The Journal

OF THE

United Service Institution of India

Vol. LXVII OCTOBER, 1937 No. 289

The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution.

EDITORIAL

The Imperial Conference.

Mr. Neville Chamberlain stressed the essential difference between our own Imperial Conferences and most international conferences when he said that the former were in the nature of family gatherings, assembled to exchange information and views, rather than committees called together to solve any particular problem. It was to be expected that foreign affairs and defence would be the main subjects of deliberation this year and that other matters would be driven more or less into the background. The most important result of the Conference was the statement on foreign policy, in which the representatives of the Governments of the British Empire set out the conclusions which they had reached in common. The statement involved no commitments but enumerated certain propositions on which the representatives were agreed. The Prime Ministers of Great Britain and the Dominions were unanimous in declaring that the preservation of peace was a first objective of every Government and stated their belief that the settlement of differences between nations could only be brought about by methods of co-operation, joint inquiry and conciliation. They agreed that their respective armaments would never be used for purposes of aggression or for any purpose inconsistent with the Covenant of the League. They wished to see the membership of the League increased, but admitted that this would be made easier if the Covenant could be separated from the Peace Treaties. They welcomed regional pacts provided such

pacts did not conflict with the Covenant and they urged strongly that an agreement between the countries of the Pacific would be a major contribution to the cause of peace.

In the review of Empire trade an emphatic desire was expressed by every representative that steps should be taken to stimulate international trade, a consensus of opinion which should help negotiations for an Anglo-American agreement. It was recognized that the prosperity of the Empire as a whole depended on that of the world as a whole and that an increase in international trade was a condition essential to political peace.

* * *

The Palestine Report.

The Royal Commission for Palestine, under the chairmanship of Lord Peel, landed in that country last November with wide terms of reference. They were instructed to "ascertain the underlying causes of the disturbances which had broken out in Palestine in the middle of April; to inquire into the manner in which the Mandate was being implemented in relation to the obligations of the Mandatory towards the Arabs and the Jews respectively; and to ascertain whether, upon a proper construction of the terms of the Mandate, either the Arabs or the Jews had any legitimate grievances on account of the way in which the Mandate had been or was being implemented; and if the Commission was satisfied that any such grievances were well founded, to make recommendations for their removal and for the prevention of their recurrence."

Early in July the unanimous report of the Commissioners, together with a summary of their main recommendations, was laid before Parliament and issued to the public. Discussing in the first part of their report the origin of the Mandate and the causes of the disturbances of 1936, the Commissioners explain that, in order to obtain Arab support in the war, the British Government promised the Sheriff of Mecca in 1915 that in the event of an Allied victory the greater part of the Arab provinces of the Turkish Empire should become independent. The Arabs understood that Palestine would be included in the sphere of independence. To obtain the support of world Jewry, the British Government in 1917 issued the Balfour Declaration. Autonomy for the Jews was implicit in the Declaration and in the Mandate which confirmed the Declaration, subject of course to sufficient Jews going to Palestine to form a national home. The Mandate

itself has in fact been concerned with specific obligations of equal weight, positive obligations as to the establishment of the National Home, negative obligations as to the safeguarding of the rights of the Arabs. The association of the policy of the Balfour Declaration with the Mandate system implied the belief that Arab hostility to the former would be overcome.

There were outbreaks of disorder in 1920 and 1921, but by 1925 the prospects of ultimate harmony between Arabs and Jews seemed so favourable that the forces for maintaining order were substantially reduced. These hopes proved unfounded because, although Palestine as a whole became more prosperous, the demand of the Arabs for national independence and their antagonism to the National Home became accentuated by external factors such as the pressure of the Jews of Europe on Palestine and the development of Arab nationalism in neighbouring countries. These causes brought about the outbreaks of 1929 and 1933 and by 1936 they were further intensified by the sufferings of Jews in Germany and Poland, which resulted in a sudden increase of immigration into Palestine, and by the prospect of the grant of early independence to Syria and the Lebanon.

Commenting on the present situation, the Commissioners point out that the temper of the Jewish Home is strongly nationalist and that Crown Colony Government is ill-suited to such an educated and democratic community as the Jews and only serves to foster an unhealthy irresponsibility. While Jewish immigration has undoubtedly conferred great benefits on the Arabs, it has at the same time given an immense stimulus to anti-Jewish feeling among the Arabs of Palestine and to the demand for Moslem self-government. The gulf between the two races is now so wide that all hopes of a Judaic-Arab nation must be abandoned. The Mandatory Government, while it has tried to hold the balance between these two antagonistic communities, has not obtained and can never win the complete loyalty of either.

In the second part of their Report the Commissioners examine in detail what can be done in various fields—administration, public security, finance, land, immigration, social services—to improve the prospects of peace under the Mandate. They make numerous recommendations but stress the fact that these are merely the best palliatives which they have been able to devise for the disease from which Palestine is suffering. And so

the Commissioners examine in the third part of their Report the possibilities of a lasting settlement and recommend the surgical operation which they believe to be necessary.

They advise that the Mandate for Palestine should be replaced by a Treaty System in accordance with the precedent set in Iraq and Syria. Two sovereign independent States should be established, an Arab State consisting of Trans-Jordan united with that part of Palestine allotted to the Arabs and a Jewish State consisting of that part of Palestine allotted to the Jews. A new Mandate should be created for the purpose of maintaining the sanctity of Jerusalem and Bethlehem and ensuring safe access to them for all the world, access to the sea for this Mandated territory being provided by a corridor extending from Jerusalem to Jaffa. The Mandatory should also undertake the administration of Nazareth and be responsible for the sanctity of Lake Tiberias.

The frontier between the Arab and Jewish States recommended by the Commission runs from Ras-an-Naqura down the northern and eastern frontier of Palestine across Lake Tiberias to the outflow of the Jordan and down the river to a point just north of Beisan. It then traverses the Beisan Plain to a point near Megiddo, whence it crosses the Carmel Ridge and continues southward down the eastern edge of the maritime plain to the Jerusalem-Jaffa Corridor. South of the Corridor it runs down the edge of the plain to a point ten miles south of Rehevot, whence it goes west to the sea.

The Jewish State which contains much of the seaboard of Palestine is to provide free transit of goods in bond between the Arab State and Haifa. In view of the backwardness of Trans-Jordan, it is to pay a subvention to the Arab State and the British Parliament is also to be asked to make a grant of £2,000,000. Guarantees given by the Mandatory Government for the security of industries, such as the Potash Companies, are to be taken over by the new Arab and Jewish States. Finally, the treaties to be drawn up should provide that, if Arab owners of land in the Jewish State or Jewish owners in the Arab State wish to sell their land, the Government of the State concerned shall be responsible for purchase at a price to be fixed, if required, by the Mandatory Government.

The Report urges that, while these proposals do not offer either the Arabs or the Jews all that they want, they offer each

party what it wants most, namely, freedom and security. The Commissioners claim that the Arabs obtain national independence and will be able to co-operate with Arabs of neighbouring countries on an equal footing in the cause of Arab unity and progress, that they are delivered from the fear of being swamped by the Jews and from the possibility of subjection to Jewish rule, and that they are freed of the anxiety that the Holy Places, guaranteed as they are by the League of Nations, should ever come under Jewish domination. As a set-off to territory which has been occupied for centuries by Arabs, they will receive financial help both from the Jewish State and from the British Treasury. The Commissioners hold that the advantages to the Jews are that partition secures the establishment of the Jewish National Home for all time. Its citizens will be able to admit as many Jews as they themselves believe can be absorbed. They will obtain the primary object of Zionism, a Jewish nation whose nationals will have the same status in the world as those of other nations.

While British reaction to the Report, both in Parliament and outside, has been almost universally favourable, the solution of the problem put forward by the Commission has naturally evoked criticism elsewhere. The Arab Higher Committee, led by Haj Amin el Husseini, Mufti of Jerusalem, is bitterly hostile to the Report on the grounds that the best land is being handed over to the Jews and that the Arab minority in the Jewish State will be threatened with extinction. There are others who oppose amalgamation with Trans-Jordan if the Emir Abdullah is to be the ruler of the new State; while the personal supporters of Haj Amin dislike any project which will diminish the secular power of the Mufti of Jerusalem. As regards other nations, Iraq has signified her disapproval of the plan, but King Ibn Saud, with more far-sighted statesmanship, is evidently not prepared to condemn the scheme out of hand.

At Zurich, the Zionist Congress, under the leadership of Dr. Weizmann, debated the proposals bitterly and eloquently for a week. Many Jews maintain that the absorptive capacity of their new State will prove insufficient for national development, nor do they take kindly to the proposed subvention to the new Arab State. A motion to reject the Report of the Commission forthwith was however defeated, largely through the personal influence of Dr. Weizmann, by three hundred votes to one hundred

and fifty-eight, so that, at present, there is no deadlock and opportunity for discussion and compromise is still available.

While we believe that partition, compromise though it is, is the only basis on which there is any hope of attaining a lasting settlement, it must be remembered that the final word about the future of the British Mandate in Palestine will be said, not in London, but at Geneva by the League Council.

* * *

Iraq.

Hikmat Suleiman's Cabinet, which came into power following the *coup d'etat* of 29th October 1936, has not had a long life. The *coup d'etat* had been engineered by General Bekr Sidqi with the help of Mohammad Ali Jowad, a Cranwell-trained air officer. It was remarkable in that it was the first time that the army had interfered in politics, it was unfortunate in that it resulted in the elimination of several prominent men from public life. After the event, General Bekr Sidqi became Chief of the General Staff and Mohammad Ali Jowad became Director of the Air Force.

Whether the General ever contemplated a dictatorship will never be known. A Kurd by nationality, he was a forceful soldier who had graduated at the Turkish Staff College and fought against the Allies at Gallipoli. In 1921 he joined the Iraq Army and soon attained high rank. As Chief of Staff during the last ten months, he appears to have devoted most of his energy to army affairs and to have taken little interest in politics, although he remained, of course, a power behind the Government.

His murder in the garden of the Air Force Mess at Mosul, on the evening of 11th August, appears to have been an act of private revenge, while Mohammad Ali Jowad was admittedly killed in attempting to grapple with the murderer. The General's death naturally caused a great sensation throughout the country and matters were brought to a head when the commander of the Mosul garrison refused to obey orders and send the assailants to Baghdad for trial. The latter's demands included moreover the banishment from Iraq of those officers who had assisted in the *coup d'etat* and the return of political exiles.

Faced with the apparent hostility of a large portion of the army, the Prime Minister had no course but to resign. A new

Cabinet was immediately formed by Jamil Madfai, who has been Prime Minister before.

* * *

Waziristan.

In our last issue we recorded that the Government of India had, on the 23rd April, been forced to hand over full military and political control of Waziristan to the General Officer Commanding-in-Chief, Northern Command. The first stage of the operations which were then undertaken lasted until 3rd May. The 1st Indian Division entered the Khaisora Valley and engaged effectively such portions of the tribal *lashkars* as could be brought to battle. There followed a short period of reorganization of the lines of communication preparatory to the next stage. The roads to Wana and Razmak, which were closed to ordinary military traffic, were not however reopened. These posts were kept supplied by means of locally hired Mahsud motor transport and, in the case of Wana, by the Bomber Transport Flight in India, which was reinforced in June by a flight of No. 70 (Bomber Transport) Squadron from Iraq.

As soon as communications had been organized, operations were carried out by the Waziristan Division in the Sham-Shaktu area, heavy casualties being inflicted on the enemy. The Sham Plain was occupied and the Faqir of Ipi driven from his headquarters in the Shaktu. In consequence many Afghan and Mahsud supporters of the Tori Khel dispersed, the Tori Khel lost heart and in June themselves submitted and handed over rifles as security. Since then their behaviour has, on the whole, been satisfactory despite the continued and active hostility of a few irreconcilables. Following on the Tori Khel submission the area from Dosalli to the Shaktu Valley was taken over by the 1st Indian Division and communication with Razmak was reopened.

Up to this time troops had not entered South Waziristan, where the Wana Brigade is the only regular peace-time garrison. In view of the fact that the attitude of the Mahsuds was unsatisfactory, it was decided to send the Waziristan Division into South Waziristan to test the loyalty of the Mahsuds and to demonstrate our ability to move at will about Mahsud territory. Accordingly the Bannu Brigade marched, without meeting opposition, from the Shaktu *via* Sorarogha and Razmak to Ladha. The Waziristan Division, consisting of the Razmak, Wana and Bannu Brigades, then began operations in the Torwam area,

north-east of Wana. During the advance to Torwam resistance was met with from a mixed *lashkar* of Mahsud, Wazir and Afghan tribesmen on whom severe losses were inflicted. These operations restored the doubtful situation in South Waziristan, but no reduction of troops was possible until the situation had had time to stabilise and the *maliks* had regained control of irresponsible elements.

Meanwhile, in North Waziristan, work was begun and is now making good progress on three roads into the Shaktu Valley from Dosalli, from Ahmedwam in the south and from Razmak. The Ahmedwam road is being constructed exclusively by tribal labour, the other two by troops and specially raised road construction battalions, although tribal sections are starting to take up contracts on them.

In spite of these successful operations the Faqir of Ipi had not by the end of July abated his subversive propaganda and his cause still commanded considerable sympathy among the tribes of Bannu District and the Southern Province of Afghanistan. It is of interest to note, however, that during July the judgment in a civil suit in the Bannu Courts restored "Islam Bibi" to her Muslim husband. It will be remembered that this girl had been converted to Islam and the agitation to prevent her being handed back to her Hindu parents—at the time of her conversion she was a minor—first brought the Faqir into prominence. Although the Faqir and his adherents were still actively hostile, the situation in August was showing marked signs of improvement. No formed bodies of hostile tribesmen remained in the field. Sniping of camps and piquets was done only by small parties of bad characters. No active operations were in progress and the troops of the Waziristan and 1st Indian Divisions were mainly employed on the road construction already referred to.

On the 24th, 25th and 26th August Mahsud *jirgas* assembled at Ladha and Government terms, which included fines in cash and in rifles, were announced. They were received quietly and apparently with some relief. Tribes were informed that the Government had no intention of withdrawing from Waziristan and that sections harbouring hostile leaders, such as the Faqir, would be liable to punishment. It was also explained that a "protected area" would be formed round Razmak, on lines similar to the protected areas at Wana and in the Tochi. In this

area individual and tribal disputes would be settled by the Political Agent with the help of tribal *jirgas* and in accordance with tribal custom. The Government would assume responsibility for protecting the area from outside aggression. While land revenue and the normal system of administration in the settled districts would not at present be imposed, subject to the good behaviour of the tribes, preferential treatment would be accorded to the inhabitants of protected areas in any schemes for improving the economic conditions of the tribes.

The present outlook in Waziristan is brighter than that which existed three months ago. Efforts to collect the rifles demanded are being made and the Mahsuds have already handed in a considerable number. In North Waziristan the attitude of the Tori Khel remains satisfactory and tribal opinion among the Wazirs appears to be in favour of peace. On the other hand Government terms to the Wazirs have yet to be announced and the Faqir of Ipi still remains a problem. He has considerable religious influence and it is difficult to say to what extent the tribes would rally to his flag should he demand a renewal of hostilities.

