more satisfactory than a series of dams in all the rivers of the North-West Frontier, and all of them silting up. Much better to spend your crore-and-a-half each year in paying the tribes to de-silt these dams and carry the silt to their impoverished holdings than to spend it as we are doing.

That is the end of my lecture. I have only touched the fringes of a fascinating subject; the more I have gone into it the more bogged I became; its problems do not and cannot respond to any quick or easy solution. I have indicated how our great administrators have spent their best years in trying to pacify it. The great Lord Curzon said in 1904 that its solution lay in the military steam-roller being passed over it but that he was not the man to initiate that policy. Times have changed since then and the military steam-roller in Waziristan has only been called out when all other methods have failed.

In conclusion, I would like to condense my criticisms of frontier policies into a parody of Lord Chesterfield's epigram on an even more pressing human association:

In the first place, I consider the results we obtain at present are purely momentary; our position *vis-à-vis* the tribes is ridiculous, and finally the expense is damnable.

* * * *

The Chairman

The latest slogan in connection with the Frontier seems to be that the presence of troops in the country is disturbing to the locals, and that, considering all things, the latter are, and have been, behaving very satisfactorily.

Major Maxwell does not subscribe to this theory, which indeed seems only to have been developed during the last few years, and to have no basis of fact.

He asks with some reason what we were doing between the years 1923 when we occupied Razmak, 1929 when we reoccupied Wana and 1936 when the present trouble broke out. During this period Mahsuds and Wazirs were comparatively the good boys of the frontier. What advantage did we take of their temporary respectability to improve the economic lot of the inhabitants or to encourage them to get on good terms with officers and men? In those days, at any rate, they were not unduly disturbed by the presence of the troops, indeed at times they even seemed reasonably pleased to see officers.

This period of calm was unprecedented in the history of the country and it may be that in our failure to make the most of it, we lost the opportunity of the century.

The combination of a well disposed Waziristan and a politically quiescent India which existed between 1923 and 1930, may not recur for a long time and both conditions must be fulfilled if we are to have peace on the Frontier.

TRUST BEGETS TRUST
THE PROBLEM OF WAZIRISTAN

By B. Bromhead

The object of this essay is to suggest a solution to the problem of policy, and consequent method and means of control in Waziristan.

The first aim of policy in Waziristan must be to ensure the safety of British India. A further aim should be to improve the economic, social and educational status of the tribesmen with a view to enabling them to take a proper part in whatever political future awaits them. Lastly, whatever policy and method of control is suggested, it must, especially in view of the present world situation, make possible a reduction in army expenditure, with a view to its use elsewhere.

The people affected by any policy or its implications are, briefly, the Finance Department, the External Affairs Department with a watching brief for the interests of Afghanistan, the Civil Administration, the Army, Air Forces, and civil armed forces, the inhabitants of the districts bordering Waziristan—and, last but not least, the tribesmen themselves. Let us try to keep this imaginary audience in mind, and sympathise with their feelings, whilst giving to each their due importance.

The Policies Possible.—The main policies possible will be briefly examined as to whether they are practicable or not. These are:

(1) The forward policy, with occupation up to the Durand line.

(2) Disarmament, either in part of, or throughout the whole country.

(3) The backward policy, entailing retirement to the administrative Border.

(4) The present policy.

Mention of the forward policy and disarmament causes a considerable stir amongst our imaginary audience. The tattered group of tribesmen say something extremely rude—backed by the Finance Department. The army point out that a considerable increase instead of reduction in army expenditure would be necessary, although an eventual reduction, after an indefinite period of time should be possible. The External Affairs Department murmurs something about the repercussions which might

arise from control up to the Durand line. Without entering into a controversy on these matters, it is obvious that the present is no time, for military or financial reasons, to embark on the adventure of an extreme forward policy, or of disarmament even though it holds promise of fulfilling our eventual aim.

The backward policy, likewise, arouses comment, though this time an irresponsible element amongst the group of tribesmen and soldiery raise a cheer. The Political authorities, however, realise that little control is possible with such a policy and, in consequence, we should be unable to fulfil our international responsibilities by preventing excursions of our tribesmen such as took place in 1929 and as was attempted by the Lewanai Faqir in 1933 and again by the Shami Pir in 1938. The question, therefore, of the strength and dispositions of the forces necessary to ensure the defence of British India and control raiding along the Administrative Border for a distance from Latambar to the Gomal of some 100 miles will not be entered upon. The considerations mentioned, apart from any hopes of improving the tribesmen's lot, or for notions of prestige, show the policy to be impracticable.

The present policy remains. This is a compromise between the former policies, entailing limited occupation and control. Tribal affairs are managed by *jirgahs* and influenced by the mullahs to a great extent, and by the maliks as far as their personality and leadership permit. The political authorities advise and support the maliks, only interfering as far as they are able, when individual or tribal behaviour is detrimental to British Indian Interests. Control, where possible, is enforced by financial and economic pressure, or more actively, in certain areas, by Scouts, and to a slight degree by *khassadars* and as a last resort, by the army and air force.

The result of this policy is not an unqualified success, though, on the credit side, a certain degree of control is exercised. The debit side shows the cost of this control to be great in lives and money, and that a feeling of hostility pervades the country. Raiders enter and leave the settled districts with comparative ease.

Despite its drawbacks, this policy has not the same degree of impracticability as the previous policies mentioned, and appears to be, in some form or other, the only one possible. The weaknesses and difficulties connected with the present policy and suggestions for overcoming these are given later in the essay.

The Question of Control.—Having criticised the various policies available, it is necessary to talk briefly about control. The present method consists in control by H. E. The Governor of the North-West Frontier Province, through his Political Officers, as long as the situation is normal, while in the event of the situation becoming beyond political control, the army take over until order is restored.

The alternative is unified control under soldier administrators, and its advocates can point to such examples as Lyautey, and to names famous on our own North-West Frontier. They can also point out, that in recent years, Waziristan has on occasions been ruled, at least as successfully, whilst under military control as it has been under the civil.

The facts are that the tribal baby, when too obstreperous, has been passed from the Political to the Military, and eventually returned by the latter after drastic treatment. Neither nurse meets with real success, although the army may return the brat in a sufficiently exhausted condition to allow the political to hold it in comparative quiescence until its undisciplined energies boil up into a further paroxysm. The parents appear to have small interest in its future. Any real nurse will tell you that this is no way to bring up an infant—but it is not fair to blame either the army or the civil. One psychological drawback to army control is apparent, and that is, the tribal baby dislikes being held by the army, more than by the civil—and here we will leave this nursery metaphor.

A further drawback to unified control is that the working of both the army and the civil machines has become so complicated as to be difficult of management by a single man. Lastly, under present conditions of service, the soldier has not the same opportunities of becoming expert in tribal affairs and in civil administration.

In short, taking all the above considerations together, unification of control appears to have too many difficulties to be efficient. The present method, provided good co-operation exists—and this is generally the case—has, in the past, proved adequate—and there is no reason to suppose that it will not be so in the future.

A Dissertation.—As a dissertation from the main theme of the essay, it is necessary to explain, for the benefit of those who may not know, what is meant by scouts and *khassadars*, before going further.

SCOUTS.—There are two Corps of Scouts in Waziristan. These are the Tochi Scouts and South Waziristan Scouts, operating in north and south Waziristan respectively. The Scouts, as part of the Civil Armed Forces, are an irregular force of armed police, trained and organised on semi-military lines. Their duties are normally police work in Tribal Territory. The strength of each of these two corps is approximately three thousand men. They are distributed in fortified posts as shown in the map. These posts vary in strength, according to necessity, from three to four platoons in the smaller posts, to possibly eight platoons or more in the large posts.

The composition is entirely of Pathans, one-third of whom are trans-border tribesmen, but these, with the exception of about one hundred men in each corps, do not come from the tribes of Waziristan. They are armed chiefly with the rifle, though some machine-guns are kept for the defence of posts. Owing to their composition and light armament, and also to the fact that when operating no animal transport accompanies them, they are extremely quick across the hills and are able to compete on more than equal terms with the tribesmen, sharing with them the twin weapons—surprise and speed—but backed by superior training and discipline.

Their normal police duties consist of:

(*a*) *Gashting.*—This may be interpreted as patrolling. A *gasht* moves on the principle of a fighting patrol, always deployed to fight. The strength normaliy varies from eighty to two hundred rifles, or more, if the area or task is dangerous. *Gashts* move out for various purposes, such as routine patrolling to become acquainted with the country, the protection of political officers visiting places in their agencies, moral support to *khassadars* on road protection or to friendly elements in difficult areas, or again to search out and engage hostile gangs when information is given of them.

(*b*) *Arrests and round-ups.*—This may be to arrest individual outlaws, or whole gangs, or perhaps to surround and obtain hostages and rifles from a tribe, or to distrain on their livestock. The village or area is normally surrounded at night and searched at dawn. Such operations are apt to be met with opposition.

(*c*) *Chapaos or Ambushes.*—These are to waylay raiders or hostile parties, moving by probable or known routes.

Apart from the above "peace time" duties, scouts act in co-operation with Regular Army columns in war. Their speed enables them to be used in the same role as mounted troops covering an advance in open country, or as a moving flank guard. Their light armament prevents their taking on superior opposition when unsupported, and makes it necessary, in such circumstances, for them to move within range of artillery support. They have shown during recent operations that their fighting value and *esprit de corps* are great.

THE KHASSADARS.—These are tribal police, recruited from the tribesmen of the country in which they work. They provide their own rifles, are not trained, and do not wear any uniform other than an armband. Their recruitment is a tribal affair. Promotions are political and not by merit. They occupy small posts, chiefly along the routes to be protected by them. These posts are often ill sited and badly constructed and, in general, not strong enough for serious defence. Khassadars' duties consist of acting as escorts where wanted, and protecting the roads in their area. Their protective value is more political than tactical, and varies in efficiency in accordance with the political atmosphere, and other factors such as the degree of support given to them. For the above reasons they are not altogether reliable, and are looked upon with suspicion by regular troops and by Scouts. They have, however, on occasion offered active resistance to hostiles, and individuals amongst them have done good service.

This finishes the dissertation, and the difficulties and weaknesses to be contended with, will next be examined, followed by a consideration of assets which may help in tackling the problem.

WEAKNESSES AND DIFFICULTIES TO BE OVERCOME

(*a*) *Weaknesses due to policy*—

(*i*) Lack of an aim other than to establish a degree of control, and also lack of any steadfastness of purpose towards that aim.

(*ii*) Absence of sufficient outlet for the spasmodic energies of the tribesmen.

(*iii*) The continuance of payments to individuals and tribes, when these have ceased to assist Government actively, and in general the demoralising effect of undeserved payments.

(*iv*) The present spirit of unrest and bitterness, due in part to the regard of Government, as so largely represented by a "foreign" army, as the "enemy."

(*b*) *Other Weaknesses*—

(*i*) The fact that, for some, war has become a racket: the more troops there are, the more contracts and transport are necessary.

(*ii*) A feeling that it pays to be hostile, and that friendship brings insufficient reward.

(*c*) *Difficulties affecting policy*—

(*i*) The difficulty of obtaining money for any useful aim such as education, social improvements, agriculture, irrigation, etc.

(*ii*) The childish mentality of the tribesmen, their idleness, lack of education and ignorance, and their undisciplined energies, so easily used by unscrupulous persons; all of which make the grown-up generations difficult to reform.

(*iii*) The general barrenness and difficult nature of the land, tending to poverty and lawlessness.

(*iv*) The fact that there is no "wall" behind the tribal zone but a neighbouring country, with but loose control over its border tribes.

(*v*) The influence of politics from the administered territory, sometimes leading to unrest.

(*vi*) The tribal custom of "*melmasti*," making it difficult for a friendly tribe to avoid giving shelter to outlaws and other tribes under blockade.

(*d*) *Difficulties affecting political control*—

(*i*) The presence of large areas such as the Ahmedzai Salient, the Lower Shaktu and the Bhittani country adjoining the settled district, in which active political control by Scouts does not exist. It is only necessary to look at the map to see the tremendous length of border touching administered territory which is at present unpoliced from inside tribal territory.

(*ii*) The frequent inability, owing to lack of control in the area to make a prompt arrest of ringleaders; and the consequent tendency for punishment to fall on their less guilty seconds.

(*iii*) The fact that the majority of raiders return unscathed, pointing to the difficulty of stopping raids from administered territory, and the need for control over the areas from inside.

(*iv*) The weakness of the *khassadar* system, especially when not in range of support.

(*v*) The lack of touch between tribesmen and government which is bound to result when junior political personnel such as muharrirs in isolated posts are not of the first class.

(*vi*) The increasing improvement in tribal armament.

(*vii*) The restrictions on the use of the air force rendered necessary by humanitarian considerations.

(*e*) *Difficulties and weaknesses concerning military and scouts dispositions and operations*—

(*i*) The weaknesses in our lines of communication, especially that to Wana. The presence of "weak spots" sometimes insufficiently guarded, such as the Sangar Sar and Tabai Narai area *en route* to Spinwam, which invite hostile action and consequent unrest. In connection with this, even when a route is "guaranteed" by the political, a commander cannot take undue risks, or forget he is responsible for his own protection.

(*ii*) The temptation to hostile gangs of weak road protection gashts, and Scouts gashts, working too far from support.

(*iii*) The difficulty of obtaining timely information and of maintaining secrecy.

(*iv*) The lack of good military objectives.

(*v*) The use of military columns in sensitive areas without any more definite objective than to exert economic pressure, or to show the flag. The presence of troops, more often than not of a different religion and race to tribesmen, whose sense of freedom and privacy is easily offended, is a tremendous irritant. The troops naturally regard all tribesmen as "enemy" and the feeling is reciprocated. It is hard not to sympathise with both sides. The tribesmen do not, to the same extent, object to the presence of Scouts when employed on such duties, for these are men of their own religion and race; though in war it is not true "that tribesmen never shoot at Scouts." By sensitive areas I mean areas such as the Shaktu. I do not mean that the Army should be confined to their posts, but that they should, unless necessary, avoid areas unused to troops.

THE ASSETS IN FAVOUR OF POLICY AND CONTROL

(*a*) *Assets in favour of Policy.*—These are somewhat few.

(*i*) The respect of the tribesmen for firm and just treatment and resolute authority, and their respect for the fighting qualities of the Services, however much they may smile at their slowness of method or dislike their presence.

(*ii*) In the majority, a ready response to friendship and a shrewd common-sense, combined with sense of humour and courage.

(*iii*) A country which in the past has been cultivated to a vastly greater extent than at present.

(*iv*) Lastly, but far the most important, a young generation of as good material as may be found anywhere.

(*b*) *Assets in favour of Military and Political control*—

(*i*) Roads and posts, and the extra mobility given to columns by motor transport and by ration dumps maintained in posts.

(*ii*) The ability of the army to fight its way where it wishes and the general high state of efficiency of the army, air forces and Scouts.

(*iii*) The great effect of new weapons, such as tanks, out of all proportion to their numbers.

(*iv*) The very great effect of the air force when in support of ground troops in action, and their use as troop carriers and supply droppers.

(*v*) The occasional usefulness of the *Khassadar* when within supporting range of regular troops.

(*vi*) The quietening effect of Razmak on the Mahsud situation.

THE SUGGESTED AIM OF POLICY

The weaknesses and difficulties confronting the solution of the problem have now been seen, as also the assets in hand. In the making of any suggestions these must be remembered. Let us also remember the imaginary audience, whom we have not mentioned for some time, and keep their feelings in mind.

The proposals are as follows:

The policy must aim at ensuring the safety of British India by means of full political control inside the area bounded by the road from Thal in Khurram to Mir Ali, from thence to Datta Khel in the Tochi; from there, via a direct line to Razmak, and so by the road to Wana; and thence straight South to Gul Kach; then Eastwards from Gul Kach taking in the Gomal Valley and the

Zilli Khel grazing grounds south of the Gomal to Kashmir Kar; and lastly the Sherrani country. The country within reasonable *gashting* distance of posts on the outer arc, outside this enclosed area, must also be included. Scouts must be able to *gasht* anywhere within this area, and carry out arrests.

When control has been established in an area, the secondary aim should be, to provide education for the younger generation, and employment primarily in the Services; and in the event of a major war, employment for the older generation also, in corps of irregular troops, at a distance from their homes, such as in Burma.

Further, the question of agriculture and irrigation must be tackled gradually, and the conditions of service in tribal police forces such as *khassadars* improved, both to increase their efficiency, and make the services rendered by such bodies more commensurable with the money spent on them.

THE METHOD OF ACCOMPLISHING THE AIM

The method of carrying out the above aim falls into two main stages:

The first stage consists in—

(*a*) Increasing the strengths, and numbers of posts, held by the Tochi Scouts and South Waziristan Scouts, to police areas inside the proposed "controlled zone" which at present are not policed.

(*b*) The raising of a Bhittani Militia for the policing of their own country.

(*c*) Reorganisation of the *khassadars,* in areas where control and support are sufficient, into a more efficient Levy Corps. The retention of the word *khassadar* might not give the new corps a fair start.

Should any member of the Finance Department or those concerned with army recruitment read these words, I would ask them to look at the suggested means for financing this venture and for finding the increased strengths necessary, before condemning the scheme.

During the first stage, the Army would have to remain at approximately its present strength, and in the event of major opposition from hostiles and other interested persons, who may well object to a stricter control over their activities, the army might have to assume complete control until the stage was completed.

The second stage is divided into two sections, that is, firstly, in the reduction of army strength to the minimum necessary for possible punitive operations, and the maintenance of a secure

line of communication; and secondly, in the opening of schools, finding of employment, and in measures for the betterment of irrigation and agriculture, for tribesmen in the controlled areas.

Brief details of the two stages are as follows:

First stage—The proposals mentioned above would be carried out as follows:

(*a*) By the disbandment of the present Frontier Constabulary as such, and the transfer of their strength to the Scouts and the Bhittani Militia, in proportion to the strength now maintained by them, along the borders of each Corps area. The retention of the Frontier Constabulary along an Administered Border lying against tribal territory which is properly controlled from inside, is redundant. This is not said to disparage the Frontier Constabulary, whose fine record speaks for itself. Sentiment must not, however, interfere with efficiency, a lesson which the army is learning.

Present methods for the control of raiding might be best described by the adage of shutting the stable door . . . and the contention of the writer is that this particular "stable door" can best be kept shut by control from inside. The length of border to be watched and the small numbers to watch it, the numerous routes in the plains and foothills available to raiders, and the lack of information through the fear or sympathy of the inhabitants in the settled districts, all weigh too heavily against forces operating from the present Frontier Constabulary posts at their present strength.

(*b*) By the formation of a "Reserve Wing" in each Corps of Scouts from the strength transferred from the disbanded Frontier Constabulary, and further, if necessary, from old disbanded soldiers. The function of the Reserve Wing would be to act as immobile post defence garrisons, to be distributed to all posts, thus entirely freeing the present "Active" Wings for *gashting*. The Reserve Wing being for post defence, for which the chief requirement is fire power, it need not, if armed with light automatics, be numerically strong. A strength of 400 men per corps should be sufficient to provide twenty platoons armed with four light automatics in each platoon.

The formation of "Reserve" Wings would require very little organisation and training if composed of Frontier Constabulary and old soldiers. They would eventually be composed entirely of old soldiers and the work being comparatively sedentary, should attract that class.

Posts might be classified as follows:

(*i*) *Normal Posts.*—Normally these posts would always contain a *gashting* garrison from an "Active" Wing, and, in addition a "Reserve" Wing garrison sufficient to hold the post in the absence of the *gashting* garrison.

(*ii*) *Seasonal Posts.*—These would be posts which the *gashting* garrison would occupy in accordance with the season of the year and movements of the tribes. A "Reserve" Wing garrison would always be present for post defence. For instance, it might not be considered necessary to have a *gashting* garrison in Chagmalai, at the junction of the Shaur and Mastang Nullahs, during the heat of summer when the area was clear of tribesmen. In winter, when the Jalal Khel Mahsuds move to their winter grazing near Chagmalai, a *gashting* garrison might be necessary.

(*iii*) *Reserve Posts.*—These would be posts, or piquets, from which *gashts* did not normally operate, though they might be used as a temporary base by *gashts.* Such posts would only contain a "Reserve Garrison." Instances might be, the Shahur Tangi and Iblanke Narai piquets or a proposed "non-*gashting*" post at Sangar Sar and Tabai Narai, for the defence of the Spinwam Road and for the support of "Levy Posts" in that area.

(*c*) *The formation of a Bhittani Militia.*—The work of this Corps would be the policing of its own area, on the lines of the Kurram Militia, with this difference, that it would also have to prevent raiding from Mahsud country, as well as its own. The financing of the corps would be found, as far as possible, from the amount now spent on the Frontier Constabulary at Tank and along the Bhittani border, and by the gradual elimination of any Bhittani *khassadars.* The nucleus of the corps would be formed by the transferring of the two Bhittani platoons with the South Waziristan Scouts—and from any now serving with the Frontier Constabulary. The recruitment of the corps would have to be chiefly Bhittani, with a proportion of Marwats.

The minimum posts necessary would be a headquarters at Tank, to be in close liaison with the Assistant Commissioner.

Tank, and the Political Agent, South Waziristan, and to take advantage of the present Frontier Constabulary post and lines; with large posts at Jandola, which, being in Bhittani country, would have to be taken over from the South Waziristan Scouts, and at Kot. Other posts necessary would be at Girni, Pir Tangi and as close as water and other considerations permit, to the Sammal Narai. The latter post would be of great importance to the South Waziristan Scouts, giving them a base for work in the Jalal Khel summer area and the Sheranna and Karesti Algads. Motor tracks would have to be constructed eventually from Jandola to Kot, *via* Pir Tangi, and from Sammal Narai to Mullazai, *via* Kot.

Before leaving the question of a Bhittani Militia, there are two points to stress. Firstly, although the formation of such a corps would probably meet with opposition from certain elements, there can be no question but that it would be eventually of tremendous benefit to the Ghittani tribe, providing decent work for their youngsters, and making possible social improvements. Further, the passage of Mahsud raiding gangs through, or the organisation of raiding gangs from, Bhittani country, could be effectively controlled along its lengthy border. Secondly, false pictures may have been drawn of the fighting qualities of the Bhittanis during recent operations. The writer does not believe the heart of the tribe was really in the hostilities. Bhittanis have done good work in the South Waziristan Scouts, where their fighting qualities have been tested and proved to be excellent.

(*d*) The extra Tochi Scouts posts suggested are:

(1) "Seasonal Posts" at the Lower Shaktu and the Kam Sham, with a *gashting* garrison of normally six platoons in the area, to police the Shaktu, and co-operate with a South Waziristan Scouts post near Sammal Narai.

(2) A "Reserve Post" at Sangar Sar, with a piquet on Tabai Narai to support Levies in the area, to keep the Spinwam road open, and to act as a base for *gashts* co-operating with the Spinwam garrison.

(3) A "Reserve Post" at Boya and at Karkamar, with a *gashting* post at Tut Narai: these posts to keep the Datta Khel road open and to support Upper Daur, Manzar Khel, and Khiddar Khel Levies. A Mohmit Khel levy post on the Lowargai Narai.

The Ahmedzai salient should not require a separate post if the line from Mir Ali, Spinwam, Thal in Kurram is sufficiently

policed; but in the event of this area being used as a base by hostiles, a "punitive" Scouts post must be temporarily established, at the expense of the Ahmedzai Wazirs, or the area disarmed. Motor tracks in the Tochi Scouts area would be necessary from Karkanwam to the Lower Shaktu Post, and improvement to the Degan to Datta Khel track, via Tut Narai.

(*e*) The additional South Waziristan Scouts posts suggested are as follows:

(*i*) A post at Wana, which would enable the Wana Brigade to be used elsewhere.

(*ii*) A post either at Barwand Baghza, or at some central place between Sorrarogha and Sarwakai, where a good landing ground was possible.

(*iii*) A "Seasonal Post" near the Sammal Narai, when the Jalal Khel were in their summer grazing grounds.

(*iv*) The moving of the headquarters of the South Waziristan Scouts to Wana or Barwand in order to be at a place from where the air force could operate, and to leave Jandola for the Bhittani Militia.

(*f*) The policing of the Zilli Khel grazing grounds south of the Gomal, and of the Sherrani country, need reference. The former area, being Wazir territory, would continue to be policed by the South Waziristan Scouts but might require a "seasonal post" in the Gomal, about Nili Kach, if the Frontier Constabulary posts at Murtaza and at Manjhi were withdrawn. In any case, police would be required at these posts to collect Powindah rifles. The Sherrani country, looking at it from the map, appears to be best left as it is under separate Frontier Constabulary, or taken over by the Zhob Militia, provided political difficulties could be overcome, and a road made from Fort Sandeman to Daraban, via Moghal Kot and Drazinda.

(*g*) The present *khassadars* in all "controlled areas" must be disbanded, and a Levy Corps, commanded by a British Officer, formed in their place, to help the Assistant Political Officer. Recruitment for the Levies must be in the hands of the Political, and not be a family affair as at present. Suitable terms of enlistment should be agreed to and be binding. Some form of uniform must be provided. Posts should be well made, tactically sited and capable of defence, and be within reasonable support of a military or scouts post.

(*h*) When a "Levy Company" becomes sufficiently efficient, and the tribe or sub-section concerned sufficiently under control, then certain Scouts' posts might be handed over, to free the Scouts for areas not yet sufficiently policed—for example, "Splitoi" Post, might be handed over, say, to the Shahur, Shaman Khel, and the garrison released for a new post elsewhere, possibly in the Upper Shaktu. Such a process would have to be gradual. If Levies organised on such lines are not politically practicable, then the present *khassadars* should, if possible, be made to feel their obligations to a greater extent, and be given better means to carry them out. Such improvements as the provision of uniform, the construction of more defensible posts and a greater degree of support, might increase their morale.

(*i*) The fighting power of the Scouts must be increased by the provision of light tanks and light armoured cars to replace mounted infantry, by a sufficiency of post guns or mortars, and by the provision of light automatics for piquet and post garrisons. If disarmament is not possible, then tribal armament must be met by superior armament.

(*j*) A liaison officer, who would be in close touch with the district police and pass on information of any raid that did happen to take place, should be attached to the headquarters of each civil district. Wireless telephony with all posts is necessary so that the voice of the liaison officer, "calling all posts," might give immediate warning. The organisation of defence against raids in the civil districts should include "radio" vans in the important police posts, so that armed police, moving in motor transport to the support of village *chigas*, would be able to pass on first-hand information of the movement of gangs.

This completes the suggestions for the first stage.

Second Stage.—The reduction of the Regular Army garrison would be carried out as soon as the first stage was sufficiently advanced to permit a reduction. It is suggested the following troops could be reduced:

(*a*) The Wana Brigade.

(*b*) The battalion at Manzai.

Peace Distribution and Tasks.—The following are the troops which it is suggested should be retained:

(*a*) Razmak Brigade, at its present strength.

(*b*) A Lines of Communication Brigade for the Bannu-Razmak road and the garrison at Bannu.

(*c*) A mechanised cavalry unit, stationed at Dera Ismail Khan or Bannu, with detachments at Mir Ali and Razmak.

This suggestion is open to criticism in that it leaves Scouts Posts far from support, and leaves the Gomal route unguarded. Further, only one striking force is available. The risk is admitted, but as far as Scouts are concerned, they can, if necessary, defend themselves against tribal attacks.

As regards the military problem, if the risk is not considered permissible, and if two striking forces are considered necessary, then the following alternative suggestions are made:

(*a*) The Razmak garrison be increased by two battalions, a sufficient strength to provide two striking forces. The extra garrison need not be in Razmak, but based on the Razmak line of communication. The disadvantage is that no regular troops are in South Waziristan, or near the Gomal. The advantage is that there is only one line of communication to guard.

(*b*) The Wana garrison be moved back to Barwand, or some central position in South Waziristan, the necessary strength being found by the Manzai battalion, released by the forming of a Bhittani Militia, and by one battalion from the present Razmak garrison, with two additional battalions. The advantages are a shorter and less vulnerable line of Communication and a more central position.

Both the above suggestions allow for a reduction on the present strength in Waziristan.

The defence of the lines of communication at this stage would be the responsibility of the "Levy Corps" supported by occasional armoured car patrols. It is suggested that the Lines of Communication Brigade be kept concentrated at Bannu and Mir Ali, for ease of maintenance and administration during normal peace periods. Movement of ammunition and arms and small armed parties between Mir Ali and Razmak would only be allowed on notified days, at irregular intervals. Protection would be by close escort of armoured cars and "Levy" protection, supported by Scouts' *gashts*.

War.—

(*a*) In the event of serious disturbances necessitating the taking over of the lines of communication from the "Levy Corps," it is suggested that the Lines of Communication Brigade occupy battalion posts at places such as Gardai, Damdil and Thal in Tochi, with intervening permanent piquets over danger spots between these posts. Whilst not advocating a static defence of the road, it is necessary for road protection *gashts* to be safeguarded from ambush at such places, and also to have pivots from which they can manœuvre if need be. Permanent piquets, apart from their value of guarding against surprise, would also give moral support to "Levy Corps" posts in their vicinity.

(*b*) The Army would take over entire control if the Civil Armed Forces could not deal with the situation. Peace time contracts would immediately cease, and every endeavour be made to prevent hostilities becoming a source of profit to the tribes. In this connection it might be worth while holding an enquiry as to the source of such possible profits, under the heading of supplies, transport, etc.

The Air Force—

(*a*) PEACE.—It would be ideal if a flight of aircraft could be based on the headquarters of both the South Waziristan Scouts and Tochi Scouts, and not only the latter as at present. The advantages are close liaison, and knowledge of the local country and its problems. The difficulties are maintenance and administration. If the above is not possible, it is suggested that the air force at Miranshah should be increased, and a flight attached for short periods to the South Waziristan Scouts. In peace, the main active work of the air force will be co-operation with Scouts *gashts*.

(*b*) WAR.—The present restrictions on the use of the air force largely counteract the great power of this weapon. The problems involved are somewhat delicate, but I would suggest the following:

The present method of "proscribing" an area, in an attempt to eject undesirables such as Ipi, or of hostile forces, has this main disadvantage: that the time lag, due to having to give separate warning to each area involved, allows the principal offenders to escape.

An area should be proscribed by a "warning order" that if authentic information is received, the area will be punished without further warning. Punishment should take the form of tear gas spray on the area concerned, administered by day or night—thus causing no damage to property, and leaving no "dud" bombs for subsequent mischief.

Caves will not prove such effective anti-air shelters as at present. The inconvenience caused will affect everybody and maim none, and should be effective. Tactical use of tear gas is impracticable as it would hamper operations if used in the vicinity of troops, but should an effective persistent tear gas be obtainable, its punitive use, as above suggested, should be considerable. Warning should be given by means, if possible, of aerial loud speakers.

Employment and Social Improvement—

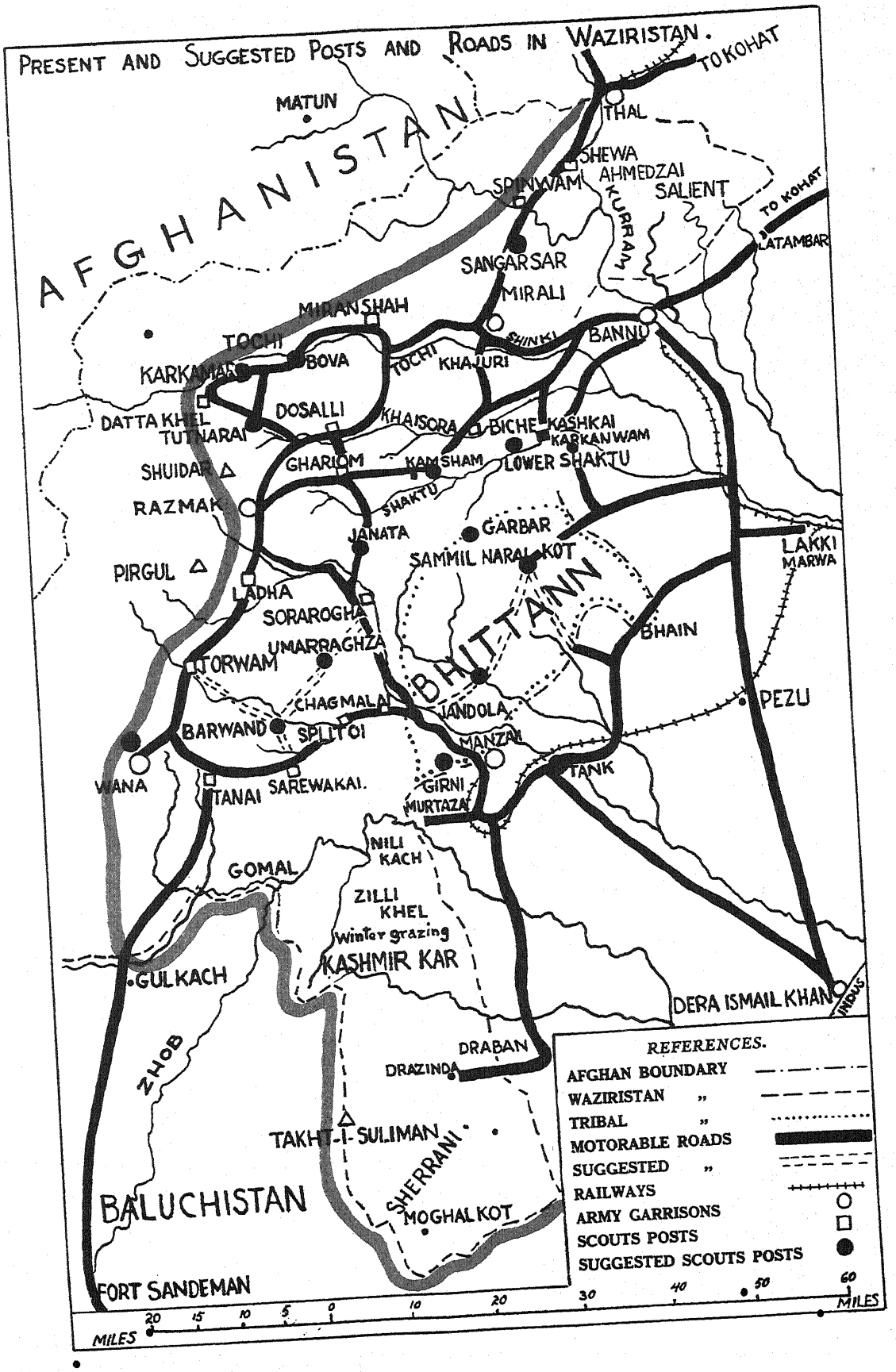
(*a*) The provision of schools raises problems. Firstly, schools must be free. Secondly, they should be run with a view to character building, as well as to education, otherwise the good material will be spoilt. (The writer is thinking of the type of school run by Canon Tyndale-Biscoe in Kashmir.) A central college would be needed near Razmak, providing education up to the standard of F. A., whilst engineering and agriculture should also be taught. The dignity of labour would be a subject that required special effort. No real progress towards pacifying this area, which is not based on the weaning of the younger generation from the bad habits of the elder, can be made.

(*b*) *Agriculture and Irrigation—*

(*i*) The problem of agriculture cannot be fully tackled until a younger generation grows up, who are prepared to work, and who have the necessary education. A start can be made by the encouragement of fruit and vegetable gardens at Levy posts, and by experimental "farms" under Levy protection.

(*ii*) There are many open plains, or "raghzas," on which, if sufficient water were made available, crops could be grown.

(*c*) Bound up with education is the problem of subsequent employment. The country will never be self-supporting and so employment must be found outside. The obvious source of employment for such material is in the fighting services. The question must be boldly taken up, and where control exists and suitable material is available, enlistment must be opened. It is


PRESENT AND SUGGESTED POSTS AND ROADS IN WAZIRISTAN.
AFGHANISTAN
MATUN
THAL
TO KOHAT
SHEWA
AHMEDZAI
SPINWAM
KURRAM
SALIENT
TO KOHAT
LATAMBAR
SANGARSAR
MIRALI
MIRANSHAH
SHINKI
BANNU
TOCHI
KARKANWAM
BOVA
TOCHI
KHAJURI
DOSALLI
DATTA KHEL
TUTNARAI
KHAISORA
BICHE
KASHKAI
KARKANWAM
SHUIDAR
GHARIOM
KAMSHAM
LOWER SHAKTU
SHAKTU
RAZMAK
JANATA
GARBAR
SAMMIL NARAI KOT
LAKKI
MARWA
PIRGUL
LADHA
SORAROGHA
UMARRAGHZA
BHITTANNI
BHAIN
TORWAM
PEZU
CHAGMALAI
JANDOLA
BARWAND
SPLITOI
MANZAI
TANK
WANA
TANAI
SAREWAKAI.
GIRNI
MURTAZA
NILI
KACH
GOMAL
ZILLI
KHEL
Winter grazing
KASHMIR KAR
GULKACH
DERA ISMAIL KHAN
INDUS
DRABAN
DRAZINDA
ZHOB
TAKHT-I-SULIMAN
SHERRANI
BALUCHISTAN
MOGHALKOT
FORT SANDEMAN
REFERENCES.
AFGHAN BOUNDARY
WAZIRISTAN ,,
TRIBAL ,,
MOTORABLE ROADS
SUGGESTED ,,
RAILWAYS
ARMY GARRISONS
SCOUTS POSTS
SUGGESTED SCOUTS POSTS
20 15 10 5 0 10 20 30 40 50 60
MILES
MILES

better to make of this area a potential source of recruits rather than a potential hostile reserve.

Conclusion.—This ends the suggested solution. The question remains: Will it work? If it does work, army expenditure will have been reduced. The increase in the Civil Armed Forces will not be at the expense of any army recruiting area, but rather the potential recruiting area will have been enlarged.

The expenses of the scheme will be largely met from the money saved by the reduction of the Frontier Constabulary. Further, should the increased force in the hands of the Political Authorities appreciably reduce the money spent on military operations in this area, then from a financial point of view the scheme will pay. There is a risk, but is it not better to take it rather than face the certainty of further operations under the present conditions?

What of the future? Certain areas such as the Upper Shaktu will not at first be under active political control until it is possible to relieve Scouts from pacified and—possibly—partially "disarmed" zones, policed by Levies.

Disarmament, even if not an immediate aim, must always be kept in mind as the ideal and ultimate solution. If it is possible very gradually to further this aim in any area, it should be done. Sufficient rifles to afford self-protection would have to be left in the area concerned, in the hands of Levies and responsible men. Possibly, the issue of government rifles and ammunition to responsible persons and to Levies (such arms to have licenses) and, in addition, the giving of financial compensation for arms handed in, might be an inducement.

In course of time, a central and partially disarmed zone might thus be formed inside the outer arc of the line marked red in the map, containing the "controlled tribes." The defence of this "controlled" area would be the duty of the Regular and Scouts posts, which, with the exception of the posts required for the protection of the lines of communication, would eventually all have moved forward to the outer arc, leaving the centre under Levy control.

The methods of Sandeman, perhaps the greatest frontier administrator, were based on the principles of supporting the maliks, and that trust begets trust. In this essay, I have endeavoured to suggest a method of control which would give the Political the means to support the maliks, and I have attempted to suggest means which will eventually create an atmosphere in which trust can be reborn.

KALUNGA, 1814

By Major J. G. O. Whitehead, R.E.

To many who have served in India and who have known Dehra Dun, the little hill of Kalunga and the twin obelisks of the Gillespie-Gurkha Memorial must be a familiar recollection. The story of its capture, with the loss of Rollo Gillespie's life, has been told by Fortescue in his history of the British Army, and by Wakeham in his memoir of that very gallant soldier; yet there are local tales to be added to it, which fill in the detail of an action in which our forces met the Gurkhas and found them to be of that stubborn, hard-fighting nature that has proved itself in so many an engagement since. It is attractive to picture the Doon of those days, not the valley of cornfields and tea-gardens that now opens before one but a thickly wooded hollow, with here and there a clearing and a sparsely populated hamlet, and with a more luxuriant undergrowth, before forest cutting had dried some of the springs. The lip of this hollow, the Siwaliks, were then the frontier hills of the North-West Province; they represented to the plainsman the edge of the inhospitable Himalayas, the home of Siwa the Destroyer, and thereby bore his name. Against them stood Saharanpur Fort, an outpost of the newly established British rule. For the British were still a strange sight in this part of India, and life was refreshingly simple; it was at an Agra fair that an old woman was heard to say that she had seen a Sahib with a fairy by his side, covered with feathers of the most beautiful hues, whose face was as white as milk, and that the Sahib had had to keep his hand on her shoulders to prevent her from flying away. Times have now changed, and fashion no longer allows peacock-feathered tippets, but the ways of a maid with a man have not altered, and fairies still need to be held.