* * *

The Far East.

The reasons which lay behind the Japanese attempts of two years ago to detach the five northern provinces of China, Chahar, Suiyuan, Shansi, Hopei and Shahtung, were partly economic and partly strategical. Japan needed raw materials, particularly coal, iron and cotton for her industries and all of them were to be had in these provinces; she needed the North China market for her exports. From a military point of view a subservient buffer-state on the south-west border of Manchukuo had its advantages.

Two years ago settlements were effected by the local Japanese General and the local Chinese Governor, Nanking at the time having little say in affairs in North China. A semi-autonomous regime was set up in Hopei and Chahar, which were combined into a single political entity under the nominal control of Nanking, but with a strong Japanese bias. At the same time a demilitarised zone was agreed on, which became completely autonomous.

During 1936 two events occurred which tended to check the Japanese advance in Northern China. These were the military revolt in Tokio with its ensuing political unrest throughout

Japan and the rebellion in Kwangsi and Kwantung, from the suppression of which Marshal Chiang Kai-Shek emerged with considerable prestige. In the latter half of the year Chinese influence and Chinese anti-Japanese feeling throughout the northern provinces steadily increased.

The clash between Chinese and Japanese troops at Loukouchiao on 7th July appears to have been unpremeditated. On 11th July a verbal agreement was entered on between the Mayor of Tientsin and the Commander of the Japanese troops, the practical effect of which was that the Chinese admitted that they were in the wrong and agreed to withdraw their troops. The agreement was, however, repudiated by the Central Government on the grounds that it had not been consulted. Six days later the Japanese Ambassador at Nanking delivered a verbal ultimatum demanding the cessation of "provocative acts" and the execution of the agreement of the 11th July. At the same time he inferred that the Japanese would consider the move of Central Government troops to Hopei as a breach of the agreement of 1935. On 18th July it appears that General Sung Chenyuan, Chairman of the Hopei-Chahar Political Council, confirmed the agreement with General Katsuki, the Japanese commander, and it is believed that he also agreed to the establishment of an entirely autonomous area in Hopei and Chahar.

Meanwhile at Nanking, Marshal Chiang Kai-Shek laid down four points beyond which the Government of China was not prepared to give way. No settlement infringing Chinese territorial sovereignty would be agreed to; there was to be no change in the status of the Hopei-Chahar Council without Nanking's consent; there was to be no removal by outside pressure of officials appointed by Nanking and there were to be no restrictions on the movement of the Chinese 29th Army in Hopei. While laying down these four points, the Central Government at Nanking seems at the same time to have endorsed at least a part of the Sung-Katsuki agreement, an agreement which they soon found themselves unable to implement since the local Chinese troops refused to evacuate the areas in question.

Sporadic fighting continued until the expiry of the Japanese ultimatum on 28th July, when the Japanese resumed full military operations, cleared the Chinese 38th Division out of the Tientsin-Nanyuan area and occupied Peiping. Throughout

August large Japanese reinforcements arrived in Hopei from Manchuria and Japan. On the Chinese side many divisions moved north to the line of the Lunghai railway. The comparative inaction which followed in northern China was probably due on both sides to the need to organise the services of supply, to the fact that Hopei with its ten-foot-high millet crops is at this time of year peculiarly difficult country in which to manœuvre and to the sudden removal of the centre of Sino-Japanese tension to the Shanghai area.

In Shanghai the Japanese garrison consisted of the Japanese naval landing party of some 3,500 men. Here, a comparatively petty incident—the kidnapping on 12th August of a Japanese sailor, who was subsequently returned—brought matters to a head. The Chinese early occupied the Kiangwan North Station area and attacked the small Japanese forces, who, however, managed to hold out for the ten days pending reinforcement. Throughout the Shanghai operations there has been much aerial activity on both sides, the Chinese concentrating mainly against Japanese transports while the Japanese attacked Chinese aerodromes and communications.

After the bombing of the International Settlement on 14th August, it was decided to evacuate British women and children and to reinforce the British garrison at Shanghai by the 2nd Battalion, the Royal Welsh Fusiliers, and the 1st Battalion, the Royal Ulster Rifles, from Hong Kong. These two battalions were replaced in Hong Kong by the 1st Battalion, the Middlesex Regiment, from Singapore and the 5/6th Rajputana Rifles from India. On 26th August, the British Ambassador to China, Sir Hughe Knatchbull-Hugessen, while motoring from Nanking to Shanghai, was attacked by two Japanese aeroplanes, some fifty miles from Shanghai, and seriously wounded. The attack, while admittedly unintentional illustrates the extremely promiscuous nature of the fighting.

Despite the twelve Chinese divisions recently concentrated within thirty-five miles of Sanghai, it seems possible that the Chinese may withdraw and so free the International Settlement from the immediate threat of war. Certainly indications are to the effect that the Japanese regard Hopei and not Shanghai as the major theatre of war. Meanwhile, the fighting at Shanghai

has already entailed great damage to foreign interests and the practical cessation of commerce.

Although there has been no official declaration of war, it seems that both countries are committed to hostilities. Indeed Chinese opinion is probably too bitter to allow of anything but firm resistance to Japan. On the other hand Japan's immediate object, the creation of a special position for herself in North China, is already half achieved and she may for that reason decide to hold her hand.

* * *

Recruitment.

The usual term of enlistment for the private soldier is seven years with the colours and five with the reserve. Mr. Hore-Belisha's proposal to allow serving soldiers to extend at their option their period of service with the colours and to allow Sections "A" and "B" men of the reserve to rejoin the colours has been one of the most discussed topics in the Army during recent weeks. Both classes of men will, on completion of 12 years service with the colours, be eligible to re-engage to complete twenty-one years and so to qualify for the pension.

This departure from the practice of the last sixty years is frankly experimental and it is clearly inexpedient to prejudge the question. There is no doubt that short service which turns a man out into the street at the age of twenty-six, relatively unfitted for civil life, has been one of the causes of bad recruiting. Soldiering since the war has been largely blind-alley occupation. The Navy offers a man a life career; the Air Force has many attractive features which the Army cannot offer and both have been serious competitors in the search for young men.

That the experiment, if successful, will have far-reaching effects on the Cardwell system, on reserves and on Army organization generally is obvious. An unqualified success would threaten the existence of the Regular Army Reserve as at present constituted, but that does not imply that reserves cannot be obtained by means other than those at present used. The experiment is a bold one, but it is one that deserves success if only for the reason that it is a serious attempt to tackle one of the most urgent Service problems of the day.

* * *

The Fleet Air Arm.

The Prime Minister made an important announcement in the House of Commons in August regarding the future control of air forces operating at sea. The air forces concerned are of two classes: there is the Fleet Air Arm comprising aircraft carried in ships and operating from them. The Fleet Air Arm, which since 1923 has been manned chiefly, but not entirely, by naval personnel, has been under the operational control of the Royal Navy and under the administrative control of the Royal Air Force. Many objections have been made to this system of divided control. Then there are those squadrons, comprising seaplanes and landplanes which are based on home ports, but which are intended in war to be used at sea in co-operation with the Navy. These shore-based aircraft have been under the sole control, both operational and administrative, of the Royal Air Force.

The Navy has for long held that the aircraft of the Fleet Air Arm, unsuitable as they are for general service in the Air Force, are an essential part of the fleet and that dual control is cumbrous. As regards the shore-based squadrons the naval view has been that their full-time co-operation is essential to the fleet in European waters and that, without complete naval control, there is no certainty that such squadrons will always be available to the fleet in war. The Air Force view has been that rivalry between the Army and the Navy in the Great War over the supply of aircraft led to overlapping, that one Service should control the maintenance, training and disposition of all air units and should decide in war whether they are to be used at sea or over land.

It is to be hoped that the decision announced by the Prime Minister will mark the end of what has been a long-standing controversy between the two Services. In future the Fleet Air Arm is to be wholly naval, the shore-based squadrons, which may be used at sea or over land, will be exclusively under the control of the Air Ministry. The Admiralty and Air Ministry are to work out as soon as possible the practical steps necessary to give effect to this ruling.

"THE ABYSSINIA CONTINGENT"

Detachment 5th Battalion (Pathans) 14th Punjab Regiment

By Lieut.-Colonel W. F. Charter, M.C.

This article deals entirely with the experiences and activities of the Abyssinia Contingent and not with the events of the Italo-Abyssinian War which did not directly affect the Contingent itself.

On 3rd August 1935, secret orders were received that, at the request of His Majesty's Government, a Contingent would be sent from India to Abyssinia to strengthen the Legation Guard for the protection of British subjects in the event of disturbances at Addis Ababa. [Nine Indian Other Ranks of the 8th (K.G.O.) Light Cavalry already formed the Escort to H. B. M.'s Minister in Addis Ababa.]

The strength and composition of the Contingent was detailed as under:

Three British officers.

One rifle company (less one platoon) at a minimum strength of three Indian officers and 100 rifles, to include one assistant armourer and one *mochi*.

One machine-gun section of two guns less drivers and mules.

Followers on a rifle company basis.

All Indian ranks to be Sikhs.

The Contingent would be found from the 5th Battalion 14th Punjab Regiment.

Medical Personnel—

One British Medical Officer.

One Sub-Assistant Surgeon.

Two Nursing Sepoys.

The strength which actually entrained at Poona on 22nd August was:

Major W. F. Charter, Commanding.

Captain G. A. Keene, attached from 1st Battalion 16th Punjab Regiment.

2nd Lieutenant R. A. Anthony.

Captain T. E. Palmer, Indian Medical Service.

Three Combatant Indian officers, Indian Medical Department.

One Sub-Assistant Surgeon, Indian Medical Department.
129 Indian Other Ranks, including two Nursing Sepoys, Indian Hospital Corps.
11 Followers.

Ammunition, arms, stores and equipment were on a scale which anticipated the possibility of a protracted siege of the Legation garrison and their British and British-protected subjects. A few items might be of interest; for instance, 200,000 rounds of small arm ammunition, 50 spare S.M.L.E. rifles, 2,000 grenades, 2,050 spare gas respirators and 10,000 sandbags. Nine and a half miles of barbed wire were taken from India and later supplemented by more than five times this amount. Three months reserve of rations for all ranks were taken, and later augmented by a further three months supply from Aden.

On August 23rd the Contingent sailed on the SS. "Jehangir," a Red Sea pilgrim ship of just 2,000 tons, which, however, was admirably suited, and indeed luxurious, for the numbers on board. The ship called at Karachi for 24 hours to pick up cargo, and when leaving that port it was still uncertain whether the ship would go to Djibouti direct or land the troops at Aden, to be transported later by a naval vessel. The cause of this hitch was political, the Emperor of Abyssinia needing great persuasion to allow armed foreign troops to enter his country and capital at so critical a time; hence the reinforcement to the Legation actually left India before permission had been given for it to land in Abyssinia.

On the eighth day at sea, of the eleven days' passage, a wireless message was received to proceed direct to Djibouti, where we arrived on 3rd September.

The landing, onward rail journey and arrival in the capital were conducted with the greatest secrecy. The area surrounding the jetty at which stores were landed was guarded by strong cordons of French Senegalese infantry, and the disembarkation of troops by lighters did not commence till after dark.

The special troop train halted the first two nights right out in the blue, not at the regular night halts, but drove on till well after dark and suddenly stopped. The country traversed being more than normally restive and dangerous, full precautions were taken by establishing strong defence posts for the all-round defence of the stationary train. Twenty Ethiopian armed policemen

who had reported at the Frontier for liaison duty on the train, were most surprised when detailed to patrol between piquets all night.

Regarding the train—the Franco-Ethiopian Railway has often been referred to as the most expensive in the world; this seems amply borne out by the bill for this train. It was admittedly the biggest rake that had ever been assembled and hauled, but the bill was the equivalent of £1,340 and 25 centimes.

The third afternoon was spent in a siding 14½ miles from Addis Ababa with shutters drawn and surrounded at a distance by cordons of Abyssinian troops and armed police. At 3-40 a.m. the train drew into Addis Ababa station, which was in darkness and where lorries with lights extinguished were waiting. Curfew had been imposed in the city, streets were patrolled, and the station strongly guarded. The station lights were turned on for 10 minutes during which time the troops had detrained, taken their places in lorries, and the convoy departed for the British Legation.

The whole move from Djibouti to the Legation had been most efficiently organised by those responsible, and the sixty odd journalists, camera and news-reel men all failed to obtain contact with, or photographs of, the latest news item in Abyssinia.

Despite some sarcastic comments in the press regarding these precautions the fact remains that photographs of foreign armed forces arriving in the Abyssinian capital at that time could have been used to embarrass still further an already delicate situation.

On arrival at the Legation, apart from settling in the troops and general administrative arrangements, the first concern was to draw up a defence scheme. The sketch will give an idea of the area to be defended, and the main problem—the hill overlooking the Legation.

A further problem which arose was not a new one: on the one hand was the soldier with his entire concern concentrated on his one object of completing in the shortest time the military measures necessary to cope with all eventualities; on the other hand was the civil administration with a more delicate task to perform involving outside, and in this case international, policy. Some of the desirable defences were situated, as so often happens, in front of, or in this particular case outside, the area to be defended. Obviously (war had not yet been declared) it was unreasonable to expect to be permitted to construct defence works

on the private property of individuals whose Government was still ostensibly at peace. Another factor was that reinforcements having arrived for the defence of the British Legation, the eyes of all other Legations and of the Ethiopian Government were more than ever turned on the British Legation for any outward indication of policy.

For the above reasons only the more inconspicuous defence posts and barbed wire were dug and erected.

On 3rd October news was received of the bombing of Adowa and heavy fighting on the frontier. This brought the realisation that long-range bombers might possibly reach Addis Ababa and that the second city of the country, Harrar, was within comparatively easy range of the Italian base at Asmara. Apart from high explosive and incendiary bombs, there was a fear of the use of poison gas, so anti-gas protection and precautions occupied the attention of all.

The French and German Legations had already anticipated the possible danger, and constructed bomb-proof shelters but had not considered the matter of poison gas. In the British Legation Mark IV gas respirator containers had been received from England to replace the containers fitted to the respirators in possession of the Guard, and the 2,050 brought from India. These were all changed and tested. A case of 46 respirators was despatched to the British Consulate at Harrar. In the Legation itself air raid orders were drawn up for bombardment and gas attacks, the entire civilian staff were instructed in the use of respirators and put through a gas chamber test. The Legation cellars were gas-proofed and sealed with blanket doors and air locks. As opposed to the deep dug-outs constructed at other Legations we dug narrow zig-zag trenches two and a half feet deep in the vicinity of our lines and parade grounds, and near the offices and houses of the Legation Staff. Similar funk-holes were prepared in the eucalyptus wood to facilitate the dispersion of the troops in the event of sufficient warning being obtained of the approach of aircraft.