Only a few years previously the British and the Gurkhas had been extending their rule side by side, the one over the plains, the other across the hills; so it was that within a few days of each other, in October 1803, the British entered Saharanpur and the Gurkhas Dehra Dun. The Gurkhas occupied the hill of Kalunga, where stood the remains of a centuries-old fort built by a Rajput chief named Sagar; the site was famed for the good omen that had led him to choose it, for on it a tiger and a mountain sheep had fought, and the sheep had won. From that point of vantage the Gurkhas used to plunder the countryside. The

memory of their eleven years' occupation is still vivid in men's minds. Human beings were sold as slaves at from ten to a hundred-and-fifty rupees apiece, yet a camel fetched seventy-five, and a horse three hundred; villages would be blackmailed for milk in the evening time, and in the morning the robbers would return to demand the curds that should have been made from it; the old and infirm, generally women, would be seized and wrapped up in grass and burnt, while the onlookers would shout in delight "Now dance to the Devi of Nepal." As a result, for the last two years before 1814, the people did no husbandry, but lived in the forests on such jungle fruit and roots as they could gather. One of the men who lived at that time was Kalli Ram, a big and powerful man, who on one occasion had seized a chital stag by the horns and felled it with his fist. On another occasion he had met a tiger in the way, and had said to it: "We are both males of our kind; myself I am not going to turn, so come on!" Then, when the tiger had sprung at him, he had caught it by its forepaw and killed it with his billhook. But, as his grandson observed, "In those days the men were like that." The same Kalli Ram had happened to be catching fish in the Song river one morning, when a Gurkha, who passed by on his way to Dehra Dun, forced him to carry his bedding roll; as they went through the forest an idea came to him. Pointing towards an imaginary rustle in the undergrowth he said: "See, there's a peacock, shoot it!" "How can I, my gun's empty, I have no powder or shot," answered the Gurkha; on which Kalli Ram, having learned that his arms were not to be feared, flung down the bedding, thrashed him, and then made off.

Such was existence in the Doon; and eventually the villagers appealed to the British for help, saying they would gladly come under their rule. This coincided with the need being felt all the way down the border for operations to put a stop to the raiding of the plains. Affairs between the British and the Gurkhas came to a head in 1814, and an expedition was set on foot: four separate forces were formed, that were to enter Gurkha territory simultaneously; the one with which this story is concerned was assembled at Meerut, and was given the task of clearing the Doon, of destroying the half-built fort of Kalunga, and then of joining with the western column that was to clear Sirmoor. Little difficulty was anticipated. Gillespie, who had seen as much of fighting as any soldier of his time, sent his troops into the Doon in two detachments, one over the Timli Pass with orders to seize the Jumna crossings,

and one over the Mohand Pass to clear Dehra and to capture Kalunga; he himself remained with the Reserve at Saharanpur. The Mohand Column was commanded by Mawbey, Colonel of the 53rd; they crossed the Siwaliks, not quite by the route that the present road follows, but by the nullahs slightly to the east, and were guided by the zemindars of Kheri village. They reached Dehra on the 22nd October; Mawbey promptly sent a summons to Balbahadur Singh, the Gurkha leader, to surrender Kalunga Fort; the summons reached him late at night, and he answered it: "It is not my habit to carry on correspondence at so late an hour, but I shall, however, soon be paying the writer a visit in his camp." Judging from local stories, Mawbey must have gone straight at the hill the next day; for there is a tale of a first attack up the western face at Shiamiwala, the former dwelling place of a faquir, near-by where is now a forest ranger's tomb. This attack it is said failed because of the high angle at which the guns and men had to fire; shots that missed the parapet went harmlessly overhead, doing no damage behind. The few villagers that could be persuaded to help carried loads for the troops, and afterwards dug a large common grave in which all who fell were buried. Mawbey then acted very vigorously; for, that same night, he marched his men round by a detour onto the northern face, to where he could bring his guns into action. A rough road was made during the night up to a neck of ground called Jagat Khana; and so scarce was labour, it is said, that the villagers were paid a rupee for every basket load of earth carried. Whatever it was, it gives a picture of a determined effort to get the guns up at all costs. The endeavour was successful; by morning the elephants had dragged the guns into position, near a mango tree in front of Gujarmi village, and the troops were assembled on the little plateau above. Then it must have been that the fault in the plan came to light: the fort was out of range, over a mile distant; so Mawbey was obliged to return to his camp and report to Gillespie that the *coup de main* had failed—"for want of correct information."

It was now the 24th October; Gillespie had strict orders to clear the Doon by the 1st November, when he was to co-operate against Sirmoor, so the utmost energy was needed unless he were to be late—an intolerable thought to a man like Gillespie. On the next day he reached Dehra; and by the 28th he had brought up the detachment from the Jumna; he saw the task in front of him to be a stiff one, but he hoped to succeed in doing it by the 1st. On the 30th he moved his camp forward to the ground

below where his memorial now stands, which was then fields or scrub covered flats but is now a stony nullah-bed, for the river has changed its course. It is not easy to reconcile the contemporary sketch of the country, reproduced in Wakeham's book, with the ground as it is to-day; but from an 1840 map in the Survey of India Office an explanation can be suggested. Mansiwalla was properly Mansinghwala, a village on the flats that are now river-bed; Dhulunwalla, now the familiar Dalanwala, was then a hamlet not far from where the present Club stands. It seems that the force moved from Dehra up the Bindal Rao, and then across country past where is now the Imperial Bank; then leaving Dalanwala on its right it crossed the Rispana, whose bed was much nearer to the west, after which it came to the Mansinghwala flats and a small nullah now represented by the eastern bank of the river-bed; the force then turned left and reached its camping ground by the memorial. At the camping ground the bed of the Rispana was seen again and was mistaken for the Bindal Rao; so in the sketch these two appear as a single straight river-bed, and the Rispana with its tributary nullah run as an indefinitely ending curved nullah. It is the absence of accurate knowledge displayed in this sketch, both here and round Kalunga Hill itself, that gives a clue to the subsequent failure of the separate columns for the attack.

Gillespie's plan was unquestionably energetic, but perhaps too ambitious. On the afternoon of the same day that he moved the camp forward he established a party on the spur south of the fort, overlooking the stream called the Garhauli Khala, from the head of which the Gurkhas used to draw their water. Up this Khala still runs the old Gurkha track, ending in a grassy clearing that used to be the ponds, known as the Sagartal, where the stream had been dammed as a reservoir, and where used to live an enormous crocodile, weighing a ton-and-a-half, who met his end in the battle. Batteries were to be established on this Sagartal spur, and the main attack was to be delivered from it; but in addition three other small columns were to advance on the fort from the other three directions, so as to divert resistance from the real point of assault. On the left Captain Fast with three hundred and sixty men was to attack from the north-west, through Lakhaond; beyond him Major Kelly and five hundred and forty men were to circle the hill, past Kirsali, and to attack through Gujarmi from the north-east; on the right Captain Campbell and two hundred and eighty men were to attack from the east, through Asthal. The sketch reproduced by Wakeham

shows the routes followed by the columns, and it shows also the difficulty under which they moved, for the true lie of the ground is considerably different from what it was imagined to be. In actual fact the routes assigned to them brought Fast's and Kelly's columns to within half-a-mile of each other, yet not in position for easy co-operation, and after an unnecessary detour of three miles for Kelly's column; Campbell's column also was given a needless march of three-quarters of a mile out to Asthal and back again, eventually coming in onto the right rear of the main attack. Nor was it realised that Fast's column was really within easy communication of the Sagartal spur, for the main nullah runs direct from Lakhaond to it. This lack of accurate topographical knowledge was not the least of the difficulties imposed by the jungle. The defenders were believed to number about six hundred; the strength of the main storming party and reserve was to be 1,550 and the total of the detached columns to be about 1,200, each one being strong enough to be safe from being overwhelmed alone.

On the afternoon of the 30th, when the Sagartal spur was occupied, the troops were opposed by a desultory fire of light artillery from the fort, and by matchlock fire from a knoll at the end of the spur, not far from the Gurkhas' fort; this fire caused no interruption. During the night batteries were thrown up, and the pieces were brought up by elephants and mounted; then in the early hours of the morning the several detachments marched off from the camp by the Rispana on their allotted tasks, and at daylight the batteries opened fire; the short bombardment was answered briskly by the Gurkhas, who even threw wet bedding onto the British shot and used it again for their own guns. At seven o'clock signal guns were discharged in the camp to enable the detachments to check their position, and the tale still is told that this made the Gurkhas believe that the force had remained in its camp. Perhaps it was this misapprehension which led the Gurkhas to make a move forward from the Sagartal knoll against the batteries; to check the threat two howitzers were immediately slewed round, and they apparently drove the Gurkhas off in disorder, for Gillespie straightaway ordered the assault to be launched, hoping to get into the fort on their heels. Fortescue has described in detail the repeated attempts and failure. The detached columns did not succeed in co-operating, only Campbell's arrived at the close of the engagement. A sepoy who was apparently in that column has described his experience thus: "The road was all through deep jungle, and several of my comrades were

wounded by arrows, which came from the jungle without any noise, and no one was ever seen. Many of the sepoys said it was the work of *jinns,* and magic. Volleys of musketry were sometimes fired by us when the arrows came thick; but so dense was the jungle that it was never ascertained if any of the enemy were killed or not." He also tells how the Gurkhas' knives were much dreaded, as a touch from them meant certain death, and that at the fort walls the flights of arrows were more frightening than the matchlock balls, for the arrows could be seen; his Captain received an arrow in the chest, which had so broad a point that the Doctor said he would die if it were extracted, but in his agony he wrenched it out and almost died from loss of blood. It may have been resistance of this nature that kept back Kelly's column; a memorial standing at Gujarmi village, either to someone of his column or of Mawbey's previous attempt near there, suggests the likelihood that he was resisted. The stone of this memorial is missing; it became loose a long time ago, and was broken up by children, for which a paternal government fined the village five rupees. Also a long time ago some men in the neighbourhood thought that treasure was buried under the memorial, and one night they started to tunnel under it from a bank near-by; they had only got half-way, though, when dawn came and they decamped. To the south of this, on either side of the hill, Kelly's and Fast's columns must have come to a standstill very close to each other, but the dense jungle would have deadened the noise and prevented either from knowing where the other was.

The end came when Gillespie lost his life cheering his men on to yet one more assault; the shot that killed him was fired by a woman, for the fort defenders were less than three hundred, and as men became casualties women were taking their places. Gillespie has been called rash, but his mind must have been in a turmoil over the protracted resistance; he had been ordered emphatically to co-operate with Ochterlony's advance against Sirmoor on the 1st November, and it was already that date; women could be seen hurling stones at the attackers, showing the slenderness of the defence; one determined rush, and even if the front rank fell the remainder could break through before arms could be reloaded. Thoughts such as these must have governed his mind. With his death disorder set in, but fortunately Campbell's column from Asthal arrived on the scene, and with its help a safe withdrawal was effected to the Rispana Camp. The command now devolved upon Mawbey, who sent to Delhi for some heavy 18-pounder siege guns before making another attempt.

A story exists locally that there was a fight by the Rispana Camp, which may well have been, as it would have been the natural outcome of the reverse for the Gurkhas to have harried the British camp. On this camp site there used to be some graves, but they have since been washed away.

Even with the arrival of the siege train on the 24th November the fight was not over; the wall was breached on the 27th, but an assault was driven back in spite of repeated efforts; no less than 480 men fell. As ammunition had run short, Mawbey picketted the fort water supply on Sagartal, probably breaking down the pond walls and draining them, for it was then that the forty-maund mugger was killed; he also picketted all approaches and cut off the fort's provisions. None-the-less, for a few days, the Gurkhas managed to scrape a little water from what was scarcely more than a puddle, just outside the fort gate, at the head of the Garhauli watercourse. But the privation, coupled with the stench from the corpses, could not be borne for long; during the night of the 29th November, Balbahadur Singh and some seventy survivors made their way through the pickets, and joining up with about 300 more who had been hovering round the posts, they went off to a neighbouring hill. Mawbey sent a party in pursuit, but so gallant had been the resistance that he ordered if Balbahadur were captured he was to be treated with every respect and consideration.

As soon as they found the fort had been evacuated, the troops entered to find the wounded lying there in a ghastly condition. A few women also had been left behind, one of whom, Balbahadur's wife, hurled a knife into an officer's chest as he climbed over the walls of the fort, killing him. After the place had been cleared the walls were razed to the ground; in the course of the work a closed hut, over which the white ants had built a mound, was broken down; in it was found a strange figure, believed to be a live Sadhu, who had been in a trance for ages, which, according to story was taken away to be sent to England.

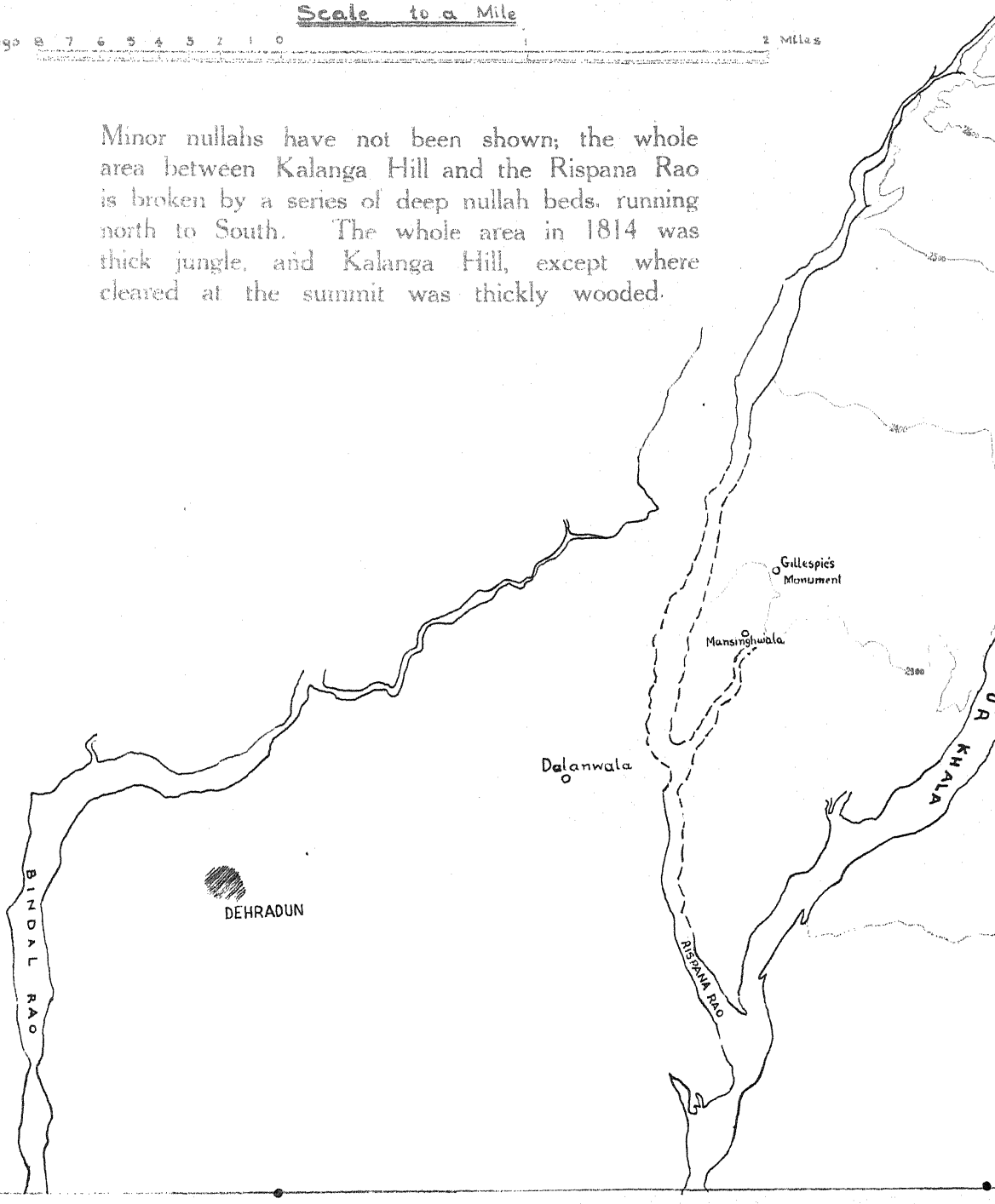
The Gurkha leaders took the field elsewhere; nor did they ever return to claim their wives. About four of these made their home at a temple near-by the spring of Nala Pani, on the slopes of the Sagartal spur. There they died, and were buried under the shade of a banyan tree, a veteran of the forest that is even now slowly creeping down the hillside; it is said to have moved some

MAP TO ILLUSTRATE
THE BATTLE OF KALANGA—1814

Scale to a Mile

Furlongs 8 7 6 5 4 3 2 1 0 1 2 Miles

Minor nullahs have not been shown; the whole area between Kalanga Hill and the Rispana Rao is broken by a series of deep nullah beds, running north to South. The whole area in 1814 was thick jungle, and Kalanga Hill, except where cleared at the summit was thickly wooded.



fifteen yards in the course of its existence; certainly it has done so since the time of this fight, for the old low walls of the graveyard tell the tale. In the temple compound the Gurkhas planted a *rudras* tree, brought from Nepal, to serve as a reminder to them of the land that once held sway over the Doon. These are stories told by the country folk; some of them came from the benign looking Nepali priest of the temple, a man of advanced years but with the spirit of the Gurkha church militant, and he ended wistfully: "The hill is a very good place for a fort; it seems a pity that no use is made of it nowadays."

MOUNTAIN WARFARE

By Major C. M. H. Wingfield, M.V.O., 2nd Goorkhas

This paper is written with the object of taking, as nearly as possible, to their logical conclusion, in one respect at least, the articles by "Auspex," published in this Journal in April and July 1938, and his letter in this Journal of April 1939. The object of those articles and that letter was to put forward a fresh aspect of frontier fighting in which full advantage is taken of the high standard of organisation and of training to which our Indian infantry should achieve. If full advantage is taken of these things, then there can be no doubt but that the initiative must be throughout with us and not with the enemy.

My object now is to apply this type of tactics to a column of, say, a brigade operating widely dispersed and thus tactically disposed to exert its full strength in mobility and fire power at any moment, mainly by making full use of its ability to inflict surprise.

There is—and will be for some time—a school of thought which holds that the greatest benefit can be derived in battle, in, say, Waziristan, from a column of infantry and artillery moving on a narrow front, throwing up piquets to right and left, deploying for battle only from its narrow head and camping nightly in the low ground with piquets about it. I must show that this is a wrong conception and that there is a far better method of advancing on and attacking one's enemy and of settling down for rest at night.

In order to prove my case I have, in this article, started with a very small force of one company only, for it is on that company that the methods that I advocate are built.

A heavy column with a mass of mules is not a necessity, for we can move, fight, feed, water and rest without a single mule within a brigade, provided that we employ reasonable and light supporting weapons and take advantage of mobile methods of supply and communication which modern development places at our disposal.

Trial by One Company.—The detail that follows concerns a test carried out by one company organised and armed, as far as

possible, according to modernised war establishments, but without any animal pack transport, in order to confirm or disprove the opinions set forth above.

The test lasted fifty-three hours, including two nights away from barracks, during which time the company, except for water and fuel, had no recourse to local produce. The officers and men participating had no preliminary hardening or preparation but were taken away at short notice from their normal individual training. The test was held during the first week in August when the weather was unusually sultry. A constant heat haze limited visibility and, in the middle of the day, on a knife-edged ridge at over 8,000 feet there was not a vestige of a breeze.

Conversely, the nights at over 6,000 feet were cool enough to enable the comfort of a blanket to be appreciated.

The company was carried in lorries twenty-six miles to debussing point. In the course of forty-eight hours, it moved some twenty-two miles as measured off the map and was again picked up by lorries for the twenty-five miles return journey to barracks. The country traversed lay between two motor roads. It was of rough and difficult nature, sparsely inhabited and, therefore, comparatively devoid of tracks. It varied in height from 5,000 to more than 8,000 feet above sea level and had not previously been visited by the unit.

The Assistant Political Agent kindly co-operated by waiving the formality of attaching local levies and left the company to its own resources.

At the conclusion of the exercise the men were physically in good condition and, given rations, were fit to prolong the test for a further forty-eight hours.

Arms and Ammunition.—Each platoon was equipped with three light machine-guns. In each section one rifleman paraded with the gun instead of a rifle. During movement the gun was changed over periodically amongst the men of the section. Platoon havildars carried Verey pistols in addition to their rifles.

Fifty rounds of ammunition were carried by each man armed with a rifle and each rifleman in a section carried, in addition, two light machine-gun magazines. This made sixteen magazines (480 rounds) available for each light machine-gun.

Platoon havildars carried twelve rounds for the Verey pistol (six illuminating, three red, three green).

Sections were much handicapped by the lack of any suitable carrying equipment for the light machine-gun magazines. If the present heavy and cumbersome leather equipment is used, the soldier becomes an ammunition porter and is incapable of carrying out efficiently the duties of a rifleman. The magazines, therefore, had to be carried in the man's pack and this caused a bad distribution of weight. The pack was unduly heavy and there was comparatively little weight in the front pouches. The issue to the Army in India of the 1937 pattern equipment, with its basic pouch, is an urgent matter, for it will provide the necessary carrying equipment and will enable a section of the same strength to carry twenty-four magazines (720 rounds) if necessary.

The expenditure of ammunition would not be heavy when dealing with a lightly armed and mobile enemy of the type we meet on the Indian frontiers and the scale carried by this company is sufficient so long as it can be replenished from the air when required.

The scale of one light machine-gun per section is preferable to the present scale of one per platoon. The extra fire power in the platoon gives it the ability to deal much more effectively with the few vulnerable targets that are likely to present themselves; the platoon commander's task is greatly simplified when he has three homogeneous sections under his command, each of which can produce a volume of fire commensurate with the fire of a whole platoon on the present scale of armament.

The additional (light machine-guns) also give a battalion a large increase of power in the defence and greatly simplify the problem of camp protection.

Personal Equipment and Clothing.—The 1908 pattern web equipment was worn with packs, but haversacks were carried only by platoon commanders, platoon havildars and signallers. The pack was slung by the pack straps so that it could be quickly removed whenever a platoon was in a stationary role.

In the pack was carried, in addition to two light machine-gun magazines:

Mess tin containing ration.
Blanket.
Dover's Cream container.
Jersey.
Socks.
Mug.

All ranks wore the following clothing:

Chaplies.
Socks.
Footless hose.
Shorts.
Shirt, cotton.
Hat, F. S.

The average weight carried by a rifleman, exclusive of clothing in wear, was:

Pack	14 lbs.
Equipment with kukri and rifle S.A.A.	12 lbs.
Rifle and Sling	9 lbs.
Total	35 lbs.

The pack was too heavy and bulky. Bulk in a pack is as great a handicap as weight, for in the hills it affects balance and is apt to catch against overhanging bushes or jutting rocks. If basic pouches had been available, the pack would have been reduced to the more reasonable weight of 9½ lbs. A further reduction should, however, be made in both the weight and the bulk of the blanket. This is possible without sacrificing any warmth. The carrying of the greatcoat was considered but, in its present form, it is too heavy and bulky to be carried in the pack and, by night, does not afford the warmth of a blanket. The jersey also is not satisfactory. It absorbs moisture easily and is slow to dry. A light wind-and-shower-proof jerkin of a material similar to Grenfell cloth would be lighter and warmer and, with trousers of the same material, would provide a warm outfit for wear by night.

Medical.—Four stretcher-bearers carried two blanket stretchers and a medical haversack. Carrying stretchers in the hills is very tiring work and this stretcher-bearer party should consist of two men for each stretcher and an extra man to carry the medical haversack.

Health was very good throughout the exercise and there were no casualties from sickness or accident. The task of evacuating casualties was, however, considered. It is, undoubtedly, the biggest problem that a column of this nature has to face. An autogyro ambulance aircraft would be invaluable, but, failing that, the solution appears to be the use of armoured fighting vehicles and an armoured ambulance which could be summoned to a rendezvous mutually convenient, both to them and to the column.

Mosquito-nets were not carried but Dover's cream, carried in light aluminium personal containers, was found to provide effective protection against mosquitoes.

Sanitary arrangements were of the simplest. The sweeper carried a shovel with which to dig and fill in latrine trenches. A lighter implement in the nature of a mattock would be more suitable.

Water.—Water-testing apparatus and bleaching powder were carried in the medical haversack.

Each *bhisti* carried the canvas part of a 50-gallon tank, together with four short bamboo supports. The metal frame issued with the tank is heavy and makes an awkward pack load, so was discarded.

Each cook carried two four-gallon tins on his back in a special khaki drill carrier. Of the total of six tins, four were used for water. These sufficed to ensure an ample supply of water being available soon after arrival at the night halting place. These four tins were used, also, to supply the company with water and replenish water-bottles at a water halt. The tins were filled from a spring, and the water chlorinated before distribution. Within half an hour the whole company was provided with water to drink and water-bottles were refilled. This included the supply of water to protective piquets round the halting place. The halt was made after the company had been moving over mountainous country for four-and-a-half hours and all men were very thirsty. This method of replenishing water-bottles could not be used in the case of a company moving without its followers and without a supply of bleaching powder. Individual purification of the refilled water-bottle by means of some kind of tablets should be possible in such circumstances.

Owing to the hot and sultry weather a seemingly unquenchable thirst was acquired after very little exertion. Strict water discipline was maintained and consumption regulated, so that the next water-point was reached with water still in hand.

The times between water-points were:

1st day: Start 0730 hrs.—arrived at bivouac 1530 hrs. Move occupied 8 hours. No water provided other than that carried in the water-bottle.

2nd day: Start 0600 hrs.—arrived at bivouac between 1700 and 1850 hrs. Average time for move—11½ hours. One water halt at 1030 hrs.

3rd day: Start 0630 hrs.—arrived at lorries 0816 hrs. No water consumed during move.

As no reserve of water is carried with the column, it is necessary to arrive at the next source of replenishment, or arrange for supply from the air, by the time the water-bottle is emptied. With good water-discipline this should be at least six hours, even in hot weather.

Although a column of this nature carries no reserve of water, it requires a very small quantity to supply its needs. This admits of great liberty of movement in comparison with a column accompanied by animal transport which requires an ample supply of water, available normally only in a river-bed.

The two 50-gallon tanks were filled immediately on arrival at the night bivouac and one was refilled as soon as it was emptied. Tea and water tins were filled overnight to ensure sufficient water for the company to start with full water-bottles in the morning.

Rations.—The Shakarpara biscuit ration was carried in the mess tin as far as possible. Any balance left over was tied up in a handkerchief.

As the weather conditions induced a continual thirst, there was no urge to eat except in the cool of the early morning and late evening, when an ample supply of liquid also was available. Most men had some of their ration in hand on conclusion of the test. The cooks carried, in addition to four water tins, two four-gallon tins for making tea. The tea, sugar and tinned milk were carried by the cooks in these tins. Tea was made before moving off in the morning, and after arrival in bivouac in the evening. Two "brews" were necessary as eight gallons of tea were insufficient to supply the whole company.

Sufficient fuel to boil water was collected in the vicinity of the bivouac.

Bivouacs.—The comparatively small space required for a bivouac makes the selection of a site an easy matter under the circumstances. As there are no animals to be considered, a large area of level ground is not necessary. Bivouacs can, therefore, be sited more for their tactical than their administrative advantages. The closely-packed camp which offers a large and vulnerable target for the sniper's bullet is unnecessary. Companies can bivouac on tactical features and, if needed, afford one another

mutual support. It will usually be necessary to bivouac near enough to water to ensure the protection of water-drawing parties.

If, however, a reconnaissance has been made by daylight the position of the bivouac can be changed after dark. This would render futile any reconnaissance carried out by the tribesmen by day with a view to attacking or sniping the bivouac by night.

The hostile parties, instead of surprising the camp, might well find the tables turned upon them.

Protective piquets would, generally speaking, not be required, as the companies would be bivouacking on the commanding ground. Also, since there would be no clearly-defined camp, a large perimeter wall would not be necessary. The fire power of the company or platoon should ensure its ability to stop any attempt to rush their position.

The time taken to settle in, after the site of the bivouac has been selected, depends on the protective works to be carried out and on the distance that water has to be carried. Two hours should normally be sufficient.

In the morning, cooks started fires one-and-a-half hours before the time of start. The remainder of the company were roused an hour before marching. No lanterns were carried and, apart from cooking fires, no lights were used.

Communication.—Within the company, flag signalling was used in conjunction with a three-letter code. I consider that this method would also be most suitable within a battalion. The heliograph is a heavy load, very dependent on weather conditions and, more than a flag, is apt to call attention to its location. It is a difficult instrument to use behind cover unless the sun is in front of it. I do not consider that it is suitable for any really mobile column. The signal lamp is more portable when used without a stand. It is useful by day on account of having a longer range than a flag, but its light is unnecessarily powerful for use by night within the battalion. A lamp could be carried at battalion or column headquarters, as an alternative to wireless, for communication with other columns, but it can be dispensed with for communication within the battalion. A few pocket torches, modified for signalling purposes, are all that are required for this communication by night. A light Popham panel was designed in two sections and was found to be efficient in use and easy to carry. Each of two men carried one section under the pack flap. Special

light ground strips were carried by headquarters personnel to lay out the column call sign and by platoon orderlies to denote the position of outlying platoons.

Air Co-operation.—It was considered that the following demands were likely to be made on the R.A.F.:

(*i*) Aircraft for preliminary reconnaissance of the area by the column commander and other officers.

(*ii*) Tactical reconnaissance in the area while the column is operating.

(*iii*) Close support of the column by means of bombing and machine-gunning.

(*iv*) Communication with the column by means of message dropping and Popham panel.

(*v*) Location of column and reporting progress to force headquarters when column is out of wireless range or in event of wireless interruption.

(*vi*) Dropping of ammunition, water, rations or medical supplies.

(*vii*) Photographs of the area of operations.

Roles (*i*), (*ii*), (*iv*) and (*v*) were actually carried out. Roles (*iii*) and (*vi*) could not be carried out as supplies dropped could not be carried or expended and offensive action had to be reserved for cases of actual necessity. In spite of bad visibility, the aircraft were very quick in locating the column and demonstrated their ability to carry out the tasks demanded of them.

Results of test.—This test proved the ability of suitably trained, physically fit infantry to operate independently of any wheeled or animal transport for a considerable period over almost any kind of country, provided that water is, or can be made, available. A whole battalion could easily move in a similar manner to the one company; in fact the increase in strength would render protection an easier matter.

The troops on this test were carrying a badly balanced and more bulky load than is desirable, and this would reduce their fighting efficiency in difficult country. But the issue of the 1937 pattern equipment and the reduction in weight and bulk of the government blanket would make a considerable difference. Although an increase in the amount of ammunition that could be carried for the light machine-gun would be possible with the 1937 equipment, I consider that the amount actually carried, namely,

two magazines a man, is the maximum he should be given if his activity is not to be hampered.

One of the most obvious advantages was the complete absence of "tail," since six followers were the only portion of the company who were unable to protect themselves. In the case of a battalion this unarmed party would be approximately thirty strong and would move in the vicinity of battalion headquarters. In order that they can do their best to protect themselves, they require to be trained to the use of ground and cover.

Communication with battalion headquarters, which in the present case was over twenty-five miles distant, was maintained through the medium of aircraft who were in wireless communication with a R/T Tender at headquarters. It appears that this must be the normal method of maintaining communication between columns and force headquarters, as the range of a one-man pack wireless set is too limited for this method to be relied upon.

The one-man pack wireless set is, however, necessary for communication between battalions working in an area. Experience may show it to be necessary in companies but I do not think that this is so. It is also essential for communication with aircraft when the latter are carrying out a close support role. For this purpose it would be necessary for the aircraft to be equipped with a similar one-man set in addition to its normal wireless, and for a Popham panel signal to be displayed to signify to the pilot that the column commander wanted him to adopt a supporting role and to open R/T communication with him.

While aircraft can be used to replace long-range artillery, there is an urgent necessity for a reasonably accurate short-range weapon. The three-inch mortar which proved such a useful weapon during the fighting in Spain, in mobile operations in Persia and in other places at the end of the war, is probably suitable. We have had plenty of experience of mortars of this kind and it is difficult to see why their introduction into the Army in India has been so long delayed.

The light machine-guns of the support platoon should be dispensed with and the platoon should carry and operate the three-inch mortars. The loads are heavy but it is suggested that the support platoon, if armed with pistols in place of rifles, could carry two three-inch mortars and thirty bombs. In any case the

flat trajectory light machine-gun is not the right weapon for use in a support role in a battalion and it is wrong to try to force the weapon into a role for which it is barely suited.

In other semi-civilised parts, both the Germans and ourselves have at different times made use of porters. There is no reason why we should not train and employ enlisted personnel in this capacity. These men could be fully trained or partially trained infantry soldiers. At any rate, they should be capable of using effectively whatever firearm is given them for self-defence. They are thus an asset and not, like the poor mule, a complete liability. Moreover, in the course of a day, they will probably eat and drink less than a mule, load for load. They would not, moreover, require the services of a trained soldier to groom, feed and water them.

Recommendations as a result of the test.—Experiments should be carried out to determine the possibility of carrying the three-inch mortar and its ammunition as man-pack loads.

Experiments should also be carried out using one-man pack wireless sets to direct aircraft to engage targets which would normally be given to artillery.

Search should be made for a lighter blanket that would form a more compact load.

Investigations should be made with regard to the possibility of providing the soldier with a jerkin and trousers of a material similar to Grenfell cloth.

The one-man pack wireless sets should be issued to frontier defence troops on the scale of two per battalion, with a reserve in the hands of the brigade commander.

The Force of the future.—The force of the future, as I see it, will not be a long clumsy column advancing on a narrow front astride a road or river-bed. Such a force is doing little more than providing protection for its mass of transport. The tribesman can anticipate its line of advance and, at his leisure, formulate his plans to inflict the greatest possible number of casualties on the column with the least risk to himself. Such a force surrenders to the tribesman the enormous advantage of initiative and surprise.

I propose that we should so use the force at our disposal as to recapture those advantages for ourselves.

To effect this, we must neither be tied to an obvious line of advance nor must we be entirely dependent on a single line of advance. Battalion columns, self-contained and unfettered by any form of animal pack transport, will move across-country on a broad front, while brigade headquarters co-ordinates their movement.

The battalion commander would have at his disposal four rifle companies with a total of thirty-six light machine-guns and a section of two three-inch mortars with his headquarter company. Battalion headquarters and the headquarter company would consist of commander and staff, intelligence section, communication personnel and mortar platoon. A party of about thirty followers, controlled by company quartermaster-havildars, would move in the vicinity of battalion headquarters and would be the battalion's sole liability in the way of unarmed personnel, always provided that we have not adopted the more sensible system of armed porters. Two one-man pack wireless sets would be carried by communication personnel; one for communication with neighbouring battalions and brigade headquarters, and the other to work with aircraft in the event of long-range support being required. The brigade commander would have at his disposal a liberal allotment of aircraft with a Royal Air Force officer and a R/T tender at his headquarters. If brigade headquarters happened to be near a landing ground, the brigade commander in person would be able to observe and control the operations of his brigade from the air.

The Place of Mechanised Forces.—We require, in addition to our infantry brigade, a small mechanised force. The vehicles of this force should be armoured and, thus, the occupants should be practically invulnerable to the tribesman's small arms fire. We do, however, require that this mechanised force should include some men who can leave their vehicles for the purpose of local protection. Therefore, the force should include some infantry carried in armoured trucks or armoured lorries. We must remember that, though of some use in other parts of the world, the unarmoured truck is a menace for tactical troop-carrying work on our North-West Frontier when the heights are not held on each flank. This mechanised force would be able to move out to a signalled rendezvous, with armoured ambulances, to collect the casualties of our infantry columns. It would be available to con-

voy supplies to a base to which the infantry battalions would return on conclusion of their operations. It would assist in providing protection for the movement by mechanical transport of our infantry battalions in the initial and concluding stages of their operations. It would be available to co-operate, at short notice, with the infantry brigades by establishing a cordon, blocking a line of withdrawal, or otherwise dealing with parties of hostiles withdrawing from the area combed by our mobile battalions. It would form a *point d'appui* for our mobile infantry operations.

The Place of Aircraft.—Aircraft would be an essential and valuable component of the new force.

At present their usefulness is limited by lack of landing grounds. This is unavoidable in mountainous country with aircraft of present types. When the auto-gyro is developed sufficiently to be reliable in conditions pertaining to mountainous country, it would extend considerably the use of aircraft. The construction of a landing ground of the necessary size would be a task within the compass of a company of infantry and there would be few areas in the vicinity of camps which would not afford the requisite space.

The auto-gyro would be useful for the following duties:

(*i*) Liaison between the military commander and the officer commanding R. A. F.

(*ii*) Preliminary personal reconnaissance by brigade and battalion commanders.

(*iii*) Observation and control of operations by the brigade commander.

(*iv*) Evacuation of casualties in ambulance auto-gyro.

The following tasks would be carried out by normal service aircraft from their own landing grounds:

(*v*) Tactical reconnaissance of the area while the columns are operating.

(*vi*) Dropping of ammunition, water, rations or medical supplies.

(*vii*) Close support.

(*viii*) Photography.

(*ix*) Contact between columns, if an auto-gyro is not available.

Conclusion.—There is, to my mind, no doubt whatsoever that the mobile tactics and mobile columns that I have here sketched are to-day a practical possibility. We very badly need the three-inch mortar; but we can just get on without it owing to the surprise and the general tactical power provided by the method of movement that is advocated herein. It is fair to say that this method of movement will enable us to hold the initiative over our frontier enemy in a manner in which it has never yet been held by us; for at all times we are disposed to fight and at all times we are free to move wherever we will.

PERMANENT FORTIFICATIONS AND THE POWER OF MANŒUVRE

By Le Polemarque

Translated by Major G. E. Wheeler

(*With acknowledgements to "L'Europe Nouvelle."*)

During the past fifteen years, France has recommenced the work of Vauban and Seré de la Rivière. She has progressively built up on her frontier a fortified barrier which, begun in Alsace and Lorraine, has gradually been extended from the North Sea to the Mediterranean. Any gaps that may now exist on the Jura frontier can be regarded as filled by the fortifications constructed by Switzerland on the Rhine and on the St. Gothard Pass, fortifications which are actually outworks of our own system.

Germany for a long time exhibited a traditional unwillingness to adopt this method. The veteran Moltke used to say that "the history of fortresses is bound up with history of capitulations," and Imperial Germany possessed no fortified defensive system. The fortified towns of Thionville, Metz and Mutzig were offensive and were designed to act as cover or as fixed pivots for the powerful offensive operations planned by Schlieffen. In 1914, the operations of the Crown Prince of Bavaria which were to result in our reverses of Morhange and Sarrebourg were, in actual fact, based on Mutzig and Metz. The offensive which, according to the Imperial General Staff, was to result in our final defeat was based on Metz and on Thionville.

After the war, there was some hesitation as to the method to be adopted. The extraordinary resistance offered by improvised fronts had been striking. From the winter of 1914 onwards, attacks had been held up by, and proved impotent against single lightly-wired trenches defended by machine-guns. In 1916 and 1917, the best prepared and most strongly supported attacks broke down after advancing a few hundred yards and were powerless to effect a break-through.