Scattered encampments of Ethiopians on the outskirts of the city, and in some cases comparatively close to the Legation, endangered the camp of the Guard in that it, being the biggest and the most obvious concentration, might, when viewed from a height, become a special target. Efforts were therefore made to

conceal our camp by reversing all tents, showing to the air the blue or yellow inner linings and arranging light brushwood on top and tying young trees to the ten poles. The result was quite successful but required constant renewal.

On October 7th the Diplomatic body met at the British Legation to discuss a scheme for the security of foreigners as the attitude of the local Ethiopians, and particularly of the hordes who would arrive from distant and more savage parts of the country, was an unknown quantity. This was the first meeting of what later became the Central Security Committee, a body whose meetings were regularly attended by the senior representative of Great Britain, Germany, France, United States of America, Egypt, Turkey, Greece, and later Japan. I attended all meetings to deal with the purely military side of the question, and France was represented by their Military Attaché, a senior Lieutenant-Colonel.

The first concern of this Committee was to consider the concentration of foreigners in one area outside the city, should control of the city get beyond the powers of the civil police. Briefly, a plan was formed whereby, on the breakdown of civil control, all foreigners should concentrate at the French, German and British Legations, while the large Greek community should collect in the compound of the Belgian Legation, a few hundred yards from the British Legation. A "Legation Area" would thus be formed at the foot of the hills to the east of the city. In this area the French were isolated, and distant from the German Legation about two miles, so, should the second phase of the situation, *i.e.* definite hostility towards, or attacks on, foreign concentrations occur, the French and their protégés were to close into the German Legation (yet to be fortified), thereby halving the Legation Area. Finally, should the situation become desperate, the Greeks, and all women and children from the German Legation would close into the defences of the British Legation followed by the men, French, German and protégés, who would fight a rearguard action assisted by the Sikh Guard if the last named were not already too hotly engaged in the defence of their own Legation.

The proceedings of the Central Security Committee were for obvious reasons kept secret.

On the following day I reconnoitred and laid out the tracings of trenches and posts for the defence of the German Legation, which work was gradually and unobstrusively completed.

In the meantime two large 60 cm. searchlights had arrived from Egypt, and these were erected where one could illuminate the hill overlooking the Legation and the site selected for the refugee camp, while the other would light up the big ravine and dense eucalyptus which ran the entire length of the north and north-eastern boundary of the compound.

One very serious situation, in view of the possibility of a concentration of 3,000 refugees for a considerable period under siege conditions, was shortage of water. The normal Legation supply was piped a distance of half a mile from a spring in the hillside, which spring was situated in a ravine and out of sight from the defences. The maximum supply from this source was 3,900 gallons a day, a yield which decreased very much during the dry season before the rains, at which time the possibility of the concentration was visualised. Apart from the pipe line there were a few small garden wells round the Legation buildings, the maximum production from which was 2,500 gallons daily and some of these sources were also liable to dry up before the rains.

In the event of siege the destruction of the spring of the piped supply would have been a simple matter, particularly at night, as owing to the high hills on three sides of it the spring could not be protected by the garrison available.

Ultimately sanction was received to sink a well if there were sufficient hope of finding water to justify this measure. The only person available who could claim any powers of water divination (in which it proved he flattered himself) was an Indian shopkeeper. Work was commenced and continued in a haphazard way on his selected spot in the paddock. I shall refer to the water question again later.

On October 13th Lieutenant Anthony was invalided to Aden and India.

By mid-November a certain amount of anti-foreign feeling became obvious. Minor instances of molestation of and insulting remarks to foreigners became frequent. It must be said, however, that this was in no way organised but the reverse, as the Emperor had issued strict orders as to the non-molestation of

foreigners. It happened chiefly on the arrival in the capital of armies from the wild interior whence they came with their chiefs to report to the Emperor and receive arms and pay. The general treatment meted out to foreigners up to and even during the destruction of the city was most exemplary and a great credit to the Ethiopians who are a most courteous race.

On 19th November Lieutenant Pearson of the 1st Battalion 12th Frontier Force Regiment (P.W.O. Sikhs) arrived to replace Lieutenant Anthony.

Throughout the dry season water was very short indeed, at times the troops only receiving $1\frac{1}{3}$ gallons a head per day. This in view of the possibility of the concentration of a further three thousand persons, was most disturbing, particularly as such steps as were being taken to sink the well were half-hearted. This acute water situation was communicated to the next meeting of the Central Security Committee.

Deeming the hill overlooking the Legation to be the key position in case of siege, frequent practice was carried out by the Guard in seizing the hill, and rehearsing, without material, the sangaring and fortification of the position. Anticipatory operation orders were drafted and issued to British and Indian officers in English and Roman Urdu. After further practice this operation could be put into effect at very short notice and all ranks were thoroughly conversant with their duties. This air of make-belief was unsatisfactory, but at that time it was quite out of the question to expect the Ethiopian Government to permit the building of fortifications by the British Legation outside the Legation grounds particularly as the situation visualising the necessity of this measure would have been obvious to all. Further, these preparations would have had a most adverse effect on the morale of the city from both Ethiopian and foreign points of view. As I have stated earlier, the attitude of the British Legation and British subjects was very closely watched by all nationalities in Addis Ababa.

On December 11th the first panic occurred in the city. The cause was possibly the receipt by an American camera man of a cable asking him for photographs should Addis Ababa be the next Italian bombing objective. The result was that complete panic broke out before daylight, semi-clothed shop-keepers with and without personal belongings left the city for the sur-

rounding hills, some paying as much as 100 M. T.* dollars for a car to take them ten miles. British and Arabs arrived at the Consulate by 7-30 a.m. but after being reassured returned to their homes. In the evening armed guards were mounted on the Legation gates to cope with panic-stricken crowds should these arrive in the event of another alarm.

On 1st December the remainder of the 5th Battalion (Pathans) 14th Punjab Regiment, while in camp at Koregaon, received orders to mobilise and to proceed to Aden, where they landed on Friday, December 13th.

On January 19th, another alarm in Addis Ababa was anticipated and precautions made to deal with crowds, but the British and British-protected communities kept their heads and set a commendable example of calm.

During the early part of the year the chief activities of the Contingent were practising air raid alarms, the establishment of the piquet on the hill, and wiring the defences; for the last named work all pickets had to be felled from the eucalyptus in the compound and trimmed.

In the middle of February the well, from which so much was hoped for, collapsed, with the tools at the bottom.

About this time I decided that, to secure the Legation further, the defences should be surrounded by two double-aprons of barbed wire, one of which aprons should be heavily entangled with loose wire. For this purpose a further 27 miles of wire, held in the city for the British Legation, was taken over. This gradual wiring of the defensive system spread over a period of three months, when there was no local danger or alarm, caused no comment or enquiry.

New buildings were now commenced in order to have more than half the troops who were still in tents accommodated under roofs by the time the four months' rains broke; other corrugated iron buildings in the scheme included an isolation and a general hospital, guard-room and explosive store.

March 6th saw the first Italian aeroplane over the city, at a great height, making a leisurely reconnaissance. This started the series of alarms and panics in the city, which alarms later became an almost monotonous interruption to normal functions as the numbers of British and British-protected subjects seeking "protection" increased with each succeeding aerial reconnaissance

* Maria Theresa dollars.—Ed.

or demonstration. On this first occasion considerable panic reigned and many fled the city. The opportunity was not overlooked by the bad characters who did a certain amount of looting. Before daylight next morning guards were mounted on both gates to control any refugees who might arrive. A small party of Indians, chiefly women and children, arrived at dawn and were accommodated under trees near a deep and winding nullah. Bad flying conditions prevailed and the guests were persuaded to return to their homes. However, two days later, as the dawn broke clear and sunny, more visitors arrived, the city was partially evacuated and all business at a standstill. Nothing happened but the city was becoming more and more nervous.

The barbed wire entanglements were meanwhile being thickened by degrees. Ammunition and explosives were divided between three well separated dumps in case bombs should fall in the Legation.

The beginning of aerial activity over the city turned the thoughts of all to the subject of poison gas, a problem which brought up some interesting points. Of all the communities present in Addis Ababa only the British and British-protected had been considered, and provision for them made by their responsible Government in this respect—I refer to 2,050 gas respirators brought from India. A confidential conference which was attended by the leaders of communities for whom the British Government were responsible, was called at the Consulate to consider the following points regarding issue of respirators:

(*a*) Individual financial responsibility—the respirators available were worth considerably over £6,000.

(*b*) Community responsible for organising the distribution and care of respirators.

(*c*) Technical instruction in use and maintenance—suggested 10 per cent., after a course of instruction under the Guard specialists.

(*d*) A monthly check.

After outlining this scheme the meeting adjourned for consideration by the leaders and judicious sounding of reliable and influential members of the communities. At the next and last meeting of the committee the spokesmen were unanimous in their decision not to accept the respirators for the following quite unforeseen, but on the face of it, sound reasons:

(*a*) Were the respirators issued to individual members of the British and British-protected communities the fact must become known, whereupon these persons would become marked men and when an air raid was predicted or occurred, the owners of respirators would be robbed of, or murdered for, the possession of the respirators—a very real danger.

(*b*) If the respirators were kept in small central batches for owners resident in close proximity the rapid issue of numbered and fitted respirators in an alarm, or raid, would become impracticable. Moreover, these storage places would become known and result in a rush of non-entitled, and probably murderous, people intent on possessing the means of immunity from inhaling poison.

There were other less important reasons but to these two reasons quoted there seemed no answer. For those responsible it was a great relief that anti-gas protection did not become necessary.

The delicate matter of fortifications outside the grounds of the Legation has already been referred to, particularly with regard to the establishment of the proposed three large sangars on the hill immediately overlooking the Legation and compound, which hill position was by now known to the troops as "Piquet." This forced unpreparedness was an ever present source of anxiety to myself.

As is usual in the building of sangars, the time to be taken in completing the work was governed by the supply of material and the length of the carry. The nearest available stones were at the ruins of an old fort crowning the main hill feature some 400 to 500 yards to the east; these were excellent material and already shaped; but when approached on the subject, the municipality replied that being a military fortification (though it had been a complete ruin for many years) it must be left *in situ* unless orders to the contrary were received from Haile Selaisse himself—this did not help the project. After much thought a subterfuge was evolved and it was represented to the Municipality that the Legation roads were in urgent need of metal and the remetalling would be carried out during the rains, but the stone had to be broken and prepared before the end of the dry weather; further, the most suitable material was on the top of the hill. Ultimately permission was given for the necessary stone to be quarried by a con-

tractor. Before removal to the Legation the stone, roughly trimmed to square blocks measuring approximately 1 metre by ½ metre by ½ metre, was stacked in three piles, the sites of which were the selected sites of the sangars.

This preparation when completed reduced the estimated time of building, wiring, provisioning and garrisoning the post, if unopposed and only requiring a light covering party, to about six hours.

April 4th saw another Italian aerial reconnaissance, this time by a flight of five aircraft which arrived overhead at 7-30 a.m. The usual alarm scheme and precautions were immediately put into force. Warning of the approach, or arrival, of the flight was given by alarm guns on the surrounding hills. This visit lasted for 35 minutes during which one Abyssinian aeroplane was destroyed in the aerodrome and other planes and hangars riddled with machine-gun bullets. During the raid the wildest excitement prevailed among the native population, practically all of whom were armed. Abyssinians ran in all directions firing wildly in the air, and machine-gun fire was opened from the Palace area. In order to prevent "anti-aircraft" fire being opened by excited natives who might encroach into the grounds of the British Legation, work was started at 1-45 p.m. on strengthening the existing boundary wire with a loose wire-entangled single-apron fence on the inner side. At the same time orders were issued by the Minister requiring all arms and ammunition in possession of native servants to be surrendered. Few arms were confiscated in this way but the majority were at least hastily removed from the compound. The next day saw the arrival of the first refugees at 4-30 a.m. and wiring was continued at daylight and completed at 2 p.m.

On April 9th another meeting of the Central Security Committee was called and copies of printed instructions already issued to British and British-protected subjects were distributed to members of the Committee as a suggested guide for other communities. Members were asked to earmark suitable members of their communities trained in the use of firearms to take over defence posts in Stage III of the Defence Scheme, should this state materialise. Representatives of Great Britain, U.S.A., France, Germany and Turkey immediately volunteered their active co-operation.

On Easter Monday (April 13th) an aerial reconnaissance was carried out by nine Italian aircraft. The usual measures were put into force, and the British and British-protected subjects from among a large concentration at the gates were admitted to the hoped-for safety of the Legation compound. The conduct of the city populace on this occasion was in great contrast to that on previous occasions in that not a shot was fired from the ground, the result of proclamations issued by order of the Emperor that capital punishment would be meted out to any person firing at aircraft from the open town of Addis Ababa.

Dessie, the last headquarters of the Emperor, was captured on 16th April. This crumpling of the Abyssinian army opposing the Italian advance sealed the fate of the capital, despite advertised and attempted "last ditch" stands between there and Addis Ababa. The situation was now very grave. In consultation with Mr. Hope-Gill, H. M.'s Consul, administrative arrangements were drawn up for the accommodation, sanitation, rationing and watering of refugees and for the necessary transport for conveyance. The water situation was a source of great concern, no extra water yet having been produced by the incredibly poor efforts of those responsible for the sinking of the new well.

The next day was one of rapid wiring by the troops. One length of over 400 yards of double-apron fence entangled with loose wire "windlassed in" was completed by three small parties in 55 minutes, which was surely good work.

An emergency meeting of the Central Security Committee was held on the 18th, the most important decision arrived at being that, in view of the change in the military situation and the uneasiness of the native inhabitants, the best way of allaying the danger of disturbances would be for all foreigners to set an example of calm by remaining quietly in their residences; representatives of communities, however, kept in close touch with their subjects, and Legations remained open to any protected persons who might claim sanctuary.

On the 19th and 20th, refugees with tentage and furniture commenced arriving and were allowed to pitch their tents in the grounds. Realising that at any moment protected persons might abandon their calm and rush to the Legation in large numbers separate areas for communities were marked and fenced off, latrines dug, screened and labelled.

The arrival of these few members of the British communities was probably attributable to the panic effect of the mass movement which had occurred during these two days among non-British communities. Hundreds of Armenians, taking most of their worldly possessions, had retreated into the French Legation and all German women and children had been withdrawn into their Legation.

For the next few days the local situation became quieter and our refugee guests were persuaded to return to their homes. It is probable that this example of self-control on the part of the large Arab, Indian and Somali communities, also the example set by the white British subjects in the city, were the means of averting looting and rioting during the ten days of increasing anxiety prior to May.

At this time I had an opportunity of visiting other Legations already in an internal state of semi-siege. One in particular bore a marked contrast to our own Legation with its fully prepared but as yet unoccupied sites for the reception of protected subjects. The Legation in question had a camp of well over a thousand refugees spread over several acres. Tents of all patterns, shelters, and huts were erected haphazard without organisation; the camp had been in being for some days and no thought had been given to sanitation or the supply and chlorination of water. However it did possess a large café and gaily-coloured garden hammocks suspended between trees. In fact in some ways it resembled Epsom Downs on Derby day.

At this time the first waves of the broken army started to arrive from the north and a truly pathetic sight they made. The men had mostly been disarmed and robbed by brigands during their flight, all were at the point of starvation, clad in rags, and many exhibited open undressed wounds and raw gas burns; the women who accompanied them were in little better shape. The road was choked for two days with this exhausted rabble, some of whom had walked hundreds of miles existing on what they could find on the way.

The 1st of May was a busy day making final preparations for what appeared, and proved to be, inevitable—the fall of the capital with its attendant bloodshed and ruin.

It was realised that this day was the last opportunity for fortifying and occupying the hill dominating the Legation, to

which I have attached such importance, and the decision had to be made immediately either to build the fortifications, and detach nearly a quarter of the total force in its occupation, or abandon the project. The factors which governed the decision were, firstly, that the possibility of a protracted siege no longer existed—the Italian army pressing on as it was to its objective; secondly, rumours were still current of a proposed desperate stand by the Abyssinians on the outskirts of the city, and, thirdly, the moral effect on the population who were still comparatively calm; hell had not yet broken loose. Of these factors the second, that is to say the danger of the development of a running fight, which would pass round the Legation was the weightiest. This would probably result in the hill being held by Abyssinians and the shelling of our garrison in the middle of the defenders. Refuge inside the Legation might be sought by force by routed Abyssinians at a time when all the small Guard would be required to hold our own perimeter. The prevention of the Legation being used as a vantage and strong point to oppose the Italian advance was of paramount importance. I decided to abandon the hill plan and to maintain a close defence until the arrival of the Italian army, which was expected in two or three days.

Most of the day was occupied in conferences of the Diplomatic and Consular Corps and the drawing up of military plans to meet the several situations which might develop. Troops stood by all day. The section of machine-guns and their crews were concealed in a house immediately beside their gun position, ready primarily to engage the hill were it used to fire deliberately into the Legation grounds. The camp was ready and the administrative staff of volunteers under Colonel Stordy, C.B.E., D.S.O., the head of the Silver Star Veterinary Unit, detailed for their respective duties.

During the night heavy rain fell and the dawn was wet and misty. All was quiet and orderly until news arrived of the flight of the Emperor to Djibouti in a special train. When it was realised in the city that the head of the State and all authority had gone the carnage started in an incredibly short time. By 6-15 a.m. continuous rifle fire had broken out in the city. This steadily increased in volume and area, stray bullets commencing to fall in the grounds of the various Legations, and by 8-30 a.m. the mobs were well started in their first wild orgy of looting, murder and arson.

With the first outburst of wholesale bloodshed refugees commenced pouring into the Legation gates, where the guards systematically searched and disarmed all who entered, a wise precaution. Most were heavily armed with a strange assortment of modern and primitive weapons; even the voluminous skirts of the Greek clergy yielded heavy automatics and cartridge belts.

By 11 o'clock there was a large collection of destitute and very naturally frightened people within the gates, and, as close range but unaimed fire was passing through the trees above them, the camp was thrown open and all were conducted there, registered, and issued with coloured tickets according to their nationalities, which tickets tallied with the painted posts demarcating their allotted areas.

During this time cars and lorries manned by the armed civilian staff of the Legation were scouring the city and rescuing individuals cut off in their houses. The Consul, Mr. Hope-Gill, telephoned for the leaders of all British communities to meet him at Messrs. Mohammed Ali's premises, which formed the largest trading establishment in the city and the agreed rallying point, and himself dashed off there to see if evacuation were possible. On arrival he found it too late, the post office nearby already in flames, and the city in the hands of drunken mobs. Defences were hurriedly erected and organised and an appeal sent by an Arab runner for twenty Sikhs and a light automatic gun to assist in the defence—the Arab never reached the Legation. Towards mid-day, Captain Taylor, the Military Attaché, went to view the situation and later brought back the message for reinforcements. Several challenges had been made to the defenders but overcome, sometimes by morale and persuasion, at other times by fire.

At 4 p.m. H. M.'s Minister called a conference at which I was asked to send this subsidiary garrison, and later other similar garrisons, and in each case I had no alternative in my judgment but to refuse, although I was prepared to make sorties for rescue purposes. It was a most unpleasant decision to make, realising that possibly, or probably, more or less helpless people were thereby being left to their fate at the hands of a mob. This question of weakening by detachment a force originally slender for its primary task received, however, a conclusive answer on the night of the 4th/5th to which I shall come shortly.

After the conference Captain Taylor took a lorry convoy by

a route avoiding the centre of the city and together with the Consul evacuated some 60 Bohras from the shop, leaving the premises under the protection of hired employees to whom more rifles and ammunition were promised and sent.

I have rather digressed and will return to the activities of the Guard during this day. These consisted of armed lorry patrols, which visited the German and French Legations at midday and again before dusk to ascertain their situation and the Greek and Egyptian Consulates where refugees were picked up. Although little, if anything, beyond supplying more arms and ammunition to the other Legations, could have been done to assist them if hard pressed, there can be no doubt that the constant patrolling of the area, and visits to Legation concentrations by disciplined convoys bristling with arms, had a great moral effect on both defenders and looters.

At dusk all battle positions were occupied for the night, while a continuous roar of rifle and automatic fire ascended from all sides.

The refugees, already 700 in number, had poured in all day and continued to arrive all night. Many were in pitiable condition, dazed, destitute and exhausted after dodging their way four or five miles through murderous mobs. During the evening rations were issued in bulk from the Guard's reserve and reissued to communities by the Volunteer camp staff, while, as working parties could be spared, assistance was given in pitching every available tent. Meanwhile stray bullets fell continuously into the open compound and all buildings were hit several times. Throughout the night the roar of small arms continued, the city was aglare, and wretched refugees arrived with their pathetic bundles, in lorries, cars and on foot.

Daylight on May 3rd revealed a heavy pall of black smoke hanging over the city, and an observation post established on the hill above the Legation reported crowds leaving the city in all directions after their night's orgy and carrying loot up to their physical capacity.

To deal with purely military events of the day, before referring to the work of the civilian staff of the Legation, early in the morning more rifles and ammunition were issued for despatch to Mohammed Ali's shop where the garrison was still holding out. Before 7 a.m. news was received that Dr. John Melly, Commander

of the British Red Cross in Ethiopia, was lying in the city shot through the lungs at point-blank range by a drunken looter, while attending the wounded. Four minutes after receiving the news an ambulance manned by a Sikh armed guard had left the Legation and later brought in Dr. Melly.

At mid-day it started to rain heavily, making conditions in the refugee camp miserable. Rations and firewood were issued.

During the afternoon a convoy of empty lorries protected by two rifle and one light automatic section left to visit Legations, patrol the area and bring in any whose positions were becoming untenable. The Belgians had decided to evacuate to the British Legation when the convoy returned from its rounds. At the next stop the Turkish Legation was found to be in a state of siege, with many dead bodies littering the road and approaches; there had also been minor casualties among the few defenders. On approaching the Legation gates the leading lorry was engaged, but the second lorry rounding a bend dispersed the attackers. The Turkish Minister wisely decided to evacuate to the British Legation on the return trip of the convoy. At the French Lega tion the situation was in hand, but, through lack of trained defenders and an organised defence plan, the scattered garrison was anxious and tiring and the camp, being spread over an unnecessarily large area, was very vulnerable to the considerable rifle and automatic fire constantly poured into it.

Leaving them to the prospect of a bad night, the convoy visited the American 7th Day Adventist Mission who after much indecision and waste of precious time were persuaded to evacuate their women and children. Back again to the Turkish Legation where in the interim more determined attacks had been made, and the casualties considerably increased. During the evacuation and embussing of the whole staff one or two further casualties occurred, but the convoy got away safely.

On the way to the British Legation, before returning for the evacuation of the Belgians and their protégés, a small girl child in one of the lorries separated from her mother, was wailing bitterly, but presently she became consoled and even content. On arrival at the Legation it was discovered that a kind-hearted and paternal Sikh had consoled the child with a primed Mills grenade, which the child was happily bowling on the floor of the lorry.

Having deposited the rescued at the Legation the convoy again set out for the Belgian Legation and evacuated all women, children and bullion, the Minister deciding to hold out with a garrison of four whites and fourteen professedly staunch Abyssinian servants.

At dusk a message was received from the United States Minister asking for a detachment of twenty Sikhs and a Lewis gun to be sent to his Legation to reinforce his garrison, and also asking for an armed convoy to evacuate the staff of the Sudan Interior Mission, who were reported besieged and unable to hold out any longer. Again the request for a sub-detachment had to be refused, but at 7-30 a.m. a convoy manned by fresh troops consisting of twenty-five rifles, a Lewis gun and carrying Mills grenades set out accompanied by the Consul to rescue the Mission and warn the U.S.A. Legation to be ready for evacuation, if desired, on the return trip of the lorries. The main streets were impassable, being blazing infernos, so the convoy had to proceed by a circuitous route, on the way driving over the Coronation triumphal arch which had collapsed. On arrival at the U.S.A. Legation the garrison were found having a hasty meal, the Sudan Mission had sent another message to the effect that their local situation had eased and they had decided to hold out. All women, except the Minister's wife, children and non-combatants were bundled into the lorries and the return journey started. One large lorry was left behind in case the garrison had to fight their way through the town to the British Legation.

Approaching the centre of the town another convoy, manned by the Military Attaché and armed civilians, was encountered driving hard for the British Legation; the evacuated personnel were Mr. Buxton, himself driving a lorry though shot through both legs, and his mission staff. This convoy had been ambushed, during which engagement two Ethiopian women mission workers had been shot dead in one of the lorries. The two convoys crashed on through the city and reached the Legation safely.

Now to recount some of the activities of the Legation and Consular staffs and civilian volunteers during this hectic day. In the early morning the Consul and other armed civilians ran lorries to Mohammed Ali's shop and delivered the extra rifles and ammunition previously referred to, loaded up foodstuffs for the camp and returned. These armed lorries were very formidable

propositions for anyone to impede, as apart from service and sporting magazine rifles they generally each carried one or more automatic rifles or sub-machine guns from the Imperial Armoury. Many rioters were, however, similarly armed, and for those who were unable to secure a brand new machine-gun by force the current price was four dollars a gun complete with magazines and ammunition.

During all this time the Volunteer staff of the refugee camp carried on their ceaseless work day and night with commendable tact and patience. Ration and water parties had to be organised and controlled, sick parades conducted, minor quarrels settled or smoothed over, sanitary, water and camp police supervised, a camp bakery oven built, and other administrative arrangements, too numerous to mention, made.

One member of the staff standing for a short time in the camp recorded the following consecutive string of queries and remarks addressed to another member of the staff in a few seconds:

"Can't you save my father and mother who are lying behind Fernades' shop?" "Do you call this a ration for a starving family?" "What the devil do you mean by letting those hordes go all over my garden for water?" "Do you know Dr. Junod of the International Red Cross is trapped in an outhouse just behind the burning Empire cinema?" "What shall we do with this corpse?" (an Arab shot through the head). "Why aren't there more tents for the Greeks?" "Where are the Italians?" "Why don't they send 'planes to machine-gun the shiftas?" (shiftas are the bandit gangs). "Pour l'amour de Dieu, sauvez-moi Soeur Marie."

A letter was received from the U.S.A. Minister asking that thirty-six Greeks who had taken refuge in his Legation should be evacuated to the British Legation on account of food shortage. The Greek Consul was sent for and ordered to produce nine Greeks, who would be issued with arms and three lorries, to bring in their compatriots. After much delay they left, to return later with the lorries stacked with comforts, furniture, pictures and knick-knacks from their own homes. These were thrown out and the owners again driven forth, this time to return with their countrymen.

Heavy rain fell all night making the camp a bog, but with all available tentage, tarpaulins, and several hundred sheets of corrugated iron, mostly run in from the Belgian Legation where no refugees had concentrated, everyone had a modicum of shelter. Throughout the night the roar of small arms fire continued on all sides and more exhausted and destitute refugees of all nationalities reached the safety of our gates. Next morning the registered refugees totalled over 1,500, apart from some 300 unregistered Ethiopian Mission workers and similar people in a separate area of the compound. On the morning of the 4th May after the extra night dispositions had stood down, a motor liaison patrol visited the French and German Legations where the situation was found to be well in hand and both garrisons appeared steady and confident. The town was quieter, but this had a disturbing significance for the Legations and what might be termed the suburbs, as it meant that all the easy pickings in the heart of the city were exhausted, with the result that individual looting was no longer possible. This resulted in larger and larger gangs being formed, capable of overpowering other gangs. This "snowballing" of desperate parties of up to 200 men, many armed with machine-guns, continued until the Italian entry and had off-shoots in the form of rioters in cars and lorries shooting their way through the town and attacking defended houses on the outskirts. Signs of organisation among the gangs of looters were evident. Motor lorries and cars, including the Emperor's two best saloon cars manned chiefly by men of the Imperial Guard and bristling with automatic rifles, scoured the suburban areas in search of rich objectives which could now be attacked by their larger numbers.

Shortly after mid-day an armed lorry patrol was despatched to bring in the remaining British-protected subjects who were in difficulties in the Egyptian Consulate. Our observation posts on the hill were being heavily fired on by Ehiopians lurking in the eucalyptus, so were withdrawn, as casualties could not be afforded for the sake of early information regarding the approach of the Italian column.

In the afternoon more ammunition was despatched to the defenders of Mohammad Ali's shop and an Arab garrison who were still putting up a stout resistance in defence of their property. Rifles brought in by the Turks were collected and sent

to the Belgian Legation, Mills grenades to the U.S.A. Legation and S.M.L.E. rifles and ammunition were lorried across to the German Legation.

The evening liaison patrol found the French and German Legations holding out well though both were continuously fired into from most directions. The mobs were becoming more determined and very heavy firing increased in the city.

Shortly after dark, while rain poured down and the evening patrol of a light automatic section and some twenty-five rifles under Captain Keene was still out and overdue back, an Abyssinian ran in carrying a hastily scribbled S.O.S. note from the Belgian Minister, "Help, please, we are attacked." As this arrived a heavy volume of fire was heard at the Belgian Legation some 500—600 yards away through a dense eucalyptus wood. Within fifteen minutes a relief force of slightly less than a platoon under Lieutenant Pearson was on its way in lorries to relieve the situation. Five minutes delay would have seen the Legation in the hands of the mob, as, on arrival near the Legation gates, when the leading lorry fell in a ditch and the relief force jumped from the lorries, a party of approximately thirty-five Ethiopians, chiefly ex-soldiers of the Imperial Guard, were advancing upon the Legation building supported by covering fire of some 200 rifles from a flank. The Lewis gun was immediately brought into action over the Legation wall and the first magazine, fired at a range of about fifty yards or less from the flank of the attackers, crumpled the attack, the rifle sections then shot their way through the remainder and fought their way steadily forward to occupy the environs of the Legation on the hill. A look-out man having reported a prearranged Verey light signal from the battle area a further two rifle sections, who were standing by, were despatched under an Indian officer.