During 1918, to break down the resistance of a position involved a huge concentration of supplies, of tanks, of quick-firing artillery and of gas. It necessitated, besides, a vast expenditure of man-power which gradually caused a serious reduction in the strength of the troops holding the trench systems on both sides.

It had, in addition, been observed with astonishment that all the great fortified places such as Liege, Namur, Mauberge,

Antwerp, Lemberg, Ossoviecs, Novogeorgievsk and Brest-Litovsk had fallen in a few weeks—sometimes in a few days.

The first conclusions drawn by the belligerents had been inclined to favour field fortifications to the detriment of permanent fortifications. Even Verdun appeared to have owed its salvation rather to Petain's soldiers than to the concrete of its defences. On closer examination, these definite conclusions had to be revised though it remained none-the-less clear that any isolated fortified place, whatever the quality of its defences, was doomed. No fortress could be maintained which was not part and parcel of the general organisation of an army.

Field fortifications, on the other hand, required vast labour for their construction, and their maintenance demanded constant effort. They were, therefore, contrary to first impressions, extremely costly. Finally, field fortifications in modern war must be continuous in order to obviate any possibility of infiltration and must be organised in depth to lessen risks and check the development of local incidents.

The Maginot Line

It was in the light of these conclusions that France, from 1924 onwards, studied the defensive organisation of her frontiers. Defensive fortifications must be both permanent and strong; they must also possess continuity and depth—an idealistic programme which not only involved huge expense but very great delay. Our engineers had, therefore, to make a choice and they decided in favour of strength combined in the first place with continuity. Depth they postponed to some future date.

Along the frontier zone was plotted a line of resistance of which the principal works constituted the bastions, and the connecting systems, which were smaller though no less strong, the connecting walls.

Beginning with the vital districts of Metz and the Lower Vosges, we have gradually succeeded in constructing on our frontiers an almost continuous line of fortifications which vary in form according to the nature of the ground. The organisation of depth, which has been begun in some places, is sometimes necessary in the case of old fortifications since modernised; in most cases the requisite depth will be achieved, when the time comes, by field fortifications.

We are thus systematically covered by a continuous line of fortifications which, though thin, is, owing to its scientific perfection, extremely strong. For a long time its weak point lay in an

insufficiently strong garrison which left a large part of the fortifications exposed to the possibility of surprise. For several years, however, and especially since the reintroduction of the two years' system of compulsory service, all danger of this nature has been eliminated.

The Siegfried Line

For a long time the German General Staff remained faithful to Moltke's ideas. Even after the return to Germany of the Rhineland, it appears that, with a few exceptions on the eastern frontiers, the work of fortification was neglected. In about 1936, however, some fortifications made their appearance on the Rhine, especially opposite Kembs and at Neu-Brisach. At the beginning of 1938, the line approached Mayence and reached the south of the Taunus. The situation changed radically in May 1938 during the first phase of the Sudeten affair. It seems that the German politicians had suddenly become alive to the vulnerability of Germany in the Rhineland and had ordered the Army to arrange for the protection of the western frontier.

Continuity, the fundamental lesson of the war and as applicable to the Germans as to ourselves, had to be achieved. Strength also was essential but it could not be the strength of concrete and steel for the construction of a line materially strong takes months if not years and the Führer was in a hurry. Of necessity Germany had to hark back to the methods of the war and to insure strength by organisation in depth. The Siegfried line, therefore, takes the form of a series of positions consisting of several lines of trenches each of which is covered by thick barbed-wire entanglements and by tank-traps. The line has an average depth of six or even ten kilometres.

The creation of such a system in a few months required enormous labour. The methods of the Nazi Government, however, enabled the hundreds of thousands of men necessary to be requisitioned or mobilised and this was done during the summer of 1938. We thus find in existence a covering defensive line along the Rhine and particularly strong defences straddling the historic routes of invasion: the Palatinate plain to the south of Landau, the Sarre covering Sarrebruck and also the road from Mayence *via* the valley of the Glan; the Moselle to the south of Trèves; the Aix-la-Chapelle corridor.

The existing Siegfried line must, however, be regarded only as a temporary expedient. Henceforward steel and concrete will also play their part and will gradually lend to the fortifications the technical strength which were lacking in the embryo stage.

Mountain Fronts

Fortifications of a somewhat special kind exist in the mountainous parts of the front. Important passes and corridors on both sides of the frontier are barred by considerable defensive works and even by fortified towns. Smaller works or even mere posts guard the secondary routes or principal tracks.

Strategic and Tactical Effects

On both sides of the frontier, then, are fortified systems which are continuous and which aim at great strength. In France, the basis of this strength lies in the quality of the fortifications; in Germany, on the other hand, it lies in the organisation in depth. As time goes on, both systems will improve: we shall develop depth and Germany strength. In the long run the results will be the same, except that we have the advantage of having adopted a more consistent method from the very beginning and of a technique superior to that of our neighbours. The result will be that, from the beginning of hostilities, strategy and tactics will be confronted by two strong and continuous fronts and the war will open with a situation similar to that of 1916. Manœuvre being no longer possible, we shall have from the start to make up our minds to a war of material with its innumerable guns and its orgies of munitions, the sort of war with whose discouraging slowness and frightful expenditure we are fully familiar. Foch's pronouncement of the 1st July 1915 has regained all its significance. "Since quick-firing weapons came into use, organised defence has held the offensive in check, for the latter has lost its power of manœuvre. At present all strategic action must be based on breaking the enemy's front."

It is useless to contemplate an offensive on a wide front without first rendering possible the carrying out of a huge programme of supply and without extraordinary development of the manufacture of munitions. Tanks, which are useless against the special weapons and devices which their introduction has brought into being, must be reserved for the operations which will follow on a break-through. The war will inevitably be methodical and slow and its successful issue will be greatly facilitated if operations in another theatre should compel the enemy to reduce the garrison of his positions.

Air Action

Since land war on the western front will tend to hang fire, the only form of operations which can be developed are those in the air. It is air action which will be called upon to wear down the material and moral resources of the enemy, that is to

say, bombardment of enemy positions and air-defence both on the ground and as provided by fighter units. Ground air-defence must in particular be developed since every town in the country will be vulnerable. Every township and every important factory will have to have its weapons and the men to man them. Fixed machine-guns and A.A. guns can perfectly well be operated by men of fifty or over.

In our opinion, the complement of fortification lies in the development of air-power and of its antidote, air-defence. We are aware of the difficulty of the task which this involves but it is an absolute necessity. We have to win a financial and scientific battle unless we are to lose the war before it has even broken out.

The Mediterranean and North Africa

On the north-eastern front, strategy is handicapped by the continuity and tactics by the strength with which the builders of the fortifications have endowed their work. For France, then, the field open for manœuvre on a wide front is confined to the Mediterranean and North Africa. Can the Mediterranean, a maritime theatre, be regarded as capable of producing important, if not decisive results? We do not think so. Certain eminent critics have recently supported the view that, thanks to air-power, the Mediterranean could become an active field of operations. One can, indeed, no longer admit the possibility of a naval force shutting itself up in its harbours and remaining invulnerable as in the case of the Austrian fleet which remained at Pola for a period of four years during the last war.

The navy is indisputably an important part of national defence and is essential for the guarding of imperial communications, but we are nevertheless convinced that it will never play a leading part in an offensive. Throughout the whole course of history, naval encounters are rare. If the question is studied *au fond,* it will be seen that decisive results obtained by great naval actions are still more rare, results, for instance, which have led to the termination of a war. To see in the defeat of Villeneuve at Trafalgar on the eve of Austerlitz the beginning of the decline of the Empire is a singular and wilful misinterpretation of history. Had it not been for gross political blunders Napoleon would easily have survived the loss of his fleet.

Navies can contribute largely towards victory but only in conjunction with action on the land.

In North Africa operations are difficult but nevertheless possible. Fortifications, of course, guard normal communications

and established routes. But there remain vast areas—desert it is true—where movement is still possible. Here, as opposed to what is happening in Europe, it is science which comes to the aid of strategy. For centuries all operations in these countries were governed by the question of water; manœuvre was reduced to the movement of unimportant columns of camel-corps going from oasis to oasis—a form of manœuvre, in fact as limited in its power and its extent as slow in its development. All this has been changed with the arrival of the internal combustion engine. It is now possible to effect rapid movement of wide range and capable of surprise action, movement, in fact, which is combined with striking power for, thanks to mechanisation, it is possible to supply large forces with water when they are far away from oases. The Abyssinian campaign has given proof of this.

On the whole, North Africa opens up towards Tripolitana, by way of Tunis, Egypt and even the Sudan, a strategic field full of interest. It is a far-flung theatre, it may be said, and, therefore, unlikely to lead to a decisive result. This is a matter of opinion. To what extent would an Italy already disturbed and divided accept without a qualm, or without, perhaps, revolt, the fall of Lybia and of Abyssinia as well as the investment of the garrisons of the Dodecanese? This would doubtless present an opportunity of using that indirect strategy, so dear to many Englishmen, of which Liddell Hart is the exponent.

Thanks to the motor car, land armies in co-operation with naval forces could doubtess achieve in this area rapid results which they could not envisage in western Europe. We do not, of course, exclude the air force—that indispensable adjunct of all operations whether by sea or land.

Eastern Europe

A third front must of necessity play a part in a possible conflict, that of eastern Europe. In the foreground are Poland and Roumania; in the background, Russia. The very vastness of the frontiers renders any continuous system of fortifications impossible. From Danzig to the Iron Gates, over a distance of 1,300 kilometres as the crow flies, there are at least 1,000 kilometres of open country. If, here and there, as for example in Polish Silesia, short defensive systems can protect an important area against surprise, continuity, the ruling factor of modern defensive fronts, can nowhere be achieved.

There remains, therefore, room for manœuvre, room for Germany as well as for her enemies. We have already, on numerous occasions, spoken of the war-objectives of Germany, of her

designs on the oil of Galicia and Rumania as well as on the agri cultural and mineral wealth of the Ukraine. If Germany economises her forces on the western front, if she puts a check on operations by means of her fortifications, she can then utilise the bulk of her divisions, and especially the mobile Panzer divisions, in the east. If, finally, she succeeds in exploiting the distrust and antagonism which still separate Poland, Roumania and Russia, she will be in a position to gain her main war-objectives in a relatively short time. She can also achieve the economic independence which autarchy has denied her. The defeats sustained by her Italian ally will be of little importance to her. Having at her disposal, without being dependent upon the sea, all necessary resources, having outlets to the Asiatic East by way of the Black Sea, having doubtless obtained access to the Mediterranean at Trieste, Germany, the most numerous race in Europe, will be the mistress of the world's political situation. The United States, her equal in power, would then most probably witness the triumph of the tendency towards isolation.

On the other hand, any check suffered by Germany in eastern Europe and still more, any defeat on that front, would be felt on account of its proximity to Berlin and Vienna. Such developments would rouse again the courage of subjugated people and would serve to sever alliances. They would necessitate, moreover, a removal of forces which would dangerously weaken the western front, just as the losses of 1918 weakened the fortified lines which had victoriously resisted the attacks of 1917.

The fortification of the positions in the west give to the eastern fronts a strategic importance of the first order. To check Germany on the Vistula and in the Carpathians is the prelude necessary to our victory on the Rhine.

Conclusions

To sum up, then, apart from the execution of an extraordinary surprise attack, which must be eliminated as a possibility on either side, and apart from a moral collapse which there is no reason to anticipate, it seems as if, on the North-east and South-east frontiers of France, the initial operations of a war must take the same slow and somewhat discouraging course as those of 1915—1917. It will be a war of munitions in which victory is secured in the factories before it is won in the enemy's trenches, a victory to be prepared for by industrial effort, that is, by artillery, ammunitions, air defence and air power.

In North Africa and in the Near East manœuvre by land, sea and air remains possible, manœuvre in which France and

England, aided by Turkey and Greece, will combine to eliminate Italy.

A war of manœuvre will be inevitable in eastern Europe where Poles, Roumanians and Russians must defend their birthright against the German, the common enemy of both Slav and Latin. For it is now a question not of nations but of races. Hitler has brought Europe back to the age of the barbarian invasions.

The final goal of Germany remains world domination, and the means to that end is first of all the acquisition of the riches of the East. Let us hope, in conclusion, that an excess of scruple based on the perhaps too narrow conservatism of the old democracies will not lead to a Germano-Russian combine. This would mean for Germany the illimitable advantage of a victory without war.

FIELD SIGNALS

By Major D. McK. Kennelly,

5th Royal Battalion, 5th Mahratta Light Infantry.

The aim of the attack should be, as a general rule, to attack weakness rather than strength, and to exploit opportunities for infiltration to the utmost.

[—*Infantry Training, 1937, paragraph 63 (3).*]

In attack this has been the doctrine of all armies from about 1916 to the present day. In theory the aim is an excellent one; in practice it is often difficult to accomplish. The manual admits the difficulty in a later paragraph:

CONDUCT OF THE ATTACK

Sections may be in exposed positions under heavy fire, and it may be difficult or impossible to collect their commanders. In such situations it will generally be advisable to leap-frog reserve platoons through the forward ones." [*Paragraph 66 (8).*]

The excellent doctrine of attacking weakness is scrapped in the latter sentence. The reason is clearly stated. It is because forward troops under heavy fire cannot get information back to their commanders. No attempt is made to overcome the difficulty—reserve platoons are directed to move through platoons which have already been held up. Is this necessary? Cannot forward sections and platoons direct reserves to ground where they will not come under the same effective fire? Such a system would be inadvisable. A forward section commander is not justified in sending his platoon commander an order as to his line of advance, neither is a platoon commander authorised to send his company commander similar directions. Messages sent by runner cause delay and under fire delivery is uncertain. The foremost troops rarely have signallers with them to inform their commanders of the situation and in any case their methods of signalling including messages by semaphore would be unsuitable in the circumstances. The message for a change of direction *can* be sent to reserves by means of field signals but would not help the commander, for it is very often more effective for him to support with men on one flank and with fire from the other. The only remaining alternative is for the use by forward troops of field signals which will give information vital to reserve commanders.

A commander requires to know first of all when his forward troops are definitely held up and in the second place the approximate position of the enemy holding them. If he can obtain this information quickly he can attack weakness and exploit opportunities for infiltration; without it the most advantageous use of reserves and fire power become a matter of chance. A move to the wrong flank either of men or fire support weapons may bring disaster on his command.

Now, in the authorised field signals given in Infantry Training, 1937, there is no field signal with which to impart this important information. A forward section under heavy fire can do no more than remain where it is and hope that the platoon commander is able to see what is going on. He on the other hand may neither realise that the section is held up nor the direction from which fire is coming, for effective fire is always from a flank and may be from some considerable distance. An advance by him on one flank or straight ahead will bring his men under the same enfilade fire whereas the ground on the other flank will be untouched by this fire or in any case the fire will be more frontal.

It is suggested that there should be distinctive field signals (*a*) to indicate the need of support and (*b*) to give the enemy's approximate position. Section 31 of Infantry Training, 1937, gives only three field signals for communicating information about the enemy: "enemy in small numbers," "enemy in large numbers" and "no enemy in sight." These may have been very useful in the Boer War. It is extremely doubtful whether they were used in the Great War; and even more unlikely that they will be used in the next. In modern warfare the commander of forward troops will hear and be subjected to enemy fire long before he can see the enemy, so the receipt of a message "Enemy in sight in large numbers" would be of no practical value.

What every forward commander does want to know is the position of enemy localities which, by their fire, are holding up the advance. It is advocated that simple field signals be adopted which will convey this information quickly and with little chance of error.

To turn from destructive criticism, here is a suggestion for the required field signals: All N.C.Os. carry, or should carry, message pads in their haversacks. If this pad is covered with bright orange coloured cloth on one side and khaki cloth on the other, it becomes a convenient and inconspicuous means of sending signals to the rear. When held up by enemy fire the section or platoon

commander will convey the fact to his respective superior by a few slight movements of the pad from side to side with the orange cloth facing the rear. The signal would be repeated at short intervals until answered. It indicates that the sender is definitely held up and cannot advance without some form of support. It is visible to the naked eye in average light at six hundred yards and in poor light at four hundred. All signals are given from the lying position. Visibility can naturally be increased or diminished according to the size of the message cover or with the use of the bayonet which can be fitted into two slots in the orange flap of the pad. This is really a matter for official experiment, not necessarily of this system but of a system of the kind.

Indication of the enemy position is given as follows: The section commander notes a point to his front which is in continuation of the line from the platoon commander to his own position. He then estimates whether the enemy locality is a quarter right or three-quarters left and so on of this line, and judges the distance of the enemy from his own position. He should overestimate the distance rather than underestimate it. Having done this he indicates the direction of the enemy by slowly moving the pad to arm's length at the desired angle to show the direction of the enemy from the central line. This signal is maintained or repeated until answered correctly. For the range, each semi-circular wave of the pad denotes two hundred yards. It has been found by experiment that this unit of measure is sufficient for the purpose. A smaller unit of measure leads either to a more complicated signal or entails undue movement. The signals are repeated by the platoon commander or his assistant who should ensure that the angle of direction corresponds exactly with that of the sender as both are showing an angle from a central or zero line. These signals are visible in dull light at four hundred yards. Beyond that distance field glasses should be used. The system may sound a little complicated on paper but in actual practice is very simple and quick. An intelligent man can learn it in less than half an hour. He has no clock face or compass bearing to bother him—just an easy estimation of direction and distance.

The suggested method has some disadvantages which would have to be overcome. For instance, a call for support may be answered simultaneously by two commanders of reserves. This should seldom occur but in case it does, a special signal is necessary by which the sender of the call can select the recipient for his message. It is not an insuperable difficulty; a rifle signal could

be made to answer the purpose, or very simple code calls be adopted for use with the message cover. Failing this the sender can screen his signals from one commander by the judicious use of cover. Should the two reserve commanders be near each other or on the same line, then it is advantageous for both of them to receive the message. Another disadvantage is that junior commanders would have one more lesson to learn. However, if the present field signals with the rifle could be abolished, a few new ones would not cause any extra burden.

There is the danger of the enemy using the signals for sending bogus messages but as no great distance is involved commanders of reserves should be able to identify their own troops. Here again a simple code call would overcome the difficulty. Admitting the disadvantages of the system—and no system is perfect—it is contended that they are outweighed by the advantages. In the first place it gives commanders of foremost troops a quick method of sending back information of the situation when all other means have failed. Secondly, it provides information which does not commit the commander of a reserve to any given line of action. The manner in which he supports forward troops is entirely at his own discretion. He may do this by fire, by the movement of troops, or he may decide to carry out a further reconnaissance before acting. In any case the information is of great assistance to him. With a little elaboration, such as a special calling up signal, the system might prove of value in giving warning of a tank attack. At present during movement forward troops have no quick means of doing this.

Fire support weapons of forward troops have been more than trebled in the last few years, whereas during movement their means of communication are the same as a generation ago. Unless these methods of communication are improved to meet modern conditions, fire power and man power will be wasted in the next war until units improvise new methods of their own.

ABOUT MEDALS

By "Millstone"

Few are likely to quarrel with the criticism that, generally speaking, the notification of the award of any medal is invariably unduly belated. Excluding "immediate" awards, this applies to both campaign medals and to medals for distinguished service or valour. There are, of course, difficulties. In respect of distinguished services and gallantry awards each recommendation must be thoroughly vetted to ensure there is no lowering of high standards and it is understandable that there should be no unjustifiable multiplication of campaign medals by making awards at too early a stage. But these considerations appear to have gained so all-exclusive an importance that the basic underlying reason for any mark for gallantry or distinguished service appears to be in danger of being forgotten. The reward to the individual merely serves a narrow and secondary purpose. The main object is to encourage the spirit of emulation. Or at least it should be if the lead of Napoleon is to be followed. It was this master of psychology who rated that object pre-eminent. It was he who first systematised the award of medals and gave the recognition of Government to these emblems gained in the service of Government. To-day in France the underlying spirit of Napoleon's purpose survives. The spirit of emulation is encouraged by the speed with which an award is announced and the ceremony with which the recipient is invested. To each is the salute to the brave and to each a few stanzas of the *Marsellaise*. Such elaborate ceremonial of presentation may be unsuited to the British character but who can deny that belated award followed by belated presentation robs the emblems of some of their lustre? And is the spirit of emulation encouraged whatever the reasons for delay may be?