Above the noise of the rifle and Lewis gun fire of the Sikhs and the fire of the 200 or so Ethiopians could be heard more heavy fire from the big hill in rear of the Belgian and British Legations, which was to any intelligent person the obvious angle from which the Belgian Legation could have been rushed. Fortunately the section of Vickers guns had been laid on the lower slopes of this hill to fire low over the refugee camp and a few feet above the Legation building. These guns then traversed their target and the immediate effect was remarkable; apart from all

occupants of the Legation and refugee camp falling and remaining on their stomachs the hillside was cleared and all other firing ceased for a considerable period. The Belgian Minister and some ladies were escorted into the British Legation while several male refugees elected to remain under the protection of the Sikh garrison.

On receipt of Lieutenant Pearson's written report of his success ammunition, grenades and Verey lights were sent across. The fourteen staunch Ethiopian defenders previously referred to had taken no hand in the defence and were sitting in a circle on the floor of the drawing-room as occasional bullets were coming through the window. To their surprise we disarmed them and locked them up in a room as useless and possibly dangerous.

Rain poured down all night and the troops had a miserable night lying without protection in hastily constructed positions.

During this engagement Keene and his convoy returned and formed the garrison of the British Legation together with some twenty or so men still in the Legation. At a hurried conference the British and Belgian Ministers advocated withdrawal from the Belgian Legation. I decided, however, that the position must be held at all costs as an evacuated Legation in the heart of the Area would draw thousands of armed looters from the city, who after sacking it, would turn their attention to the British and German Legations.

With our depleted garrison the situation was very serious. It was impossible to foretell the next, and probably bolder, move on the part of the rioters. However, volunteers came forward to assist in holding our defence posts. Two posts were manned by civilians of mixed nationalities, one under the command of an ex-Turkish corporal of the Great War and the other a combined British and American post under an English newspaper reporter and ex-soldier; a civilian reserve was also picked, armed, and quartered in a tent at the Quarter Guard. During the night posts at the Belgian Legation were twice in action against minor and undetermined attacks while the Turkish post in the British Legation kept up intermittent fire all night.

During the 4th May, the events of which day I have just described, an S.O.S. message was received from the U.S.A. Legation, five or six miles away, again appealing for twenty Sikhs and a Lewis gun to reinforce their garrison. This message had been

wirelessed from the Legation six miles away to a U.S.A. radio station in the Far East, relayed to San Francisco, to Washington, and telephoned to London, from where it was wirelessed to Aden and Addis Ababa. The message was received in less than four hours after despatch, and a reply sent by the same route regretting that Sikhs could be spared less than before owing to the garrisoning of the Belgian Legation, but that were the Americans prepared to evacuate a rescue convoy would be sent immediately.

It might be asked: why was this roundabout method of communication necessary over a distance of a bare six miles? The reasons were three: the Ethiopian telephone system, at best a wearisome and undependable concern, no longer existed; visual communication by heliograph or lamp with the U.S. Marine personnel at their Legation was, owing to the intervening dense eucalyptus woods and Palace hill, impossible except from the top of the main hill feature some 500 yards beyond the perimeter; one set only of radio-telephony apparatus had been "come by," and this had been installed between the British and French Legations to keep in touch with the situation at the latter refuge, in case a withdrawal from there, in accordance with the original defence scheme, became necessary.

I will now refer back to a passage in an earlier part of this article regarding the refusal to detach parts of the very small force in the British Legation. It is suggested that, had garrisons been sent as appealed for, to Mohammed Ali's shop, and the U.S.A. Legation, and had the attack on the Belgian Legation developed, as it did, during the absence of a large patrol, both Legations would probably have been over-run by weight of numbers encouraged by the first success against organised resistance.

Shortly after daylight on May 5th, Captain Keene took fresh troops, a Sub-Assistant Surgeon, barbed wire, pickets, sand-bags, rations, reserve ammunition and other stores and relieved the saturated shivering garrison of the Belgian Legation. During this relief another round-the-world appeal for help was received from the Americans, so a large convoy sufficiently well armed to deal with hostile mobs left immediately, and, after it had been explained to the Minister that this was probably their last chance of evacuation, the American garrison reluctantly collected what valuables they could in the half-hour given and were brought into the British Legation. We had now within our wire over

1,700 refugees. The rain had subdued most of the fires in the city and the stench of smoke, smouldering material and rotting mutilated bodies was almost overpowering.

By now all foreigners except the two garrisons at Mohammed Ali's and the Arab stronghold were concentrated in the three Legations and there remained nothing but to await the arrival of the Italian Army.

At 2-15 p.m. a distant roar was heard drawing closer and at 3 p.m. the head of the column passed the British Legation, from which time till after daylight the next day huge lorries streamed past without interval. Regarding the entry and occupation of the city it suffices to say that the motorist column approached and passed into the city with no form of protection or even advance guard.

Only half the city was occupied that day, the other half being left in the hands of the rioters, who at night took full advantage of their last opportunity to burn, murder and destroy, and in that quarter the reign of terror continued. The refugee camp was kept intact and nobody allowed to leave the Legation though many desired to return to the city and learn the full extent of their material losses.

In the morning, the 6th May, on a liaison visit to the Belgian Legation garrison all was found in order, sandbag emplacements and rapid wiring having been erected. During the previous night one attack had been made and dispersed by fire. An Italian staff officer arrived on a round of Legations and handed out proclamations assuming full responsibility for the safety of all foreigners. On this it was expected that our garrison would be withdrawn, leaving the Belgians without armed protection. When the staff officer was informed that the Sikhs would remain till the Officer Commanding was satisfied that the necessary relieving Italian garrison was sufficiently strong to guarantee security, arrangements were made for a guard of Marines of the San Marco Battalion. At 5 p.m. sixty-five Marines arrived and the Sikhs withdrew.

From 10 a.m. the refugee camp started to disperse and by the evening of the 7th the last refugee had left and the gates were closed.

The next few days were spent in stock-taking and the discreet collection of arms and ammunition issued during the

disorders. Then a telegram from home was interpreted as an indication that the Guard would be withdrawn almost immediately, so trenches were filled in and the packing of stores commenced. This pleasant work was discontinued, however, when on 22nd May intimation was received from the Foreign Office that the situation was not considered sufficiently stable to justify the withdrawal of the Guard. With this the rains started and all realised that there would be no release till after the dismal period of four months continuous rain.

Work was then commenced on reconstructing the defences, built up sandbag posts replacing the previous dug-down trenches; these gave better observation over the long grass which grows in the rainy season and solved the difficult question of drainage. The building of these massive posts, like small fortresses, continued during June and proved an interesting occupation; in the construction of one post alone, No. 4, six thousand sandbags were used. All posts but two were connected by field telephones and to a central exchange at Headquarters.

On 2nd July, the Charge d'Affaires, Mr. Roberts, called a conference to discuss the local situation and security measures to be taken. The local Italian military situation was still insecure and there was open talk in the town of a concerted internal rising and attacks on the city by massed undefeated elements of the army. Foreign residents did not conceal their very natural state of alarm. It was decided again to organise arrangements for the reception of refugees, this time on a considerably larger scale than previously as there was little doubt as to which Legation afforded the most adequate protection and to have defence measures ready for an emergency at the shortest notice. These preparations consisted of a new alarm scheme, whereby posts could be manned and the reserve concentrated in ten minutes, day or night. Nine canvas nosebags, each containing 24 primed grenades and nine more holding Verey pistols and cartridges, were kept standing in rows at the Quarter Guard, to be picked up by men passing on the way to their posts. All ranks slept with their rifles, equipment and field service scale ammunition beside them, machine-gun water jackets were kept filled, and Lewis gun springs at firing weight, the guns being out of their chests and ready to be picked up with the ammunition as the troops ran past.

Since the riots of May more armament for the Legation Guard had been "acquired", in the form of two light automatics, one a Browning Mauser and the other a Brenn, each with several hundred rounds of ammunition. Short courses of instruction in the handling of these weapons having been held, more than 50 per cent. of riflemen could handle them in an emergency, so the Browning was allotted to No. 4 Post and the Brenn to the Reserve.

The next afternoon I went to Mohammed Ali's shop with the Consul to draw up a defence scheme for the premises and ensure that the staff were sufficiently well supplied with arms and ammunition.

The cause of these preparations was the open unrest in the city and the presence of small armies each of several thousand men, well armed with machine-guns and ammunition, who were roaming within a few miles of, and closing in on, the city with the avowed intention of making a concerted attack from several directions. The Italian aircraft were inactive, the army tied up in Addis Ababa, and the bandits getting bolder. Various dates and stages of the moon were nominated for the big attack and a state of very real alarm prevailed. The previous bogey of Piquet Hill again came to life. An attack would probably be made by many thousands emerging from the eucalyptus and pressing their way forward by weight of numbers into the yet practically undefended town. It was clear that my proposed poor little garrison on Piquet Hill would only be swamped and so reduce the Legation defenders by nearly a quarter of their effective strength. Hence again I decided on a close defence behind a mass of wire. As extra wire was necessary outside the Legation compound limits, Marshal Graziani was approached and gave an encouragingly free hand in this measure, there being no doubt that the best strong point in the defences of Addis Ababa was the British Legation. Then wiring commenced in earnest. The weakest part of our wire when finished consisted of two double-apron fences, one of which was thoroughly entangled with windlassed-in loose wire. In all sixty-one miles of wire was used. Each post was provided with shelter in the form of a tin roof or tent stretched on light beams, and we felt secure and ready for what might happen. The two big coast defence searchlights were tuned up once a week and each had an operator

and assistant detailed. The camp was prepared, more registration tickets printed, all tentage stacked on the site, 10,000 man day rations taken in, firewood stacked under cover, and the camp oven frequently tested.

On 6th July parties of men were set on to fell all eucalyptus outside the compound to give the desired fields of fire to the posts. In the meantime the Italians had made a strong point on the main feature overlooking Piquet Hill, and had mounted a battery of mountain guns on the hill; this was very comforting and confirmed my decision to abandon the idea of our holding Piquet Hill. The Italian artillery spent this day registering targets on all sides of the city. By this time the road to Dessie and Asmara had become impassable for motor transport so that the only communication was the narrow gauge railway which was liable to be cut with impunity.

The days dragged on in this state of tension with more or less incessant rain. Minor actions on the outskirts of the city became more frequent and heavy bursts of firing occurred almost every day and night. The Legation compound had become a bog.

The Italians kept to themselves all information regarding concentrations of Ethiopians but stories from the town emphasised the imminence of attacks and the presence of large bodies of troops nearby. The truth of these rumours became apparent on 26th July when a flight of Savoia heavy bombers carried out considerable bombing operations some five miles west of the city. During that night heavy rifle fire on the western outskirts indicated either a battle or a bad attack of nerves on the part of the defence posts. Next day a further aerial bombardment was observed in the same area as on the previous day. On the 28th there was general apprehension of a night attack on the city being launched within the next three nights. One source of information had previously proved reliable so emergency measures were put into force, the gate guards doubled and telephones connected to all lines. The French Legation Guard had similarly doubled its precautions. Not till mid-day did information reach the British Legation, four miles south of the city, that at dawn two Ethiopian attacks had developed from the hills to the north of the town, that one had been driven off after severe fighting and that the other fight was still proceeding on the edge

of the city, small parties having in fact fought their way into the centre of the city before being wiped out. The key defence posts of the British Legation were then manned. Shortly after 1 p.m. the aircraft were bombing two miles north-west of the city and automatic and rifle fire could then be heard distinctly. Later, rifle and automatic fire broke out in a new area, west of the city and about a mile from the Legation. At 3-30 p.m. intense rifle and machine-gun fire started to roar in a dense eucalyptus wood some 400 yards from the Legation gates. The full defence scheme was manned in eleven minutes and it was realised that the battle was on.

This engagement continued for two hours without a lull and an aeroplane flying low over the battle was engaged by automatics from the ground so flew away unable to obtain any observation on account of the density of the trees. At dusk the battle was renewed with great fury, the concerted noise of heavy machine-guns, automatics, rifles and hand grenades at such a close distance being deafening. This died down after half an hour, to be continued at 2 a.m.

The next day, 29th July, the Italians, 32,000 strong in Addis Ababa, called on further resources to destroy or evict the Ethiopians, variously estimated at 500 to 2,000 (the former probably being more accurate). At 9 a.m. the batteries covering the hills above the Legation opened fire on targets to the south and south-east of the woods, firing directly over the Legation, while a flight of six Savoia bombers circled helplessly over the battle until driven off by automatic fire. During this time our troops were making full use of the bullet-proof cover afforded by their sand-bag posts as bursts of machine-gun and rifle "overs" were continually falling in the grounds and all buildings were hit. One defence post found itself for some time directly in the effective beaten zone of an unseen machine-gun in the trees, but no casualty occurred.

It was interesting to watch, from the high ground of the Legation compound, companies of Ethiopian troops deploying in the open and advancing into the woods in an encircling movement.

The battle continued all day. During the afternoon a Sikh N.C.O. in a defence post, while pointing out some object, was wounded through his pointing hand by a bullet from the battle

area. Meanwhile rifle and bursts of machine-gun fire continued to register on Legation buildings. A bullet which passed through the hospital between two occupied beds restored all patients but one to immediate health far more quickly than anything prescribed by the medical profession.

At 4 p.m. further Eritrean reinforcements arrived in lorries at the Legation gates as an assembly position; officers held a conference while troops inspected and loaded heavy Fiat machine-guns. The conference was interrupted while the officers chased a clumsy machine-gunner who accidently fired his gun a few yards from the conference. The lorries which had brought the reinforcements were utilised to remove the casualties from the action to the city.

At 5 p.m. the Legation gate guards were withdrawn to the line of the strong defensive wire as it appeared probable that during the night the fight might develop immediately at the gates, should the attackers try to cut their way to the city and thus raise their confederates in the town.

At 6-30 p.m. approximately 1,200 troops with mountain artillery withdrew hurriedly into the town, followed later under cover of darkness by the reinforcements referred to above, who were presumably sent out to cover the withdrawal. Thus this small determined band of Ethiopians were allowed to break off the action and return to the hills unsuccessful but unbeaten. The night was quiet, the battle area being unoccupied except by the dead. Two motor lorry patrols visited the area, the first one continually firing machine-guns and throwing grenades without any provocation or targets.

The next day, 30th July, strong rumours were current that the Ethiopians, encouraged by the failure of the defence to annihilate the ill-armed bands of attackers, intended to launch heavier attacks on the city in the immediate future. Mills grenades were issued to the American Legation at the request of their Minister. During the afternoon more Eritrean infantry and a pack battery withdrew at the double into the city, the officers bringing up the rear belabouring the mules. The day passed quietly and on the next day normal conditions prevailed. In the Legation, however, guns were kept in position and all emergency measures ready for immediate action. The weather conditions were wet and miserable.

August was a wet and trying month being the third of four months of heavy rain. Training, instruction, and recreation were devised, through force of necessity, on quite unusual lines. A generous supply of games and sports appliances had been received in answer to an appeal addressed to the India Office. Webley air pistols for a miniature range were augmented by air and .22 bore rifles either purchased or unclaimed by refugees from whom they had been confiscated. For lack of space intersection fire order competitions were carried out with darts, barracks resembling the bar parlour of a public house on a Saturday night. Skipping competitions consisted of endurance and fancy skipping, apart from relay races. Footballs were converted into medicine balls for indoor use, while under a platform the punch ball was very popular, many a Khalsa developing a punch worthy of a heavyweight champion. Company concerts in the evenings were a great success and "turns" were worked up and practised with much enthusiasm.

The outstanding event of this month of deluge was the finding of water in the new well, some five months after it was required.

Minor actions continued to be fought on the outskirts of the city, and larger actions further afield with much aerial reconnaissance and bombing. Artillery was constantly active. This state of affairs continued until the middle of October, but as the further raids on the outskirts of the town, the repeated cutting of the railway and the losses sustained by small Italian columns did not directly involve the Legation Guard I will not touch on them.

Early in November the glad news was received that the withdrawal of the Guard, including the Cavalry Escort, was under consideration, so work was started on checking and packing stores and material. The Italian High Command were very ready to assume responsibility for the safety of the British Legation subjects and property; further Marshal Graziani was prepared to accord every facility for the withdrawal of the Guard, and signified his intention of calling at the Legation to meet the officers, of providing army transport for the move and a guard-of-honour at the railway station, and that he would be present in person at the departure of the special troop train. These proposals having been cabled to London and meeting

with the full approval of the Foreign and War Offices, the work of packing and demolition of subsidiary posts and some wire entanglements went ahead apace.

Every assistance and military courtesy was extended to the Guard on their departure, but the train journey to Djibouti was not lacking in interest. All trains from Addis Ababa to the French Somaliland border were normally provided with an escort of two or more platoons of Italian or Eritrean troops armed with automatics and heavy machine-guns, to say nothing of rifles, ammunition, and bayonets in the luggage racks for the use of passengers. That was considered sufficient—and on a trouble-free run it was; but in not a few cases when the line was cut it had proved quite inadequate, with fatal results to the train garrison and passengers. For our troop train a guard of two platoons of Askaris with light automatics and a section of machine-guns was provided under the command of a most efficient Lieutenant of Bersaglieri seconded to the native army. The armament of the Guard for the journey consisted of 126 loaded rifles, 3 Lewis guns with magazines on, a section of Vickers guns half loaded in a central goods wagon with the doors open, and canvas buckets of grenades and others of Verey lights and pistols in each wagon and carriage. An alarm scheme was drawn up for immediate detrainment and deployment.

The train was scheduled to run straight to Djibouti, not halting at night as was the normal routine, and to arrive in 36 hours. One of the greatest difficulties of the Franco-Ethiopian railway under the conditions of the time was water supply. The supply trains were required to run daily on water from wells which had been sunk to provide only two trains a week during the Ethiopian regime. On the second evening of the journey the train stopped at a small station, having insufficient water to reach the next station; an "up" troop train of Libyans was also in the station, having been there 24 hours as the engine driver complained of stomach ache. Before dusk the station area was organised as an outpost position with all round defence, the Askari escort taking over their sector, and the Libyans, after recovering from their surprise at being asked to hold a sector, co-operating willingly. After taking up night dispositions some enterprising person discovered a railway wagon half full of water so the engine was replenished by hand with tins and buckets,

DEFENCE PLAN - BRITISH LEGATION, ADDIS ABABA. (NOT TO SCALE)

PROPOSED SITE OF PIQUET
PROMINENT ROCK
VERY STEEP HILL SIDE
WATER SPRING - APPROX 800.
SCRUB
No 3
No 4 (BROWNING L.A)
M.G.S.C.
No 7 (L.A)
LATRINES
EUCALYPTUS WOOD
REFUGEES
OVEN
WELL
ORIENTAL SECRETARY'S OFFICE
TENNIS COURTS
SEARCH LIGHT
L.A. RES.
PADDOCK (GRASS)
ROAD TO DESSYE
No. 8. (SEC. V.G.)
FIRST SECRETARY'S HOUSE
LEGATION.
CONSUL'S HOUSE
W/T OFFICE
REFUGEES
ARCHIVIST.
ORIENTAL SECRETARY No. 9
ALTERNATIVE
GATE GUARD
MAIN GATES
GUEST HOUSE
STABLES
QUATER GUARD
No. 2. B
4 BARRACKS
ABYSSINIAN SERVANTS QUARTERS
CONSULATE
Q.M. STORES
HOSPITAL
DISPENSARY
ISOLATION HOSPITAL
PRISON
SEARCH LIGHT
No. B1 L.A.
B'RES
C'RES
GATE
DEEP NULLAH
TO BELGIAN LEGATION 500 K
ROAD TO CITY

N

LEGEND

- DEFENCE POSTS (RIFLE, L.A., V.G., OR BROWNING L.A)
- B BOMBING POSTS. (POSTS 1 AND 2)
- DOUBLE APRON, WIRED BEFORE MAY 1st 1936.
- DOUBLE APRON, WIRED JUNE - JULY 1936.
- FORM LINES
- TREES, MAINLY DENSE EUCALYPTUS.

SCALE (APPROX:)
1 INCH - 100 FEET

FEET 200 100 0 200 400 600 800 1000 1200 1400 FEET

after which the train suddenly pulled out of the station leaving behind the outposts till held up by an Askari post on the line.

Next day the train was detained six hours as the single line ahead was blocked by an engine and four wagons which had run away, the engine of which had fortunately soon run short of water. A troop train was reported derailed behind. When the runaway train had been hauled back to a station, our journey continued till the train stopped suddenly and an engine driver was seen running hard across the desert. A section of Askaris rounded him up after a good chase and once more the train crawled on its way. Ultimately the escort left us at the Frontier and we reached Djibouti 12 hours overdue on a 36 hours journey.

The next minor difficulty was the laziness and inefficiency of the Arab loading gangs, possibly owing to heat and Ramzan. It appeared certain that the ship would be delayed a further day in port, but the Sikhs again rose to the occasion and turned stevedore. Being able to lift and handle three or four times the weight managed by an underfed coolie, the loading and stowing was rapidly finished. The ship left only two hours late on its original schedule.

The return voyage to Bombay was uneventful and extremely slow, ten days being taken between Aden and Bombay, the little pilgrim ship steaming at a speed of 6.2 to 7 knots; but even so India was ultimately reached on December 7th, and Poona the next day. Thus ended a little expedition packed with interest and emergencies far beyond our most sanguine hopes at the outset, but which for weary months of virtual imprisonment had tried the tempers and patience of all without, however, making any impression on the discipline or cheerfulness of the 142 Sikhs who had been isolated in Africa for 14½ months.

THE INDIAN SOLDIERS' BOARD

By Major D. F. W. Warren

The Indian Soldiers' Board, like many other valuable institutions in India, was bred (out of Paper by Military Officialdom) for quite a different purpose from that which it now serves. The child of this union, unlike some of its more unfortunate brothers and sisters, has turned out better than could have been expected, and in spite of a number of childish complaints (which appear at one period to have included infantile paralysis and sleepy sickness) is now, at the age of eighteen, a well-grown lad, with great possibilities.

The story of the Board's birth and the vicissitudes of its childhood and adolescence are in themselves an outstanding example of how all things work together for good in spite of the best-intentioned efforts to steer them into other courses.

Early in 1918, a United Provinces civilian, serving as an I.A.R.O. subaltern with an Indian cavalry regiment in France, put up a note to the Government of India in which he claimed the Civil Servant's privilege of criticising the Government. He then proceeded to make certain proposals for rewarding Indian soldiers by a policy of land alienation and expropriation of large landowners. Besides these proposals, most of the recent election programmes of extremist Indian political parties appear moderate and restrained. Wrapped up in his rather lengthy note, however, were a number of valuable suggestions, and the contents of his paper were seriously considered by the Home Department, the Army Department and the Adjutant-General's Branch at Army Headquarters.

It was generally agreed that *something* should be done, and that the child when born would be worth preserving and should be held by somebody. But who was to hold it? The Adjutant-General's Branch suggested the Home Department and the Home Department said that it ought to be the Army Department.

Finally it was realised that an organization for looking after the welfare of the ex-soldier was excellent recruiting propaganda, and in October 1918, just before recruiting on a world war scale ceased, the Central Recruiting Board, a mixed civil and military

body under the general control of the Army Department, volunteered to adopt the child and see what could be made of it.

With the almost immediate ending of the Great War and the consequent slump in recruiting activities, the Central Recruiting Board was able to turn its whole attention to the welfare of the ex-soldier. The demobilization of an Army of half a million men was a problem that had never had to be faced before, and the Government of India was somewhat nervous about the results of releasing so many men at once; so, with the approval of all concerned, the Recruiting Board turned itself into the Indian Soldiers' Board and the Provincial Recruiting Boards into Provincial Soldiers' Boards, with the primary object of rewarding, compensating or otherwise satisfying the demands of the brutal and licentious soldiery. The Central Recruiting Board held its last meeting on the 28th November 1918, and the Indian Soldiers' Board its first meeting on the 23rd January 1919—just nine months after the I.C.S. cavalry subaltern had started things moving. Except for a change of President and the addition of one member, the personnel of the two Boards were identical and the new Board, like its predecessor, was administered under the Army Department.

The objects of the Board were given in a Government of India resolution as follows:

"The Government of India have decided that the functions of the Central Recruiting Board should now be definitely held in suspension and that in its place a new Board, to be called the Indian Soldiers' Board, should be established to advise on questions affecting the interests of serving, discharged and deceased Indian soldiers and non-combatants and their dependants. Its composition and membership will be the same as that of the Central Recruiting Board, but the Honorary Secretary of the Indian Imperial Relief Fund will be added as a member, and the Honourable Sir George Lowndes will take the place of the Honourable Sir William Vincent as President.

The Indian Soldiers' Board will be affiliated to the Army Department of the Government of India, and will deal particularly with the following subjects:

(1) The formation of district records of war services which may serve as the basis for the future action of this Board.

(2) Consideration of questions connected with land rewards or grants.

(3) The question of obtaining preferential treatment in Government employment.

(4) Educational concessions for children.

(5) The after-care of the wounded and incapacitated soldier.

(6) The safeguarding of the general interests of soldiers by provincial and district committees, who should specially watch the interests of soldiers absent from their homes.

(7) Consideration, in collaboration with the military authorities, of the whole subject of demobilization in its civil aspect, in relation to prevailing economic conditions and the general interest.

The solution of these problems depends largely upon the action taken in the several provinces, and all local Governments and Administrations have been addressed with a view to preserving the provincial Recruiting and War Boards—reconstituted, if necessary, in form and composition—as a nucleus to advise on these questions."

This resolution has been quoted in full, as it shows the Board's original terms of reference. It will be seen that at that time the Indian Soldiers' Board was very largely taken up with the immediate demands of demobilization, war casualties and war rewards, though the inclusion on the Board of the Honorary Secretary of the Indian Imperial Relief Fund is an indication of the Board's more permanent duties. Most of the Board's ephemeral tasks were completed by the end of 1922, and with the advent of peace its duties gradually adjusted themselves to changed conditions; they continued, however, to centre round the welfare of the Indian soldier, past and present, and that of his dependants. In 1924, these duties were defined generally as "the construction and execution of such measures as may be found from time to time necessary in order to protect the home interests of the Indian soldier and to assist where necessary in establishing ex-soldiers in civil life;" and then, as now, one of the Board's main duties was the administration and distribution of a number of relief funds.

Though some of these duties were not defined in so many words until 1924, considerable progress had already been made on the lines indicated. In 1920, a scheme was formulated which had

as its object the creation of District Soldiers' Committees, controlled by the Provincial Soldiers' Boards and co-ordinated by the Indian Soldiers' Board. The idea underlying this proposal was not new, for District Soldiers' Committees had been in existence and doing valuable work in Madras and the Punjab for many years, and Provincial Soldiers' Boards existed in all provinces. The extent of the operations of the various Boards and Committees and their composition and influence varied, however, in different areas, and the need for co-ordination and direction had become increasingly apparent.

This scheme was generally approved by all the provinces and administrations from which the Indian Army recruits and the work of organizing or reorganizing District Boards and Committees was taken in hand. By September 1923, there were nearly seventy local organizations in existence in the various provinces and States. During 1923 these organizations dealt with investigations regarding pensions, arrears of pay, finding employment for discharged soldiers, distribution of medals, investigation of applications for relief from funds at the disposal of the Indian Soldiers' Board, tracing of individuals who had ceased to communicate with their families, inquiries regarding land grants and *jangi inams*, furnishing of *nerrick* rates to military units, verification of recruits, grant of educational facilities, maintenance of lists of serving and deceased soldiers, procuring of legal assistance for absent or disabled soldiers, and help for soldiers' families in cases of disease or famine.

This is a formidable list and it will be seen that District Soldiers' Committees, in addition to their normal task of keeping up the spirits and morale of the military classes generally, were already carrying out a great deal of unpaid liaison work for the Army.

The system as originally instituted worked after a fashion, but owing to a number of reasons, amongst which were post-war lethargy and lack of official support and encouragement, civil and military, it was found necessary to strengthen the local organizations and put them on a uniform basis. Up till this time District Soldiers' Boards had been purely voluntary bodies of little standing, with no paid staff and varying in name and objects from the "District Soldiers' Board" proper, through "Indian Officers' Associations," to the "Hoshiarpur District League of Order." In

1931, on the recommendation of the General Staff, all District Soldiers' Boards were put on a uniform footing, with the civil head of the district as President and a serving soldier, who was either a recruiting officer or an Indian Army officer detailed for the purpose by Army Headquarters, as Vice-President. In the North-West Frontier Province the composition of the District Soldiers' Boards was somewhat different, for here the President was a soldier (generally the local Brigade or Station Commander), while the civil head of the district was Vice-President of the Board. Important Boards were given a paid secretary or a clerk —in some cases both.

Under this system the District Soldiers' Board became the local executive organization and its duties were defined as follows:

(1) Constantly to endeavour to promote and maintain a feeling of goodwill between the civilian and military classes.

(2) To give all assistance to the President of the Board in his capacity as head of the district in all administrative matters connected with the ex-soldier and his family.

(3) To demonstrate the benefit of, and so promote the desire for, mutual co-operation between ex-soldiers and civilian officials.

(4) To represent and explain to the civil authorities all matters of particular moment to ex-soldiers that require the attention of the local administration.

(5) Generally to watch over the welfare of the ex-soldier and his family and the interests of serving soldiers absent with their units.