As for campaign medals, a singular lack of imagination exists in the situation that permits a soldier all too frequently to have left the colours before he receives his mark of recognition. Of course, it is something that he is permitted to wear the ribbon before he receives the medal but with our short service army it is not difficult to estimate, on the seven years' colour service basis, what proportion of men awarded a campaign medal for a minor campaign are denied the privilege of wearing their medal in uniform unless they are again called to the colours. In a great war

the vast majority have usually been demobilised long before the issue of the first campaign medal commences.

So much for the past and the present, but the future would appear to hold new problems for solution. In quite a new way our democracy is binding itself to national service in volume, extent and form as never before. The combination of compulsion with the voluntary system, for both service in the field and at home, finds no parallel in the past nor does the almost certainty that future hostilities will cover both the battle zones and the home country. This is bound to raise interesting and difficult problems; problems that could be considered and solved in anticipation and should be so solved if dilatoriness in the issue of campaign and other medals is to be avoided in the next emergency. For example, are the personnel of an anti-aircraft battery in, say, Cumberland, to receive the same campaign medal or medals as those serving in an anti-aircraft battery at the overseas base? If so, where does this stop? Are the workers of a bombed aircraft factory to receive the same treatment as the A. R. P. workers who came to their assistance? Perhaps the answer may be a medal similar to that issued by President Hindenburg in 1934 "for services in the Great War to every German citizen who rendered military services for the German cause or for the cause of the Allies of Germany." The medal of those who served at the front was distinguished from that of those who served on the "home front" by bearing upon it two crossed swords. It is thoughts such as these that lend argument to the proposal that the primary control of medals of all kinds should be removed from the several Defence Ministries and should be transferred to the Central Chancery for the Orders of Knighthood. Only by some such reorganisation would opportunity be created for timely and co-ordinated planning. The existing Inter-Departmental Committee that deals with such matters in England is prone to work "in arrears" and the basis of its organisation leaves no alternative.

The more immediate purpose of this article, however, is to examine what future changes might appear desirable for an army fighting an overseas campaign. The British army of the future will see units of Regulars fighting side by side with Territorial units and both of these are to have their battle and other casualties made good, as the war progresses, by drafts from the conscripted Militia. As the war continues, there will be an increasing leavening of the Regular units by an observant and educated body of democratic civilians. At least one major political party in Britain is pressing for another vital change: that all future

officers should preface their commissioned service by some period spent in the ranks. The drift is towards democratising and civilianising the army. The few remaining vestiges of privilege are fading. If we are to take note of these factors, and plan intelligently for the next emergency, it might be that we should pay regard to considerations such as—

(*a*) The desirability of narrowing the disparity between the proportionate awards for valour to officers and to soldiers.

(*b*) The need to make some distinction between those who bear the burden of the actual fighting and those whose tasks are not so dangerous.

(*c*) To give to each their reward for valour or for service at the earliest possible stage and thus serve the object of encouraging the spirit of emulation.

In preparation for any planning based on those or similar considerations, the view is put forward that there should be an amalgamation of certain existing awards for valour and that the circumstances of their future award should be tightened up considerably. The standard should be raised to a higher plane and fewer should be awarded. As regards amalgamations, it is suggested that the V.C. and the D.S.O. remain as at present, but that the M.C., the D.S.C. (Navy) and the D.F.C. (Air Force) be replaced by a new decoration named the "Distinguished Service Cross," that the D.C.M., the C.G.M. (Navy) and the D.F.M. (Air Force) be replaced by a new decoration named the "Distinguished Gallantry Medal" and, lastly, that the M.M., the D.S.M. (Navy) and the A.F.M. (Air Force) be amalgamated in a "Distinguished Service Medal." This brings the Services on to the same footing, permits of three awards for valour to both officers and men and eliminates a multiplication of medals that has no *prima facie* justification. With the ground so cleared and bearing in mind that the necessity for maintaining a high standard for such medals will invariably require time for the examination of recommendation and hence delay in notifying their award, the following further medals are suggested for award during the campaign to meet the considerations specified at (*a*), (*b*) and (*c*) above:

The War Cross.—The three essential features of this decoration would be its award for collective as well as for individual action, that it would be essentially the "immediate" award and that the authority for award would be a citation in infantry brigade or equivalent orders. For a patrol or a raiding party or an

armoured fighting vehicle crew that had done good work to the adjudged standard, it would not only be the leader but many or even all of the men who would be decorated. Similarly for the crew of an aircraft or say the crew of a motor torpedo boat in the other two Services. It would definitely be restricted to action in face of the enemy in the strictest sense of the meaning of words and would not be awarded for action under that elastic term "under enemy fire." The medals in the required numbers would at all times be available for presentation at the earliest moment. Another object of the medal would be to meet a purpose that has all too little recognition in the prevailing system; the need for recognising conspicuous *fortitude* as well as conspicuous gallantry. Can anyone reasonably deny the case of the infantryman who served, say, two years in the trenches in the last war, whose demeanour and conduct in face of the enemy had been exemplary and who had never been absent from his duty by reason of sickness or wounds? Admittedly the distribution of the War Cross on the lines suggested would lead to far greater numbers being decorated but by such a medal we would tend to avoid what is at present not too infrequent, *i.e.*, that awards for gallantry are sometimes invidious distinctions in that several may have done equally well but one is chosen as the lucky recipient.

The Campaign Medal and the Medal for the Wounded.—The Great War recognised the necessity for badges to denote years of service in the war theatres as also to single out those who had been wounded. It is interesting to surmise what logic underlay the assumption that whereas the badges were desirable or necessary in war, they had no place in the succeeding peace. The indication of war service can as equally well be met, and in a permanent form, by the grant of the first campaign medal by the end of the first six months or so. The main point is that if the grant of the first medal is decided early, the need for service chevrons does not arise. Whether subsequent campaign medals would be necessary could be decided as time progresses. A suitable scheme might be as follows: The first campaign medal would cover the first two years; service in each of the two years to qualify for a bar to the medal and a rosette on the ribbon. On completion of two years of war, the "National Defence Medal" would also be issued. This would be on the lines of the commemorative medal issued in Germany in 1934, to which reference has already been made, and would be awarded to all Defence Forces of the Nation, civilian as well as fighting services, whether serving at

Home or overseas. The question of further campaign medals could then be postponed for decision until after hostilities.

The case for a medal for the wounded is based on two grounds. Firstly, to satisfy the consideration noted at (*b*) above, and secondly, to give some tangible reward to those who will, in a great number of cases, carry some physical incapacity for the remainder of their lives. In a large number of cases, the fact of their being wounded denies them further opportunity of gaining rewards for gallantry. More in the case of this medal than any other would most stringent rules be necessary. Perhaps the most important would be that for the purposes of the award, only evacuation to and treatment in a casualty clearing station or beyond would qualify for appearing in the lists published for the purpose in Corps Orders.

Whatever views may be held by different individuals, there is little to be said for the existing system as far as the soldier is concerned. For them, the distributions of awards for gallantry are so few and far between in proportion to their numbers that the normal odds on any soldier receiving such medal assumes the dimensions of the odds against a rank outsider in a classic race. Only in one regard are the odds relatively even as between soldiers, *i.e.*, in the majority of cases the soldier who has literally faced death for seemingly unending months and years will conclude the war, if he survives, with the same emblems for his fortitude as the man who baked bread at the Base.

VANCOUVER ISLAND ON A PENSION

By Major-General Sir Ernest Walker

For the last few years before I retired I read a great deal of literature about different parts of the Empire and what they had to offer to the retired officer and civilian. Much of this was frank propaganda and some of it was out of date, so it struck me that our impressions of our first year here would be of interest to those who are approaching the end of their service. I retired in August 1937, arrived here last April and this is written in January 1939.

I should like to clear the air by saying that this part of the world is only suitable for a certain type. I can think of a good many friends and acquaintances in India who would not fit in here. You must first of all be a countryman at heart with a countryman's interests in the land and the trees, the garden and the birds. You should, preferably, be a shikari. Best of all, a fisherman. You should be satisfied with the simple things like bread and cheese and the log fire on the hearth. If you feel that life is empty without a London Club, that Devon is a charming county but it is too far from town, or if you habitually let the bearer put on your socks, this is no place for you.

I think that it is the people with young children to educate who should consider very carefully the question of settling out of England. Canada is for the Canadians, naturally; if you are prepared to give your boy a completely Canadian education and make his life here, well and good. The education available is excellent. The Government schools are good and practically cost-free. There are also good private schools on the Island comparable to the English public school of the smaller type and costing about the same or less, and the girls' schools of the same class are excellent and cheap. There is also Kingston which admits boys from fifteen to nineteen years of age and gives a four-year education for £300 which is a great bargain. To this must be added the high cost of transportation from Eastern Canada if your boy is to come home even once a year for holidays. Kingston is really a civil engineering college which gives a first-class general education as well, and from it boys go direct into the British Service and the Indian Army, and as we all know it turns out very fine men. But there is this difficulty: the boy is, say, in the Indian Army and his parents have settled here. He has neither the money nor the

time on his leave to come here easily, his pals all go Home on leave and he wants to do so as well. I know instances here where this is a very real problem involving in some cases the question of selling up and leaving the country.

The other objection is the feeling which many people have of being far away from the centre of things, "cut off" as they say, from good theatres and good music for instance. Actually England is not so far away. If you go by rail across Canada and by one of the slower and cheaper ships across the Atlantic it takes about thirteen days. If you are in a hurry you fly from Seattle and catch the "Queen Mary" at New York and do it in eight. A return ticket from Duncan, doing it comfortably, will cost you £90; you can do as cheaply as £70.

There is also the general question of comfort and the standard of living. Anglo-Indians (in the old meaning of the word) are supposed to be rather helpless creatures in Canada, used as they have been to being waited on hand-and-foot by hordes of Oriental slaves. Actually we have never been so comfortable or had such good service and cooking as we get from one very efficient Chinaman. This is partly a question of money; my Chinaman gets £9 a month but he is worth it.

I cannot think of any more disadvantages so we may examine the other side of the medal.

Being a Scot I should like to state that this is a cheap country to live in and good value. I have a soundly built house of eight rooms with lawns and garden and twelve acres of land running down to the shore of a lake situated on a good road five miles from the small town of Duncan which is our shopping centre. The house has polished floors, panelled walls, central heating, electric light and power, unlimited hot water and electric cooking, double garage and other outbuildings. Telephone of course (£5/8 a year). This proposition cost me £1,600 and I am considered locally to have paid too much for it. The local taxes on the property amount to £15 per annum. Current costs 1¼d. a kilowatt, coal 36s. a ton, and wood is cheap; I cut a lot of my own actually.

There are houses of all kinds and prices for sale. The most expensive and the most attractive are those with sea or lake frontage as mine has. They are also the easiest to sell. We lived in a charming modern house in Victoria which is for sale for £900 and I could have bought quite a good house for £800 here in the Cowichan Valley. There are very few houses to rent though the ideal is to rent a house for a year with the option of purchase if

you can. Anyone who decides to settle on the Island has first to settle on the part he prefers. This we did by getting into the car and exploring the whole place thoroughly. Having settled this point you have then to make up your mind whether you will buy land, cleared or uncleared, and build a house on it and make a garden or buy a ready-made proposition as I have done. I went into the money side of this pretty carefully and there is not a great deal in it but if you start from uncleared land it will take you about three years to get it looking like a home. Whatever you do, don't be in a hurry and buy the first charming place you see in June—there is also December to consider, and don't buy a bigger house than you can manage.

As regards other expenses: income-tax is levied by both the Dominion and the Province. I do not propose to give details as they would be too complicated but for incomes in our group a rough working rule would be that the tax will amount to six per cent of gross income or, say, 1*s.* 3*d.* in the pound. A very important point is that all Indian pensions paid by the India Office are paid free of British income-tax and pay the Canadian tax only; this does not apply to British Service pensions and those of R. N. officers which are liable to full British tax at source of payment and again here in Canada on the remainder. A rebate of the major part of the Canadian tax is admissible.

I have a Ford V-8 which cost me £230; the tax on this is £4/10 a year, insurance £7, petrol 1*s.* 2½*d.* a gallon. As regards the other necessities of life, Scotch Whiskey costs 13*s.* a bottle and Canadian rye 9*s.*; cigarettes 4*s.* a hundred. Alcohol is a Government monopoly; you have to get what I call a drinker's license which costs 1*s.*; you then go to the Government Liquor Store and buy as much as you want but you cannot get a drink in a hotel except in a special part of it called a beer parlour and there you can only get beer which is neither cheap nor good. We brew our own, most successfully. What one might call local produce such as milk, butter, fruit, eggs, fish, beef, mutton, and vegetables are absolutely first-class, better than I have had anywhere, and on the whole, cheap, some very cheap. Groceries on the whole are cheaper than in England. Imported articles are definitely dear: Canada has a pretty stiff tariff and there is a local sales tax everywhere. On the other hand "settlers' effects" which you bring with you or which follow you within a reasonable period are duty-free. This includes all your furniture, glass, cutlery, china, linen, carpets, pictures, guns, fishing tackle, camp kit, car if you like, and of course personal clothing It pays one to bring all one's

old clothes; for one thing you never wear anything else. My wife says this remark applies to both sexes.

If your wife has read as far as this she will be saying, "All very well for this old General with his big pension and his jewel of a Chinaman, but what about poor little me?" Well, Memsahib, it is like this; you get what you pay for here as everywhere else. The Chinaman is the most expensive proposition, and I consider the best. You can have a Canadian girl who will live in the house and requires a bedroom; your Chinaman lives in a shack in the garden. She is quite good and will teach you all you want to know about local housekeeping though you may be a bit worried at times at the hours she gets up and goes to bed. She will cost you £4 to £5 a month. You can have a woman who comes in and works anything from half a day a week upwards; standard rate is 1*s.* an hour. You can in a labour-saving house run by electricity do everything yourselves, but I do not advise this until you know the ropes and unless both the people involved are willing to take a fair share of the work. One thing you can be sure of; you can always get domestic help of some kind or another, the kind you get depends on two things; one is what you can pay, the other is the treatment you give to it.

As far as I am aware most Dominions and Colonies infer, if they do not make a definite statement, that the pensioner can at least augment his income by such means as fox farming, mink breeding, bulb growing, dairy farming and so on. You should be under no delusions about this; these are all highly specialised industries requiring a long training and a very considerable amount of capital, while even for the expert it is not always easy to show a profit. A good many keep a couple of cows and some chickens and grow their own vegetables. Comparatively harmless amusements these, but I fancy if our old friend the C. M. A. made a check of their accounts he would find that their milk, butter and eggs cost a good deal more than if they had been bought in the local market. In any case livestock of any kind is a tie; you or your lady want to run in to Victoria or over to Vancouver for a week-end; who is then to provide the nourishment and other amenities which the animals demand? Even the ordinary flower garden in a dry summer cannot be left very long. The gardening is a great joy; the soil is kind and things do well. I have the south wall of my garage covered with peaches and my neighbour next door has more grapes, also grown in the open, than he knows what to do with.

The mention of gardening leads one to say something about the climate, the two I know best are the east coast of Scotland and the north of India and I am putting it mildly when I say that it is a long way ahead of either. I think the best description is a very much improved south of England. One's first year in any place is always unusual according to the local inhabitants and this was no exception; it went up to 95°F. in July and down to 16°F. in December. It gets quite hot in summer, but you always want a blanket at night. So far this winter I have not exceeded two blankets and an eiderdown. To-day we had a letter from a friend in Edinburgh where I shivered for six winters as a boy, commiserating with us on the ghastly time we must be having. When her letter arrived at 3 p.m. on January 18th, I was sitting in my shirt sleeves on the end of the jetty watching the canvasback in the calm and sunlit lake. The lady forgot that we live on the pacific coast. A few weeks ago it was 48°F. here and at Edmonton across the Rockies it was 48° below zero. As a matter of fact, we have had two light falls of snow and ten days' quite good skating before Christmas. Some winters the snowfall is quite heavy.

Everyone who has lived a long time in the tropics misses the sun terribly at Home—at least I do. You do not feel that disability in British Columbia; I think that is the salient point of the climate; it is sunny not only in summer but in winter too. The average rainfall is about thirty inches.

I said that the man who would be happy here should be a shikari; better still, a fisherman. So I had better give you some of my personal experiences. I had not nearly enough time to fish last year—what with buying a house and furnishing—all sorts of things interfered with this really serious job. This will be remedied in 1939. First of all, if you are keen you can actually fish all the year round either in the sea or in fresh water. Secondly, you have to unlearn a great deal of what you did before and start afresh. For instance you go up to Cowichan lake to get some trout; by far the most successful method is to troll a seven-inch spoon with a worm dangling behind it. You then go down to Cowichan Bay to get a salmon in the sea, here really the only way for the Coho salmon is a fly either cast or trolled.

I have been disappointed in the river fishing on the whole, but then I have only tried the Cowichan and it is hard fished. You see the most wonderful looking water and fish it carefully without a rise; you go to the same place another evening and get three or four good fish. The explanation is that most of the river trout have acquired a sea-going habit and come in in definite

runs, and to do well you must hit off a run. Dry fly is not much good as a rule; the fish are largely minnow feeders and it is like fishing the Lower Sind for instance. I have had a lot of blank days and some marvellous ones to compensate. The first time I fished the river I got three rainbow 16½-lbs. In July I went with Colonel Slater, late of the Burma Police, to a lake in the centre of the Island; quite a trek by boat and pack horse. We camped out at the mouth of a big creek where it entered the lake. I got sick of catching trout on the fly at this place; there was a regular morning and evening rise lasting about two hours, nice fish, say, from ½-lb. to 1½-lb. They took a dry sedge here too. In September I went with another friend two hundred miles north by car, coasting steamer, and rowboat and camped in a deserted shack at the mouth of a large river and fished the tidal water for Tyee salmon. This turned out to be the best fishing I have ever had. We got eighteen fish in a week weighing 727 lbs. The best fish weighed 50 lbs. On the best day we got six fish weighing 242 lb. in all. I should hesitate to say how big some of the fresh-run fish were which we saw jumping, but 80-lb. is quite safe.

The results of these two trips really gave me the clue to success in sport here: you must get off the beaten track. I won't say that everyone fishes, but the inhabitants are a very keen and sporting lot and any available water near Victoria or Duncan is pretty hard fished. We are lucky in being only a few miles away from Cowichan Bay; there is a good run of Coho salmon every autumn lasting about two months. These are most sporting fish running from 8 to 15-lb. or more. They take a fly freely in salt water and play magnificently. This was a bad year and I was unlucky, and never got more than two in a day; but I saw bags of six to nine often. One ought to get between thirty and fifty fish in a good season. I am afraid I have been lazy about the shooting, having done so much in the past. I went to one party of six guns, five Labradors and one beater. We got eighteen head including twelve cock pheasants; quite good fun. All the shooting practically is on private land. You shoot your own and your friends' land and form little syndicates which are very cheap. There is quite a big stock of pheasant and quail on my small bit and I get the odd mallard and teal on the lake. There is just enough game to make it worth while to go for a walk with the dog; good fun for the dog anyhow.

You can play any game you like. We have a good little nine-hole golf course—£6 a year—and lots of tennis and badminton. If you feel that way you can even play polo; a pony will cost you

£15—20 and its keep some £3 a month. The best, in fact the star performer at the polo club, is a young friend of mine who drives a truck for a living. He drives it most furiously.

These remarks seem very disjointed when I read them over; but I hope that they give some sort of a picture of the country and what it has to offer and what it lacks. It is unconventional, friendly and democratic. This part of it is full of the most charming people from all over the Empire who have tried life here and found it good. Their regulation costume is a pair of old flannel bags and a tennis shirt, and they do not dress for dinner except on Christmas Day. It is famous all over North America as the place where old gentlemen in plus-fours take off their hats in the street and call each other "Sir." If you have enough to buy and furnish a house and an income of say £700 a year you will have a grand life. If you have more, it will be grander still. Lastly, if you think seriously of settling on the Island, come Home this way on your next leave; your fare will be about £50 more than a return from Bombay to London. Hire a car in Victoria for a couple of months; put your fishing rods and golf clubs in it; and study conditions for yourself. You can be assured of good weather from May to October.