This organization was a great improvement on the previous lack of system, but it still had certain disadvantages. Recruiting officers are busy men who naturally pay most attention to those parts of their areas which provide them with most recruits. Indeed, as under the system then in force they could only draw travelling allowance when on recruiting duty they could hardly be expected to do otherwise. Civil heads of districts are also generally more apt to interest themselves in the affairs of ex-soldiers in those districts where military service is still a live issue, and not merely a rather pathetic reminder of the Great

War. At the same time, the interests of ex-soldiers and their dependants in the more heavily recruited areas are, to a certain extent, looked after by units and it is the "forgotten areas," which provided nearly half our recruits in the Great War but from which very few men are now taken, that require most assistance. One result of the 1931 reorganization, therefore, was to increase the efficiency of the better Boards, while allowing the weaker ones to remain in a state of neglect and decay. "From him who hath not shall be taken away even that which he seemeth to have."

This state of affairs continued until October 1936, when a further effort was made to raise all District Soldiers' Boards to the level of the best—and that is very good indeed. There was no interference in the internal constitution of the Boards. The President is still the Collector or Deputy Commissioner, and he is still assisted by a regular Indian Army officer as Vice-President, but in order to preserve continuity and provide supervision it was decided to make Indian infantry training battalions and similar units, which were not liable to changes of station, responsible, where possible, for providing the military Vice-Presidents for the District Soldiers' Boards in the vicinity. The Commandant of each training battalion was made responsible for detailing the military Vice-Presidents of the District Soldiers' Boards allotted to his unit, and for the general supervision of their work. At the same time full advantage was taken of the experience and influence of recruiting officers, who were appointed additional Vice-Presidents of all District Soldiers' Boards in their areas. Allotments of travelling allowance were also made to a number of Boards to enable military Vice-Presidents to tour their districts or to sanction allowances to members touring on Soldiers' Board business.

It was hoped in this way to interest units, rather than individual officers, in the welfare of ex-soldiers in the neighbouring districts, and so to remove the principal objection to the earlier system—the objection that certain fortunate districts throve at the expense of others less fortunate, while all Boards were dependent for their efficiency on the fortuitous presence of keen civil or military officers.

The result of this measure has exceeded all expectations. Units providing the military Vice-Presidents, with a very few

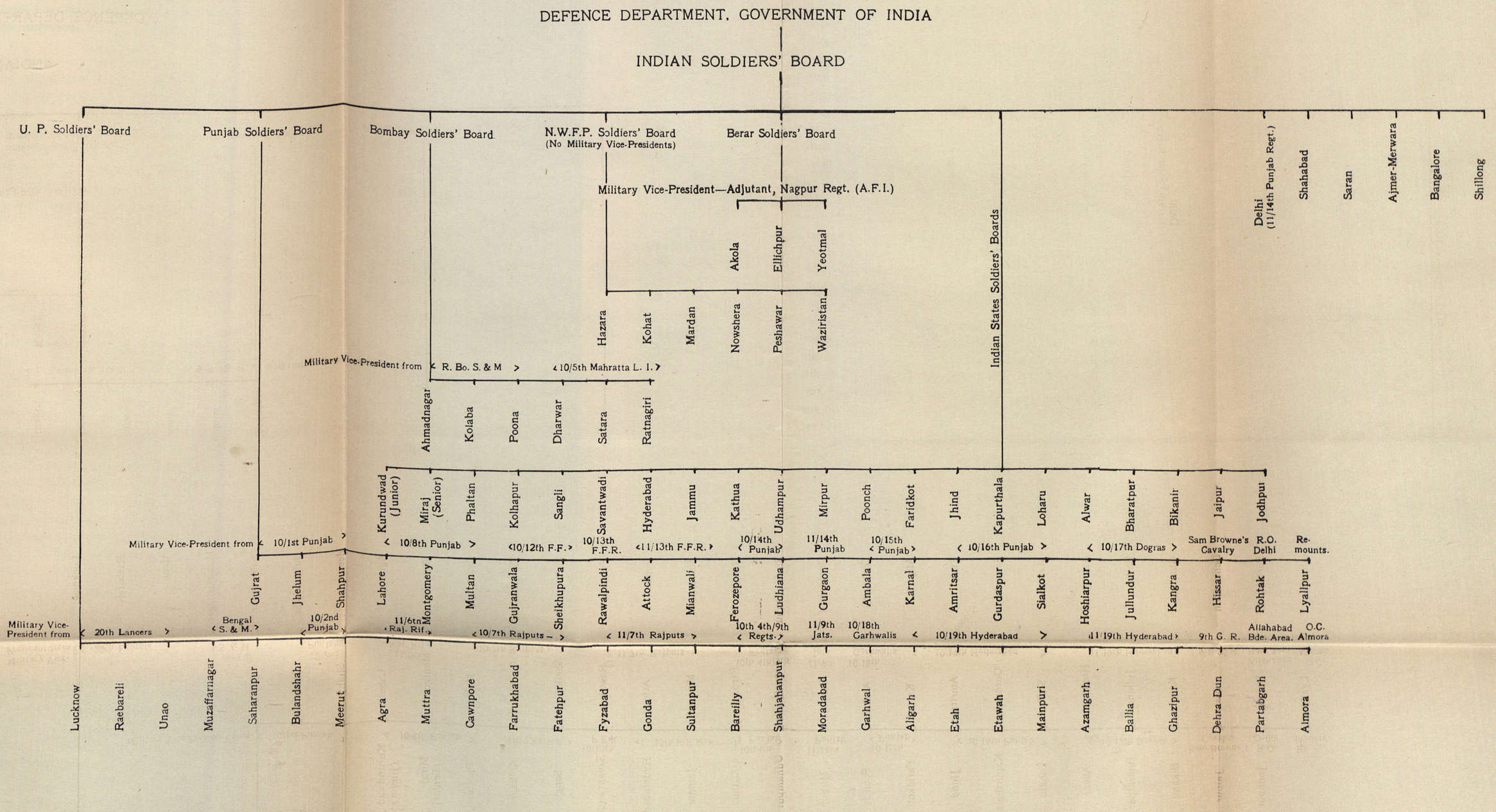
regrettable exceptions, have thrown themselves into the work of improvement, reconstruction, and in some cases resurrection, with a keenness beyond all praise. Boards which had appeared to be dead for years have already taken a new lease of life and are now going concerns, with efficient sub-committees working in tehsils and zails. The keenness shown by military officers is stimulating interest amongst civil officials and raising the morale of ex-soldiers which was at rather a low ebb owing to recent political events in India. Ex-Indian officers and soldiers are beginning to realise that the Indian Soldiers' Board is an efficient organization, which can and does help them in a number of ways, and are giving their own local Boards a measure of support never given them in the past. The immediate result is thus to strengthen the Boards and to increase their power for good and, incidentally, to raise the prestige of the soldier among his fellow-citizens.

Another, and not the least important, result of this effort is that a new and ever-improving channel of communication has been established between Army Headquarters and the ex-soldier —a channel which facilitates the collection of information from the recruiting areas and the issue of information to them. The channel is one that may yet prove of immense value in war, both for recruiting, propaganda and intelligence.

An attempt has been made in this article to show how an organization, designed primarily for the clearing up of problems connected with the end of a war and the demobilization of an army, has been adapted to meet the peace-time needs of the Indian Army. It would be out of place to discuss here the responsibility for looking after the welfare of the ex-soldier and his family or for safeguarding the civil rights of the serving soldier, but it is no overstatement to say that in a country like India a discontented ex-soldiery is a danger of the first magnitude and that the Indian Soldiers' Board is the only organization designed to combat such a danger. As such it is possibly as cheap a form of insurance as is to be found anywhere in the world—but it is more than that. It is a reasonably efficient and flexible machine with contacts in every district which contains more than a handful of ex-soldiers. The potential value of such a machine to the civil authorities in time of trouble can hardly be exaggerated. It is, however, as yet almost unrecognised, except in those

ORGANIZATION OF THE INDIAN SOLDIERS' BOARD—1937

(Showing Units from which Military Vice-Presidents are found)



districts with a large and occasionally turbulent military population.

The child is now eighteen years old, and a promising youngster that may yet prove of as great value to the country as it has to the classes for whose benefit it was brought into being. It is, however, still a youngster, and requires the assistance and sympathy of the authorities.

LOOKING GLASS REFLECTIONS

By Lazarus

First of all that there should be no doubt as to my identity and that the wrong people should not get the blame for the provocative way in which this article is written, I will describe myself.

I am an elderly captain, company commander, of Indian infantry, 5 feet 8½ inches in height and of what I consider good physique, but others tell me that I have, prematurely, the "field officer's figure." I am uneducated in the narrow military sense, but that does not prevent occasional glimmerings of intelligence brightening my otherwise dull and stolid brain. Whether this article was written during one of these bright periods or not, I have, as yet, been unable to make up my mind.

Needless to say, with my manly figure, I am married, but I am one of those courageous few who firmly keep the wife out of the study. Unfortunately she is ambitious for me and has fixed up a mirror over my desk; she tells me that this is to enable her to see whether I am really at work or not. Personally I think she suspects me of flirting with the pretty young governess we have recently engaged. Luckily the mirror is set at a slight angle, so that I am not forced to study my own reflection on the infrequent occasions when I lift my head from my work.

Sometimes when sitting back, seeking an inspiration, I seem to see right through the mirror into another room, very like the one I am in, but somehow different, more practical and more in accordance with modern progress. It gives me the impression of an atmosphere not steeped in tradition for tradition's sake. At times I see the occupants of that room in their every day life. Often that life, like my own, takes on a military aspect.

It was the collective training season. My orderly had reminded me to take my compass, as I had been in trouble with my commanding officer the day before for not having it, so I had gone into the study to look for it. Lal Singh, my orderly, was dressed in his field service order complete with pack; I had on my Mills equipment and, as usual, my haversack was bulging, but my orderly's was worse, as he had his ration tin in it, for we were not due back until the afternoon.

I happened to look into the mirror and I saw two figures, obviously a major and his orderly. What a difference there was between their kits and ours. As I had a few minutes before parade I made a careful comparison between the various kits. Starting with the major and from the feet upwards, he had on marching boots, canvas gaiters and knicker-bockers, not the "plus fours" of the golfer, but the "plus two and a half" of the normal being. I looked at my own nether garments, breeches, putties, boots and spurs. I own that the better riders in my battalion do not wear spurs, but I find it easier to keep on my horse when I do. I could not help thinking how indifferent our forms of leg wear are. Putties are the invention of the devil; they either fall down or restrict circulation and are impossible when riding. The other form of leg gear, the field boot, is worn by the mounted arms and the staff; they are useful for riding and look absolutely beautiful, especially on our brigade major—a gunner—but you should see him trying to walk uphill. In comparison my opposite number's canvas gaiters looked workmanlike and smart and it was obvious that he could both ride and walk in them. His equipment and flannel shirt were like mine and I was glad to see that his haversack was just as bulgy.

The two orderlies wore similar articles of clothing, the changes being in equipment and head gear. The difference in equipment was staggering, while Lal Singh had hanging from his belt a haversack, water bottle and bayonet, the other only had a bayonet. On his back my orderly had a nicely squared pack (my commanding officer is like that) while his opposite number had a rucksack-like bag. While I was watching he took out its contents which were—a water bottle, flat ration tin with tight-fitting lid (how different from our clumsy pattern), jersey, socks, towel, laces and soap. His pouches were smaller than Lal Singh's and I estimated would carry 50 rounds. Here was a workmanlike kit and it appeared that the men of the "Looking Glass" army would be more agile across country than ours. The major's orderly had on a hat like the Gurkhas wear, only I noticed that the crown was thick and the brim thin and that it had two hooks so that it could be caught up on each side, after the method employed by the South Africans when fighting in German South West. (Denys Rietz in his book "Trekking On" mentions how useful this was for concealment purposes.)

However, it was time for parade and as we went out, Lal Singh put his hand to his forehead to shade his eyes from the sun.

I had just been out with my company doing an attack. I had worked out a great scheme to bring in the use of the Lewis guns by the forward platoon commanders. The company umpires had done their bit and the platoon commanders had made their little plans, with the result that the Lewis gun on the right had wiped out the reserve rifle section of the left platoon. This did not seem quite right and it happened that had I, as company commander, had any means of producing a fair volume of fire, I could have put in a reserve platoon—a force big enough to effect something—and won a pretty victory. Another point that struck me was that the effect that can be produced by one rifle section in one place and one in another is practically negligible and seems a waste of effort. I made a note to look up the principles of war.

When I got back to my study and had jotted down what I thought was the principle of war—"economy of force"—I looked it up in the book and found that it was now only a corollary to another principle—"concentration of effort." I was starting to ponder over this when I found myself glancing at a "Looking Glass" manual called "Platoon Leading." I liked the fact that the man in charge was called a "Platoon Leader" and not a "Platoon Commander" as with us. The distinction is subtle, but marked. My opposite number had obviously been exercising his mind over the problem of light machine-guns as a company or a platoon weapon and had made notes to this effect:

The area for manœuvre by a platoon is small and it will usually not be possible to co-ordinate any movements with platoons on the right and left when held up by enemy fire at close range.

The company commander has a larger area in which to manœuvre, but has no means of producing adequate covering fire. If he details a platoon to provide this, it has only one light machine-gun plus the rifles, if they can be used, to produce the necessary effect.

The time has come to consider a possible reorganization of the company into—

Company Headquarters.

One light machine-gun platoon.
Three rifle platoons.

The advantages of this are—

The officer with the largest area in which to manœuvre has the power of combining fire and movement.

The more highly trained officer has the means of making a combined fire and movement plan.

There will be co-ordinated effort by the light machine-guns instead of haphazard fire.

When the leading platoons are held up, the effect of a body of forty men advancing under heavy covering fire is far more likely to achieve success than a body of ten men under weak covering fire.

The disadvantages are—

There will be occasions when rifle platoons will require a light machine-gun from the start.

In defence there is bound to be a certain amount of dispersion of the light machine-guns to cover the company frontage.

Both these disadvantages can be overcome by placing light machine-gun sections temporarily under command of rifle platoon commanders.

The parrot cry that the "light machine-gun is the platoon commander's weapon," whatever that may mean, will have to be broken down.

The advantages of having a light machine-gun platoon in a company well outweigh the disadvantages and the introduction of such an organization will increase minor tactical ability in the field.

I came to with a start as Field Service Regulations fell to the ground and as I picked it up I wondered which were the more important—the principles of war or the principles of organization.

It was about three o'clock on a Thursday afternoon late in March and I was sitting at my desk doing one of my annual tasks. On the left side of the table was a large collection of books of all sizes, on the right-hand side was a smaller heap and between them, in the centre, a pile of pamphlets, a pair of scissors and a paste pot. The floor was scattered with small bits of paper of different sizes and shapes. The annual inspection was getting near. For some days I had been at this pastime and I had

just pasted in the sixth amendment to a sentence; this had, by the substitution of an "and" for an "or" in the fifth amendment, reintroduced the original wording of the regulation as it had first been published two years before.

Reaching for a fresh amendment I happened to look up and saw in the "Looking Glass" room a desk similar to mine, but with very few books on it. I tried hard to read the titles of the smaller books, but could not. On the cover of one of the larger books I saw a white label which appeared to read—

I PUNJAB RIFLES LENDING LIBRARY.