I should be only too pleased to reply to any inquiries about Vancouver Island addressed to me at Duncan R. M. D. 1, Vancouver Island, British Columbia, Canada.

HIS EXCELLENCY THE COMMANDER-IN-CHIEF'S BROADCAST ON MILITARY DESPATCH No. 5—

(THE CHATFIELD REPORT)

All of you who are listening are of course fully aware of the grave crisis which we have now been called upon to face. My object in speaking to you to-night is not to attempt to make any forecast of the course of events in the future, but to give you some idea of the way in which we, here, in India, have been preparing to take our part in any eventuality that may arise.

Most of you will have heard of the unprecedented gift which His Majesty's Government are making to India in order to help us to re-equip and reorganise her defence forces in the light of modern technical developments in warfare. The details are given in Military Despatch No. 5, addressed to the Governor-General by the Secretary of State for India and this despatch has already been published in the press. In brief, in order to bring our forces up to date and to make them capable of playing their part efficiently, we are receiving a free gift of Rs. $33\frac{1}{4}$ crores and the remaining Rs. $11\frac{1}{4}$ crores required for our programme are being lent to us free of interest for the next five years.

This evening, in my capacity as Commander-in-Chief of the Defence Forces in India, I am speaking to you in order to explain and expand certain points which were dealt with in the necessarily brief and formal terms of the despatch. First and foremost, I wish to make it clear that I, as Commander-in-Chief, was closely associated throughout with all the work of Lord Chatfield's Committee as expressed in the despatch published and that I entirely agree with the proposals it contains, which have now been accepted by both the governments concerned. I am convinced that the implementation of these proposals will put the defence of India on a more satisfactory basis. The enormous cost of modern armaments has made it quite impossible for a poor country like India fully to keep pace with wealthier nations. It is, of course, obvious that the provision of a navy capable of shouldering the entire burden of India's seaward defences has always been beyond our means. This applies equally to the provision of a large air force. But until comparatively recently we were able to stand on our own legs as far as the army was concerned, and I can say that

the army in India was second to none in personnel and training. Post-war developments, however, have vastly increased the expenditure necessary to keep land forces up to date, and an army in the present year, if it is to be equipped up to modern standards, is far more expensive than the army of 1914. In fact it is not too much to say that India would not have been able to organise her defences, either on land or sea or in the air, to meet the dangers which the future may well bring forth had she only her own resources in money and industry upon which to rely.

I am aware that there are many in India who have been asking whether, in view of the trend of the world situation during the past year, those responsible for the defence of India were going to continue in apparent unconcern to watch the portents of the gathering storm, silent as to how they and the peoples of India must act if it should break. The best answer to that question is the announcement on which I am now speaking.

There are also those who, knowing the great services which India rendered to the cause of freedom and civilisation in the last war, are anxious to be told what India might have to do were war to come again. It is right that the people of India should know the answer to this question in so far as it can be given without damage to the public interest. Those who remember the Great War of 1914—18 know that though India's forces served beyond the borders of India, in Iraq and Africa and even in Europe, India itself was far from the seat of war and was never directly threatened. In existing conditions it would be clearly unwise to assume a continuance of this immunity. Look Eastwards and think of what would happen to India if Malaya and its great fortress of Singapore were to fall into the hands of an enemy. The British fleet would thereby lose its great base in the East and the whole Eastern coastline of India from Calcutta to Madras would become liable to raid and bombardment by sea and air. The loss of Malaya might well also mean a serious threat to Burma. Napoleon once said when he occupied the Low Countries that he had in Antwerp a pistol pointed at the heart of England. Burma, in hostile hands, would be a pistol pointed at the heart of Bengal. Look Westwards, to the Red Sea and Egypt. So long as Egypt, our ally, is free and independent and able with our help to check the movements of a hostile power, the Indian Ocean and the shores of India are likely to remain immune from

attack from that direction. In other words, it may be said that it is vital to the interests of India that Egypt and Aden should never fall into hostile hands. In the conditions of the world situation as it has developed in recent years, the places which I have named have become of the first importance to the defence of India and may be considered to be her outposts. Eastwards we have Singapore, Malaya and Burma; Westwards, Egypt, Aden and the lands of the Persian Gulf. If these were to be lost to India's friends, India would be directly threatened. Happily this has been realised, and as we have made preparations in time there is, humanly speaking, little danger of their loss, especially as we can count upon the fullest and most whole-hearted help from our allies—Turkey, Egypt and Iraq. If India were to stand alone, she would undoubtedly be in imminent danger. But India does not stand alone. In all the places from which her security may be menaced, there are British garrisons and in Egypt there is also the Egyptian Army. It must, however, be remembered that events in Europe may make a very heavy call on the sea, air and land forces of Great Britain, and moreover that sea and air communications may become unsafe for some time, in which case the arrival of reinforcements from the United Kingdom to garrisons east of Suez might be considerably delayed. In that case the country from which aid to the garrisons I have mentioned can best and most speedily come, is India. In India's own interests, therefore, as well as in common loyalty to the common cause, India must look this real problem of external defence squarely in the face and must acknowledge in the words of Military Despatch No. 5 "that her responsibility cannot in her own interests be safely limited to the local defence of her land frontiers and coasts."

What will external defence entail? It will entail the maintenance in India, in peace, of a part of India's defence forces comprising both British and Indian units in instant readiness to reinforce the garrisons in those strategic positions overseas which are vital to India's external defence. The nature and size of these forces are determined in joint consultation between His Majesty's Government and the Government of India. According to present plans, they will represent in numbers about one-tenth of the forces maintained in India for the defence of her frontiers and coasts and for the maintenance of internal tranquillity. It stands to reason that if these forces are to be fit to fight alongside British

Forces and to be prepared to resist the attacks of the troops of great military powers, they must in every respect be fit for war under modern conditions, ready in fact to meet and defeat the most powerful mechanised forces, tanks, aircraft, gas and hostile infantry heavily armed with modern light machine-guns and possessed of a high degree of mobility. We can no longer, therefore, be content with an unmodernised army for India. Indian troops, so far as their quality is concerned, need not fear comparison with the troops of any country in the world. It is only fair, however, to our officers and men, that they should have the fullest use of all the new weapons which modern science has devised and also of motor transport and wireless communications which have come into general use in modern armies. It was to help towards the provision of these new weapons and equipment that the British Government increased her annual contribution to India's defence budget by half a million pounds and, in addition, gave us a capital sum of five million pounds. Much of these five millions has already been spent on re-equipping the army and air units detailed for the tasks of external defence. It is due to that money that the contingents from India which have just been sent to reinforce Singapore, Aden and Egypt, are far better equipped for modern warfare than we could have hoped for when we had to rely entirely upon our own resources. Incidentally, I can tell you now that India's prompt reinforcement of the strategic positions vital to her defences, has gone far towards increasing the sense of security both in Egypt and Malaya.

It is possible that some of you who have followed my arguments so far may be thinking to yourselves "Good; if India and Great Britian can prevent our enemies from occupying Singapore, Aden and Egypt, then India is safe, and needs no other defence forces." This, unfortunately, is not correct. The new problems which I have described do not cancel out the old needs; India still requires land, sea and air forces for the following tasks:

(1) the defence of her land frontiers;
(2) the defence of her ports and harbours and all the cities and industrial establishments on and near her coasts;
(3) the preservation of internal security;
(4) the provision of a reserve to meet the many unforeseen emergencies which are likely to occur in a world as unsettled as the one we live in.

Moreover, just as the forces for overseas external defence require to be equipped with modern means of warfare, so the forces for the local defence of India can no longer be regarded as efficient if they rely upon the comparatively simple weapons, and on the horse and mule for movement and transport. In fact it would obviously be absurd to have one-tenth of the Army in India organised on a highly modern basis, while the remainder of the forces, both Indian and British, were not similarly equipped and trained. Nothing is more costly to a nation than the maintenance of defence forces which are not on the same level of modernised efficiency as those of their possible adversaries. In peace they are almost as expensive to keep up as highly modernised forces and in war they lead to unnecessary loss and perhaps ruin. For the last two years and more, I have recognised that the forces for the defence of India must be modernised; that we needed new ships for ports and coastal defence and for keeping the approaches to our harbours clear of enemy submarines and mine-layers; that our air-craft must be replaced by new and efficient machines and that the weapons of the Army were insufficient in numbers and becoming out of date. Further, I have realised that in many parts of the East in which we might be called upon to operate, the Army would gain in that striking power and speed and range of movement which makes for success, if the cavalry, British and Indian, were to be mechanised and armoured and the infantry to have motor transport instead of the slow-moving and vulnerable mule. Up till now the main difficulty has been lack of money. Modernisation, either in business or in defence services, is very expensive and needs a large supply of capital. It was easy enough to decide what ought to be done to modernise India's defence forces and comparatively easy to work out how much that would cost, but until this agreement between the Government of India and His Majesty's Government was arrived at, after a close and detailed study of our problems and needs on the spot, there seemed to be little hope of getting the money required to give effect to our programme of modernisation. This decision of His Majesty's Government, virtually to pay for the whole reorganisation and rearmament of the defence forces in India in the light of modern military needs and of the international situation, is an immense relief to me and to all concerned with the defence of this country. We can now set to work to complete the reorganisation of our

land, air and naval forces in order to fit them in every respect for any emergency and to meet any enemy. We have indeed already made substantial progress in this direction in all three services. The Air Force in particular now possess a complement of machines of the most modern types.

In tackling this problem we had to decide to what extent we can rely on our own resources and what will have to be provided from elsewhere. India's greatest asset is a large supply of the finest types of fighting men. India's weaknesses are a low national income and up to the present limited industrial development, incapable as yet of supplying all the technical equipment of a modern army. Without proper equipment we cannot assume or use the man-power which we possess. Moreover, so costly are modern armaments, that unless our annual resources for the maintenance of our new model army were to be very largely increased, the modernised army, though it gains greatly in efficiency for war, will probably be smaller in numbers of units and men than its predecessor. History has, however, amply shown that victory is not the prerogative of a large organisation, swollen with ill-armed soldiery, but rather of small well-armed mobile armies, modern for their period. This is even more true to-day than it was at any time before, and nowadays large ill-equipped armies are nothing more than sheep for slaughter. Realising the possibility of reduction, consequent upon the great improvements and striking power conferred by modernisation, His Majesty's Government have practically completed the process of withdrawing from India, and thus assuming financial responsibility for, the equivalent of a division of British troops. It may also become necessary, hereafter, in order to keep within the limits of the money available for defence, to make some reduction in the numbers of Indian troops maintained *in peace*. This in any case will be proportionately much smaller and will of course not be done yet.

And now a word on the subject of industry; as the despatch says, it has been accepted that after the process of modernisation is complete, India should be in all major respects self-sufficient in munitions in time of war. In the present state of industrial development, the first reliance must obviously be placed on the expansion of government factories, which is already in hand, but the utmost encouragement will be given to indigenous industry and it is up to industry to take advantage of this new development.

India is a military country and I am a soldier. It will, therefore, perhaps not be amiss if I give you some personal impressions of what the effect of modernisation will be on the personnel of the future Army in India. They are not just guess work but based on what has already been done. With new scientific weapons and with modern vehicles, there will inevitably come new ideas and a new outlook. Modernisation is likely to give increased impetus to the already high rate of education in the Indian Army and when nearly every soldier on discharge returns to his home with a knowledge of motor cars and machinery, there may well be a perceptible effect upon the age-old methods of agriculture and ways of living. Modernisation in the Army may therefore have a considerable indirect effect upon the life of India. Many of those who hear me will regret the passing of the horse. No one regrets it more than myself, but as a soldier who knows the fate which awaits the horse in modern warfare, I rejoice for its sake, that one of the greatest and best of friends of man is in future to be spared the horrors of war.

Finally, I wish to remind you, that all connected with India's defence are addressing themselves to their utmost in the present grave emergency to meet all the dangers which India may be faced with. In the performance of this task we shall be immensely encouraged by the support, sympathy and understanding of people of good will and intelligence who realise the dangers which threaten India in the circumstances of to-day and have some understanding of what the defence forces must do to meet them. I would also recommend them carefully to read and re-read the words of Military Despatch No. 5 in the light of what I have been saying.

In wishing you "good night," I can assure you with the utmost confidence, that the modernised forces in India will serve you as nobly in the present emergency and in the future as their predecessors have done in the past. I cannot say more than that.

MILITARY DISPATCH No. 5

This despatch from the Secretary of State for India to His Excellency the Viceroy embodies the conclusions reached by His Majesty's Government on the recommendations submitted by the committee under the chairmanship of Lord Chatfield.

The Government of India have accepted the conclusions and have expressed their appreciation of the very substantial contribution which His Majesty's Government at a time of great financial stress have decided to make to the capital cost of re-equipment and reorganisation.

The despatch is as follows:

* * * *

On the 13th September 1938, an announcement was made on behalf of His Majesty's Government in the following terms:

"As was indicated by the Secretary of State for War in his speech on the Army Estimates on the 10th March of this year the Prime Minister at that time authorised the initiation of discussions regarding the role of land and air forces in India in relation to the defence problems of India and the Empire.

"Both the military and financial aspects of this question have been considered in detail. The outcome of these discussions at the stage so far reached has recently been considered by His Majesty's Government.

"The need for early action to place the defence organisation of India on a more satisfactory basis is accepted. It has not been possible in the time available to reach agreement on all matters which have presented themselves for consideration in the course of these discussions. But definite progress has been made, and in the light of this progress, an offer has been made by His Majesty's Government in the United Kingdom, subject to approval of Parliament, to increase by £500,000 as from 1st April next, the annual grant of £1,500,000 which has been paid to the Government of India since 1933 in aid of Indian defence expenditure in accordance with the recommendation of the Garran Tribunal. In addition, His Majesty's Government in the United Kingdom propose to ask Parliament to authorise the offer to the Government of India of a capital grant up to £5,000,000 for the re-equipment of certain British and Indian units in India, and in addition, to authorise

the provision of aircraft for the re-equipment of certain squadrons of the Royal Air Force. The precise scope and cost of these proposals have not yet been determined in detail. Further, it has been agreed that four British battalions should be transferred from the Indian to the Imperial establishment; three battalions will be transferred at once and the forth will follow as soon as can be conveniently arranged. Finally, in connection with the discussions which have taken place in London, the Government of India have suggested that His Majesty's Government should send out an expert body of enquiry to India, at the earliest opportunity, to investigate the military and financial aspects of the problems on the spot, and to submit a report before the discussions between the two Governments are carried to their conclusion. His Majesty's Government have accepted this suggestion and appointed an expert committee, with the following terms of reference:

> "Having regard to the increased cost of modern armaments, to the desirability of organising, equipping and maintaining the Forces in India in accordance with modern requirements, and to the limited resources available in India for defence expenditure, to examine and report, in the light of experience gained in executing the British rearmament programme, how these resources can be used to the best advantage, and to make recommendations."

"The expert committee, with which the Defence Department of the Government of India will be associated, will be presided over by Admiral of the Fleet Lord Chatfield. They will leave England during October, and it is hoped that they will be able to report early in 1939."

* * * *

The Report of Lord Chatfield's Committee was presented to His Majesty's Government on the 6th February 1939. His Majesty's Government have since been considering the Report in consultation with Your Excellency and have now arrived at certain conclusions upon it. The Report itself necessarily contains material which it would not be in the public interest to disclose, and it is not therefore intended to publish its text. I am, however, authorised to communicate herewith to Your Excellency for publication the substance of its main recommendations and of His Majesty's Government's conclusions thereon.

As Your Excellency is aware, Lord Chatfield's Committee maintained close and constant touch with the defence authorities in the course of their work in India, and the recommendations in the Report reflect in large measure their joint conclusions in so far as the technical aspects of the enquiry are concerned. At the same time the Committee took steps to ascertain the views of all sections of opinion, unofficial as well as official, with which they were able to establish contact, and they included in their survey of the problem various considerations that were put before them as a result of this procedure.

The Committee's terms of reference allude to "the desirability of organising, equipping and maintaining the Forces in India in accordance with modern requirements." The term "modern requirements" was, of course, intended to relate to the defence requirements of India in modern circumstances, and the Committee have so interpreted it in making their recommendations. These contain proposals affecting the Army, Air and Naval Forces maintained by Your Excellency's Government, as summarised below and take fully into account the great changes that international developments have brought about in India's defence problem.

As regards the Army, the Committee gave consideration to the suggestion that it might be simpler, cheaper and more effective to maintain separate specialised forces for such purposes as frontier watch and ward and internal security. They concluded, however, that for many reasons the suggestion cannot be supported. They noted that the personnel of separate specialised Forces would not be interchangeable, and consequently great practical difficulties would be met with as regards the reliefs and the training of units in the various components, while the constitution of Forces of which the component parts cannot readily be interchanged is in itself unsound from the point of view of elasticity and economy of force. Moreover, such Forces would almost certainly prove more costly than general purpose troops. Specialisation of this nature would involve the conversion of a large part, if not the whole of the Regular Indian Army, at any rate, into groups of forces which would be incapable of operating anywhere outside their local spheres. On the other hand the British Units which now form an intergral part of the Army Forces in India must in any case be maintained in such a state that they are readily

interchangeable with units on the Home Establishment and it would clearly be detrimental both to efficiency and morale if any portion of the Indian Army were organised and equipped on a markedly lower basis. The Committee concluded that in the interests of Indian defence the whole of the Army Forces in India should be modernised with only such minor variations as would not effect the general level of efficiency.

They therefore recommended a thorough-going scheme for the re-equipment of all branches of the Service, particulars of which are given in the Appendix to this dispatch. It will be noted that one of the most important features of the modernisation proposals is the mechanisation of the Cavalry and of the first line transport of a large portion of the Infantry with the object of greatly increasing the mobility of the units.

With the increased efficiency and mobility afforded by modernisation it becomes possible to provide an equal measure of security with a smaller number of troops, though it has to be recognised that the maintenance costs of a modernised unit are necessarily higher. The Committee carefully considered these factors in relation to the defence requirements of India and to the need for keeping the maintenance costs of the Army within the compass of what India can afford. The financial effects of their recommendations are dealt with later.

The actual reductions as regards British units are as follows. The Committee noted that since the 1st July 1938 one British Cavalry Regiment and four British Infantry Battalions had already been withdrawn or earmarked for withdrawal from India. In addition to this, their proposals involve the withdrawal of one Regiment of Field Artillery, one Regiment of Medium Artillery, and three R. H. A. Batteries, and of one Cavalry Regiment (since increased to two in consultation with Your Excellency) and two Battalions of Infantry; and effect is already being given to these further withdrawals. The total reduction of British troops as measured with their establishment on the 1st July 1938 is approximately 25 per cent.

For the same reasons a reduction in the number of Indian units will also be involved. It has to be remembered that while the reduction of British units on the Indian Establishment implies their transfer to the Home Establishment and consequently their retention as a part of the available combatant forces, the reduction

of Indian units must be absolute except in so far as they can be employed, at the cost of other than Indian revenues, in overseas stations. In present world circumstances, however, it would clearly be imprudent to lay down any hard and fast programme involving an absolute reduction of the available combatant forces; and time and occasion for any actual reduction will have to be fully considered hereafter. In any event such reduction would be proportionately much less than that of British troops.

As regards the Air and Naval Forces, the Committee made proposals for the re-equipment of the Air Squadrons maintained in India and for the re-equipment of the Royal Indian Navy. In the case of the Royal Air Force, as stated in the announcement of the 13th September, 1938, quoted in the first paragraph of this despatch, His Majesty's Government had already agreed to make a capital grant for the re-equipment of certain squadrons. A sum of approximately £1,700,000 has been provided for this purpose and the re-equipment of four Bomber squadrons is now in progress. The proposals of the Committee include the complete re-equipment of the remainder of the Royal Air Force squadrons in India (as shown in the Appendix) and measures to bring the transport and stocks of stores for war requirements up to the requisite standard.

With regard to the Royal Indian Navy the proposals are related to the agreement reached between His Majesty's Government and Your Excellency's Government in 1937 and announced in the Communique dated the 26th February 1938. They include the provision of four new escort vessels making an eventual total force of six modern vessels together with adequate measures for the local naval defence of India.

In addition, proposals are made to modernise the coast defences at the principal ports.

The Committee further recommended a scheme for reorganising and where necessary expanding the Ordnance Factories in India which supply all three Services. While recognising that the greater part of the initial equipment required under their modernisation plans would have to be provided from sources outside India, they accepted the principle that thereafter India should as far as possible be made in all major respects self-sufficient in munitions in time of war. They gave full weight to the possibility of drawing on the resources of private enterprise in India in

this connection. They concluded, however, that in the present state of industrial development it is necessary to place first reliance on the Government Factories.

After carefully examining the Committee's proposals, His Majesty's Government consider that they should be accepted subject only to a few minor modifications and to the further consideration of certain aspects, which however do not materially affect the Committee's scheme as a whole. In reaching this conclusion they have taken full account of the heavy capital cost involved in the modernisation proposals. The Committee, working on material made available to them in India, estimated the total net capital cost at some Rs. 45 crores or £34·33 millions. The Committee made it clear that in their view the funds required to meet this capital expenditure could not be found out of the resources available in India. His Majesty's Government have accepted this conclusion, but are no less impressed than the Committee with the need for modernising the Forces in India. They are, therefore, prepared to adopt a suggestion made by the Committee, and to seek the authority of Parliament to provide the sum of £34·33 milllions from the Home Exchequer. This sum would include the capital grant of £5 millions and the cost of re-equipping the Air Force Squadrons referred to in the Communique of the 13th September 1938. The Committee estimated that a period of five years would be required for the completion of the modernisation plan (except that a some-what longer period will be needed in the case of the Royal Indian Navy); and the provision of the total capital sum would accordingly be spread over this period. Of the total amount, three-quarters would be provided as a free gift while one-quarter would be advanced by way of a loan. The interest on this portion, however, would be entirely remitted for the first five years; thereafter interest would become payable together with instalments of capital.

In estimating India's defence requirements, the Committee had to consider how far the prevailing conception as regards India's liability for defence can be held valid in the light of modern conditions. They took note of the principle stated in the Report of the Garran Tribunal of 1933 that the broad lines of division between Indian and Imperial responsibility for defence should be that India assumed responsibility for the "minor danger" of the maintenance of internal security and protection of

her frontiers, and that Great Britain assumed responsibility for the "major danger" of an attack by a great power upon India, or upon the Empire through India. They observed, however, that this principle was formulated in the years immediately following the Great War and was re-affirmed by the Garran Tribunal. Since then, however, developments have brought into far greater prominence India's potential vulnerability to attack in other forms than those envisaged when the principle was first laid down. Such attacks, if they should ever mature, would so vitally affect India's own well-being that they would demand her immediate co-operation in effective measures for her defence. In such cases India's defence would clearly be most effectively and economically assured by co-operation in the defence of points outside India which are strategically essential to her security. The agreement of 1937 with regard to the Royal Indian Navy, which embodied a policy that had already been made clear when the Royal Indian Navy was created as a combatant force, contained in itself a recognition of the fact that India is directly interested in defence measures extending beyond her local frontiers. Lord Chatfield's Committee drawn inevitably to the same conclusion, have recommended as a general principle that the Forces maintained in India should be adequate not merely for the narrower purposes of purely local defence, but also to assist in maintaining what they describe as "India's external security"; and further that India should acknowledge that her responsibility cannot in her own interests be safely limited to the local defence of her land frontiers and coasts.

It was fully appreciated by them that the Forces to be maintained by India could only bear a small share in these wider responsibilities and that she could not necessarily bear in full their cost. Further, they make it clear that any such Forces as are maintained to meet the requirements of India's external security should form an integral part of the Forces in India as a whole; and that in accordance with the principles on which the relations between the Governments of Great Britain and of India have been based, the Government of India must be responsible for the administration of all the Armed Forces situated in India for the purpose of local and external defence and must, therefore, have full financial control over the expenditure necessary for their maintenance.

The governing principle advocated by the Committee is, in short, that India should bear some share in a joint responsibility for her external security. They conclude that if at any time there are forces held for the purposes covered by this joint responsibility, the British Government should make a recurring contribution towards their maintenance costs in such a way as would afford an equitable apportionment while reserving the Government of India's financial and administrative control over the whole of the Forces maintained by them. Taking all the factors into account, the Committee recommend that the contribution hitherto paid by the British Government in accordance with the Garran Award should be definitely raised by £500,000 and stabilised at the higher level of £2,000,000 a year to which it has been provisionally raised by His Majesty's Government. On this basis, the Committee estimated that, if the whole of the forces were organised and equipped on the scale proposed, the maintenance charges during the first five years would be within the level of the present provision for defence, provided that no material increases, which could not at that time be foreseen, should occur. The Committee hold that it would follow from their main principle that if Forces held in India for the purposes covered by the joint responsibility are used outside India in an emergency affecting India's external security, their ordinary maintenance charges should continue to be borne by India; in other words, that in such circumstances India should forbear to make a saving out of the fact that some part of her forces would in her own interests be employed beyond her geographical frontiers.

The scale of the Forces recommended by the Committee is intended to be adequate, though not more than adequate, to provide for India's purely local defence needs together with a margin available if need be for her external defence. As regards the Army, this margin will amount to approximately one-tenth of the Army Forces maintained in India. Being an integral part of the Army in India it will contain Indian as well as British units, and both alike will be so equipped as to be able to take part effectively in India's external defence. It will not in any sense be segregated from the rest of the Army Forces; and in normal times it will continue to discharge the functions assigned to those Forces as a whole. As a result of general modernisation, units will be readily interchangeable between what are termed

"external defence troops" and the remainder of the Army Forces; and the slight variations in equipment proposed for the former have been so designed as not to impede this process.

Here, as elsewhere, His Majesty's Government consider that the Committee made out a convincing case for their proposals. They have every hope that the principles advocated by the Committee will commend themselves to Your Excellency's Government and to all who are prepared to take a realistic view of India's defence requirements in modern circumstances; and they are confident that Your Excellency's Government will do all in their power to foster an informed appreciation of the necessities which India, like almost every other country in the world, must to-day be ready to face.

APPENDIX

ARMY

1. The basis of distribution of the Army in India will be:
   (*a*) Frontier Defence.
   (*b*) Internal Security.
   (*c*) Coast Defence.
   (*d*) General Reserve.
   (*e*) External Defence Troops.
2. Types of modernised units will be as follows:
   British and Indian Cavalry Light Tank Regiments—equipped with light tanks and armoured carriers for reconnaissance.
   Indian Cavalry Armoured Regiments—equipped with light tanks and armoured cars.
   Indian Cavalry Motor Regiments—provided with motor transport for conveyance of personnel who will normally operate on foot.
   British and Indian Field Artillery Regiments—all regiments are to be mechanised and in due course equipped with 25-pounder guns.
   Sappers and Miners units—with mechanised 1st line transport and mechanical power tools.
   British and Indian Infantry Battalions—armed with rifles, Brens and 2" mortars and fully mechanised 1st line transport.

Units on North Western Frontier will retain a certain proportion of pack mules.

AIR FORCES

3. The Air Forces in India will be re-equipped with modern aircraft as follows:

Bomber Squadrons—Blenheims.

Army Co-operation Squadrons—Lysanders.

Bomber Transport Squadrons—Valentias.

The Indian Air Force Squadron, at present being formed, is expected to be complete by the end of 1940.

Volunteer flights for coast defence duties will be raised at certain ports.

ROYAL INDIAN NAVY

4. The following new vessels will be ordered:

(*a*) Four "Bittern" class escort vessels.

(*b*) Four "Mastiff" class trawlers.

The "Indus" and "Hindustan" will be re-equipped with new armament.

ORDNANCE FACTORIES

5. In order to make India as far as possible self-sufficient in the supply of munitions in war the existing Ordnance Factories will be expanded or reconstructed. Where necessary entirely new factories will be built.

REVIEWS

WHEN I WAS A BOY

By General Sir Ian Hamilton

(*Faber and Faber, Ltd.*: 18*s*.)

These are Sir Ian Hamilton's reminiscences from his earliest years until, as a young officer of some two years' service, he transferred from the Suffolk Regiment to the Gordon Highlanders.

Those who are entertained by a description of the minor details of the early life of distinguished personages, or by an exhaustive catalogue of their relatives even unto cousins twelve times removed, or by accounts of distinguished friends, will find much to interest them in "When I Was a Boy." Others, less inclined to "bless the squire and his relations," may be irritated by the somewhat exasperating complacency which permeates the book. The author makes it so very plain that these modern decadent days compare poorly with the robuster ages of the mid-Victorian era, and that the young men and women of to-day are but shadowy counterparts of the saints and giants of old.

From another point of view, namely, as a psychological study, the book is of interest, for it is a typical and candid description of the formative years and character building processes which went to produce the majority of those who guided us into and through the Great War.

Sir Ian Hamilton was born in 1853, eighty-six years ago. He goes at great length into details of his family. His father was Captain Christian Montieth Hamilton of the 92nd Gordon Highlanders, a unit which he afterwards commanded. His mother was a Miss Vereker, of the family of the Viscounts Gort. His grandmother was Christina Cameron, daughter of Henry Monteith of Carstairs. His early childhood was spent in Argyll, where his father rented a house, and is described in great detail. One cannot help being amazed at the range and minuteness of the author's memory of those distant days.

In 1863, at the age of ten, Ian Hamilton entered the highly select preparatory school of the Reverend Doctor R. S. Tabor at Cheam. The main function of this establishment was to prepare

the young of the best families for Eton. Here the atmosphere was that of misery and terrorism normally prevalent in schools at that time; on the part of the headmaster, a mixture of sadistic brutality and smug sanctimoniousness; on the part of the boys, continuous bullying. The curriculum consisted of the classics, pure and unalloyed, forcibly and ferociously injected.

In 1866 little Ian went on to Wellington, then just recently founded. We learn that he should have gone to Eton, together with the majority of his contemporaries at Cheam, but finance forbade. At Wellington, in accordance with tradition, he took great pains to avoid doing any work; until in 1870 he was brought up with a round turn at the prospect of having to obtain a competitive vacancy at Sandhurst. Purchase having just been abolished, competition was keen. He was bundled off to a crammer, took the examination, in which he had a stroke of luck, and much to his own and every one else's astonishment passed in well.

The book goes on to describe his year in Dresden, in the house of one General Dammers, prior to his entering Sandhurst. Here he was coached by the worthy Austrian and for the first time in his life saw work done gladly for the sake of the job and for pride of profession. There follows his time at Sandhurst, mostly devoted to horses and good cheer, and the account concludes with his short stay in the 12th Foot.

On turning the last page of this book a contemplative young man of modern times might pause to reflect on the diverse influences which condition the mentalities of succeeding generations. He might think how each generation has its own codes and standards; and he might wonder whether those of the present generation could possibly be more peculiar than those of the second half of the nineteenth century.

F.E.C.H.

"THE DEFENCE OF BRITAIN"

By Liddell Hart

(*Faber and Faber.* 12/6*d.*)

Published in July 1939, Liddell Hart's latest book comes at a time when it seems likely that events in Europe may shortly prove much of it to have been prophetic.

The most important part of the book is devoted to the reorganisation and reform of our defence forces which have taken place since Mr. Hore Belisha became War Minister. For the impetus for many of these reforms the author, it appears, was partly responsible; indeed, as shown by the various papers which he wrote both for *The Times* and for circulation in the War Office and from which he quotes, he was generally one lap ahead of the responsible authorities—military and civil. Of particular interest in this connection are his views—some of them expressed as long ago as 1937—on such questions as the redistribution of the Army, including the holding of an Imperial Reserve in India; the reorganisation of the Mobile Division to form two smaller ones; increase in weapon power accompanied by a reduction in man-power; smaller divisions; the concentration of all aspects of anti-aircraft defence under a single authority at the War Office; and reforms in the system of promotion with a general lowering of age limits.

As a background for his proposals the author recapitulates the various situations which have confronted the Democracies since 1919 and gives the British reactions to each from the standpoint of defence. Up to Munich, he thinks, there was no necessity to contemplate a direct reinforcement to France on land; all our efforts should have been directed to improving our sea and air resources. Since Munich, however, the defection of Czechoslovakia and the potential hostility of Spain may have rendered such support necessary, though he would still prefer that we should not commit ourselves in advance to sending more than armoured formations, holding that it might well be more profitable to use the bulk of our Expeditionary Force elsewhere.

Captain Liddell Hart contends that whilst the Great War showed the superiority of the defence over the attack, subsequent developments have, if anything, increased the disparity so that an attacker having a superiority in weapons of less than three to one cannot hope to succeed. He quotes figures to show that such an ascendancy is unlikely to be achieved by Britain and France on the Western Front and he argues that our correct policy—which he claims is also Britain's historical one—is to maintain an active defensive on land, allowing the enemy to wear himself out in costly attacks but taking every chance of a quick counter stroke with mobile and air forces, whilst relying for ultimate victory on economic pressure regarding which we still hold a strong hand.

A great point is made of the defence of Great Britain—not against invasion by land which is considered even less likely than formerly—but against air attack and the danger of the enemy dropping sabotage agents near vital centres. For anti-aircraft defence proper the author advocates a higher ratio of fighters to bombers, whilst to limit the inhumanity of air bombing he suggests the creation in every country of clearly marked demilitarised zones for the non-belligerent population.

The book ends with some interesting notes on training methods in war and two chapters on the expansion and reform of the Territorial Army.

The author has long been noted for his progressive and far-sighted thinking and vigorous writing on matters military. After reading this book most people will agree that he is continuing to run true to form.

C. J. G. D.

TRAINING, UMPIRING IN ATTACK AND DEFENCE, EXERCISES WITH AND WITHOUT TROOPS, ESSAYS, LECTURES

By A. Kearsey, D.S.O., O.B.E., *p.s.c.*

(Gale and Polden, Ltd. 2s. 6d.)

Most officers must be familiar with Lieutenant-Colonel Kearsey's short guides to knowledge. In this one the author writes from the point of view of a candidate for examination or an officer about to prepare lectures or exercises on training and tactical subjects. He has brought together in handy form information extracted from the regulations and manuals besides giving a number of hints and tips well known to officers of experience but not included in any official handbook.

The author has certainly succeeded in compressing a great number of academic facts and precepts into a small compass. His book provides quite a useful *aide memoire* for an officer preparing a lecture or about to run an exercise. An officer studying for an examination might also find it of value; but it is no substitute for the practical training which a young officer should receive from his seniors and it must be used with intelligence. The

danger is that the young student may try to use the book as a substitute for the manuals and as a provider of a stock answer for every tactical problem. Another danger is that things change so fast nowadays that portions of a book of this kind are almost certain to be behind the times almost as soon as the book is published. This has happened in this instance, especially in regard to the chapter on defence, and the remarks about the use of casualty screens on training.

F.E.C.H.

"THE ROYAL DECCAN HORSE IN THE GREAT WAR"

By Lieutenant-Colonel E. Tennant

(*Gale and Polden*. 10*s*. 6*d*.)

This attractively bound and well printed history of the Royal Deccan Horse and the 29th Lancers (Deccan Horse) during the Great War is a worthy record of two famous regiments. Both regiments served in France and Palestine, so their history includes valuable material for anyone who is interested in horsed cavalry in modern warfare, either in European or Eastern conditions. The book has a most interesting foreword by Brigadier-General Macquoid. He gives an account of the types of Deccan soldiers of which the regiments were originally formed. Besides the usual appendices which give the names of officers who served with the regiments and similar subjects of regimental interest, there are two appendices of general interest. One is a clear description of the old silladar system, and the other expresses the author's views on the value of horsed cavalry in modern warfare.

The book contains good maps and pictures. It has steered a fair course between the double dangers of being a "Parish Magazine" and a "History of the Whole Army;" it is, therefore, readable both to members of the two regiments and to the general military reader.

G. T. W.

LORD KITCHENER

By Lieut.-Colonel H. de Watteville.

(*Blackie and Son, Ltd.* 5*s.*)

One opens this volume hoping that it will throw new light on the enigma of the man to whom Britain and the Empire so instinctively looked for leadership when the storm of war burst upon them twenty-five years ago. So many other books have already appeared in praise of him as a born leader of men and an astute administrator, or to tear him to pieces as an intolerant, inhuman and narrow-minded man who rose to positions too high for his ability, that one hoped to see a book full of human glimpses into his character, his letters and his words, and to read expressions of opinion about him from those who worked closest with him and knew him best. In this respect the book is somewhat of a disappointment. Instead, it gives a concise, well-written, historical biography dealing with events rather than with personalities, and leaving one to deduce the great man's character and shortcomings from the facts.

The book deals mainly with Kitchener's earlier service in Egypt, South Africa and India, and the steps by which he came to stand out head and shoulders in the popular imagination as fitted to be Britain's military leader in 1914. It shows him as original but self-willed, the Cat that Walked by Himself; not as inhuman as many have believed, but lonely and aloof as a result of shyness and long periods of service in the wide spaces of the Middle East. It shows him as a far-sighted thinker, ready to back his own convictions against all others, and as a great commander and leader of men. It shows him too as a great administrator who seldom came short of success so long as his immediate task was not too great to be centralised in his own person and judgment.

The author only gives forty pages to the War period from 1914 to the June day in 1916 when H. M. S. Hampshire sank with K. of K. on his way to Archangel, at the Tsar's invitation, to suggest means of reorganising the arming and supplying of the Russian armies. This brevity is only right in view of the number of authors who have already dealt with this last phase when the task of Secretary of State was at times too great for the over-centralising Field-Marshal.

It leaves us with a clearly-defined and unbiased picture of a great man and a great soldier, of whom, soon after his death, one of the bitterest critics of this last phase could only say: "A great figure gone. The services which he rendered in the early days of the War cannot be forgotten. They transcend those of all the lesser men who were his colleagues, some few of whom envied his popularity . . . . But there he was, towering above the others in character as in inches, by far the most popular man in the country to the end, and a firm rock which stood out amidst the raging tempest."

E. H. W. C.

NOTICE

LADY GROVER'S HOSPITAL FUND FOR OFFICERS' FAMILIES

SIR,

This Fund, which is advertised in the Navy, Army and Air Force Lists, offers most advantageous terms to serving and retired officers of the Defence Forces who wish to insure their wives, their families or their dependants against the nursing expenses of illness, and is deserving of support.

Benefits consist of grants paid to assist in defraying the actual cost of residence in a nursing home or hospital to a maximum of £5-5-0 a week and for a maximum period of six weeks in any calendar year; or, in the case of a nurse privately engaged, the actual fees up to £3-13-6 a week for a similar period. with the proviso that the first week's expense in any illness is not eligible for benefit.

Families and dependants, that is, possible beneficiaries, are defined as wives of officers, their sons up to 18 years of age and their daughters up to 21 years of age or marriage, whichever is first. Bachelor members may secure benefits for their mothers if dependent on them and for unmarried sisters. Widows of officers and unmarried daughters, over 21 years of age, may become members and be eligible for benefit.

Those eligible for membership are all commissioned officers of the Royal Navy, the Royal Marines, the Regular Army, the Royal Air Force, the Royal Indian Navy and the Ecclesiastical Establishments attached thereto. Subscriptions vary according to rank being either £1-11-6 or £1-7-6 annually. Widows and unmarried daughters of officers may also become members and the subscription in their case is either £1-1-0 or £1-5-0 annually according to whether the husband or father is, or has been, a member of the Fund, and to the time that has elapsed since his death in the case of widows, or of the age of daughters over 21 years.

Officers may, if they wish, become life members by paying a subscription varying from 25 to 15 guineas according to age.

The Committee are aware of the special conditions that exist in India with regard to the admittance of officers' dependants to Military Family Hospitals and of the necessity of engaging Minto nurses in such cases, and care is taken that no member shall be at a disadvantage because of such arrangements.

Finally members may draw benefits in any country of the British Empire, whether Dominion, Colony, Protectorate or Mandated Territory, and in the allied countries of Iraq and Egypt.

Full particulars with regard to the Fund, together with forms of application for entry and banker's order forms may be obtained by application to the Secretary, Lieut.-Colonel G. E. Smart, D.S.O., 1 Glazbury Road, London, W. 14.