I was trying to understand what this meant when suddenly I found myself in the "Looking Glass" room and I read the label—

1 PUNJAB RIFLES LENDING LIBRARY.

As I read the title I knew in a flash the system on which the "Looking Glass" army based their issue of books. As far as I can remember, and I wrote it down shortly afterwards, it was on these lines:

It is wrong to issue books broadcast without considering what happens to them at the other end of the scale. Following the books comes a spate of amendments which, if the books are to be of any use, must be entered in their correct places. If officers and clerks are thoroughly conscientious in this respect there is a lot of duplication and many hours have to be spent with the paste pot and scissors.

Books divide themselves into four categories—

Those which have a general interest.
Those which have a particular reference only.
Those which must be kept up in a number of small offices.
Those which the individual officer must keep up.

From the point of view of the greatest reader of these books—the officer—they can be divided into two classes—

Those which he reads continually and places on his bedside table for study when he wakes up in the night.
Those which he requires when the bugbear of examinations raises its head.

He and his wife are reluctantly prepared to keep the former category amended, but he is not prepared to do the same for the latter in which he only has a passing interest.

The matter is further complicated by the books themselves being classified as—

Those which can only be read behind bars with an armed guard outside.

Those which should not leave a room without a receipt and should be locked up over the week-end or when a superior officer is expected.

Those which can be left lying about in "taxis."

The "Looking Glass" army gets over these difficulties by forming two unit libraries for the books that the individual officer need not always be studying.

A reference library the books of which can only be consulted in a particular place.

A lending library, specially for officers studying for examinations.

The keeping up to date of the books in these libraries is the definite responsibility of a clerk detailed by the commanding officer.

The original issuer of the books has to consider more headings than these, but the formation of these libraries keeps down the number of books required. Headings under which the issue of books are considered in the "Looking Glass" army are—

Headquarters office.
Sub-unit offices.
Mobilization boxes.
Court Martial box.
Unit school.
Individuals.
Reference library.
Lending library.

Each category, secret, confidential and security, are considered under these headings as well as the ordinary kind of book. I came to the conclusion that there were certain big advantages in this system. For instance it appears that there is—

A financial gain in that fewer books are required.

A sufficiency of thoroughly up-to-date books.

A saving of time to officers and clerks in having fewer amendments to enter up and in knowing where to find the latest copy of a regulation not frequently consulted.

As I was pondering over these matters I heard a voice from the next room say, "Tea is ready, darling," and I found myself at my own desk again. As I got up a dust devil came in through one window and out through the other, taking with it most of the amendments. I watched some of them up to 300 feet in the air.

I am going up for my promotion examination and have been struggling to digest the repair organization behind mechanised units.

As far as I can make out there are two repair organizations both dealing with mechanical engineering, yet each overlapping the other. One organization deals with all vehicles, fighting and non-fighting, while the other deals with actual weapons and instruments. I have also gathered, perhaps erroneously, that certain machines are common to all workshops and that the concentration of machinery in one place is convenient and economical. With armoured fighting vehicles it is difficult to separate the weapon from the vehicle which is in many cases, of itself, part of the weapon. When I asked a certain senior officer for enlightenment on this, he replied that it was easy and that a chalk line was drawn on a tank and below the line was dealt with by one organization and above it by the other.

I tried to think out what happened to a tank after it had been hit by a shell which damaged both the engine and the gun. The first thing that occurred was that it was dragged out of action and carried to the people who repair engines and tracks. There, if my garage is any criterion, it was taken to pieces and after various bits had been overlooked the first time it was assembled, it was put together again. Eventually, after a great many forms had been made out in quadruplicate, it left the workshop under its own steam and went to the place where the gun was dealt with. Here everything above the chalk line was taken to pieces, repairs effected and many more forms filled in. Probably it then went back to the first workshop to see if any bits of the gun had been left lying about in the engine. After that it was ready for reissue to the unit. All this meant that the machine was, in two separate places and at two different times, completely out of action. The waste of time can easily be imagined and to this must be added the expense of keeping duplicate machines and often duplicate power units. The whole thing is ludicrous.

I again consulted my good natured senior and explained my thoughts to him and he told me that I was probably correct, but that I had missed the point. That was that our army is not an army at all, but is like one of those exotic cocktails in which the colours remain in layers and do not mix. Only in our case it is "cap badges" and not colours. He explained to me the antiquity and the iniquity of cap badges which resulted in a man wearing a "one-ended spanner," as his badge could only work a machine in the organization of "one-ended spannerers," and that the wearer of a "two-ended spanner" badge was in a similar case. He said that he could show me some workshops, a few miles apart in one cantonment, where, in one place a man with a "one-ended spanner" badge could not keep pace with the work on his machine, and in the other a "two-ended spanner" man sat idle at an exactly similar machine. However, he told me not to give up hope, as, anyhow, we had managed to get the "horse-shoe" badge men into motors.

As I was sitting in my study trying to get this complicated system into my head, I found myself at the desk in the "Looking Glass" room, reading some notes made by my opposite number who was obviously studying for his examination. The notes were very long and I could only remember bits of them when I came to jot them down.

First of all there was what he called the "prehistoric" (the word is his, not mine) system which was too like ours for my liking. Then he had a paragraph of eulogy on a certain Secretary of State who had made great changes. A bit I remember exactly went like this:

"Mr. Pittpole first of all abolished the difference between the combatant and the non-combatant, as he realised that, when nations go to war, the women who produce the fighting men or fill the shells are helping their country just as much as the soldiers with their arms. In place of the old distinction he made a new one which was based on training only; he divided the nation into those trained in arms and those not so trained. He was emphatic that it was the duty of the former to provide adequate security for the latter, just as it was the duty of the latter to ensure that the former had the wherewithal to keep themselves and their arms in being."

The essentials of maintenance in the "Looking Glass" army appeared to be four—

Manufacture.

Repair.

Stock and issue.

Carrying.

Of these only the last three were likely to be in the theatre of operations and were represented at General Headquarters by high officials. The "Looking Glass" army appeared at heart to be very conservative, as the titles chosen for these generals were—

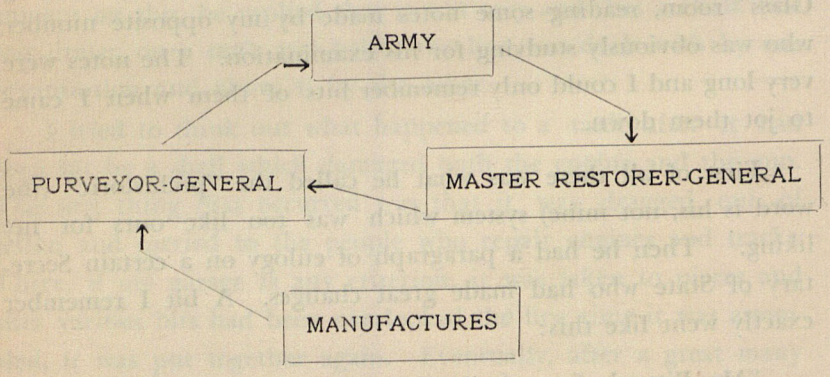
Master Restorer-General.

Purveyor-General.

Transporter-General.

They had branches under them for dealing with the various services and departments, but each general dealt with everything within his own sphere. The Purveyor-General, for instance, supplied the army with food, weapons, vehicles, stores of all kinds, including technical stores, animals and ammunition.

The system could be reduced to a simple diagram thus—



I gathered that the introduction of the scheme had, by no means, been easy and that a tremendous opposition had been put up by elderly wearers of cap badges and several had gone so far as to put up the resignation barrage, but when these resignations were accepted and no reconsideration allowed, opposition stopped. I understand that the "Looking Glass" army considered their system to be simple, quick and economical in the field.

Having thus far achieved success, Mr. Pittpole went still further, as he realised that those trained in arms were not an army, but a collection of arms, branches and units, all of which put *esprit de corps* before *esprit d'armée*. The result of this was that

vested interests in certain respects pulled against each other to the detriment of the efficiency of the whole. This was uneconomical and meant that the full power of the army could not be exerted. This was not the case in the other Services which called themselves the "Looking Glass Seaservice" and the "Looking Glass Birdservice." Mr. Pittpole realised that it was not possible at that moment to make a "Looking Glass Landservice" as visualised by Mr. Kipling in his "Army of a Dream," but he considered that a lot could be done to minimize the dangers of non-co-operation. The differences were largely accentuated by distinctions in dress and badge and also by the fact that there were two cadet colleges.

Mr. Pittpole laid it down as an axiom that the army was more important than the individuals who go to make it up, and made the following decisions for troops trained in the use of arms:

General lists for officers of cavalry, artillery, engineers, signals, infantry and tankery.

One cadet college where cadets were taught the rudiments of the work of all arms. During the last period of his training the cadet was allowed, but not guaranteed, choice for a particular arm.

Between seven and ten years service there was attendance at a junior officers' school where the tactics of all arms were again considered.

Between twenty and twenty-three years service attendance at a senior officers' school was compulsory.

After command of a unit, officers selected for the higher appointments were on a general list. Any officer could be posted to any command, for instance, a late cavalry officer could be and was selected to go to an artillery command and equally a late infantry officer was posted to a cavalry brigade.

I came to with a start as my orderly came in with a letter from the adjutant stating that there would be a meeting in the commanding officer's office to discuss the proposal from the first battalion that the regimental badge should be changed from an African to an Indian elephant.

I had been promoted major at the beginning of the hot weather and, after sending my family to the hills, was ready to go to mess for the first time as a field officer. I was very proud of my jingling spurs and was looking forward to being called "sir" and treated with the respect due to my new rank. Incidentally I felt

quite relieved in that I need no longer call Jones, who had been promoted a few months before, "major." As there was half an hour to spare I went into my study to read in a comfortable chair. After going through a chapter of Field Service Regulations I happened to glance into the looking glass and saw my opposite number also dressed for mess. His appearance horrified me. He had no spurs, I have already told you that he was a field officer, and was wearing white trousers and Wellington boots. He had a bright silk "kummerband," a silk shirt with a soft collar and a coat just like mine except that it had no badges of rank. It looked thoroughly cool and comfortable and the wearer could sit down in any chair without disaster. It was very like the kit my commanding officer wears in his own bungalow, but I thought of his face had anyone dared to turn up in mess like that.

The "Looking Glass" major beckoned to me and I accompanied him to his mess which was very like ours on the outside. On the way in I noticed that, whereas we have a large and expensive band, his mess had a compact-looking string orchestra which must have cost a great deal less than ours. Inside the mess there was a different atmosphere, more homelike to my mind. No one got up and said, "Good evening, sir" when we entered, as would have happened in our mess, but, at the same time, everyone was very friendly and passed the time of day with my host. I must have been invisible, for they would have naturally got up had I been a guest. The "Looking Glass" major explained to me that Mr. Pittpole had been appalled by the ultra-military way officers lived when off duty and he had succeeded in cutting down "seniority-itis" off parade. He had divided officers into three social seniorities; group one was majors and below, group two colonels and brigadiers and group three general officers. All members of the same group were equal when off parade, the only exception being that a formation commander was called "sir" by those actually serving in that formation; that is a commanding officer called his own brigadier "sir," but not the brigadier of a neighbouring formation. Mr. Pittpole had also laid down that the mess was the bachelor officers' home and that they should be as nearly comfortable as was possible in it, as the married officer was in his home. Amid the cheers of the junior officers he had publicly burnt with his own hand that paragraph in regulations which stated that mess was a parade.

As I was leaving I thought that I heard girlish laughter within the sacred precinct and my friend explained that they had a ladies' room where officers could return hospitality adequately yet cheaply. It had made a great difference to the pockets of the subalterns who were able to take their "fairies" out to dinner and the "movies" without being ruined, as they would have been had they patronized the local hotel. I gathered that this room was most popular.

I woke up with a start, got up to look at the clock and discovered that I had only five minutes in which to get to the mess. I hastily bent down to pick up my pipe with the usual result that both back trouser buttons were torn away. I dashed to the door to call my bearer, tripped over my spurs and fell full length on the floor.

Athough you may not think it, there are brains in our family and I recently wrote to my brother who is on the staff about some business in which we are both concerned. His answer was unintelligible to me and ran as follows:

"Unfortunately, *inter alia,* I shall be away with *dadph* from *excl* 7 Apr to *incl* 12 Apr and am *not likely to be able to* give you a complete answer now, but I agree, *mutatis mutandis,* with your proposals. Later *ad hoc* arrangements for the *implementation* of our decision *will issue.*"

After studying this for some time I put it on my table and the looking glass with a loud report fragmentated.

THE MACHINERY OF MOBILIZATION *

By Lt.-Colonel A. V. Anderson, M.B.E., R.E.

The basis of all mobilization preparations rests primarily upon the orders and instructions laid down in Mobilization Regulations and upon the mobilization schemes prepared in accordance with these regulations by units, formations and individuals. If these schemes are complete the order to mobilize should see the peace-time Army and the units which compose it rapidly and automatically transforming themselves from their peace condition of comparative unreadiness into a condition in which they can move and fight, or carry out such other role as is required of them, at a moment's notice. The process may be a complex one and may involve many detailed arrangements necessitating foresight and thoroughness, but once these arrangements have been made the subsequent procedure should be simple and the units concerned should be able to pass without difficulty from a peace to a war footing. If this were all that were required no major problems would arise but this process of mobilization, defined in its narrowest sense, is only the first stage towards making an army ready for war.

The object of Mobilization Regulations and schemes is to ensure that, so far as can be foreseen, every detail connected with the change from a peace to a war footing has been thought out in peace, and within the limits of that object these regulations and schemes should be as elaborate, as definite and as uncompromising as careful preparation in peace can make them. Their object is, however, definitely limited and they are not, and should not be, concerned with any other process once that object has been attained. When they have ensured that the army, as it exists in peace and as it is located in peace, can pass rapidly to a war footing their functions have ended and their usefulness is over.

It is well known that the army in peace does not include many administrative and ancillary units which are required in war and that even for a minor campaign many units of various types must be raised specially for the occasion. The necessity for economy and for making the best use in peace of the money

*See "The Principles of Mobilization" in the July number of the U.S.I. Journal.

available makes it certain that this will always be the case to some extent at least, and as things stand to-day we find that the reaction from the war of 1914—1918, combined with the effect of economic depression, has resulted in the army's administrative establishments being cut to the bare minimum required for its peace maintenance. This minimum will always be insufficient in quantity and quality for the greater demands of war and arrangements must be made to meet these demands in full with the alternative of risking an administrative breakdown such as occurred in the Crimea or in Mesopotamia in 1916. These arrangements find no place in Mobilization Regulations and must be provided for elsewhere.

A further consideration is that the army, even when completed with its additional administrative machinery, is seldom ideally located in peace to carry out any particular plan of campaign. The multiplicity of tasks which the army may be called upon to perform is sufficient to ensure this and, in India particularly, the necessity for providing training facilities and for ensuring for the troops in peace a reasonable share of the amenities of life makes it doubly certain. To the process of mobilization, therefore, must be added the further process of concentrating the army in the area or areas from which it will be in a position to carry out the first steps in the plan of campaign. This process of concentration is in itself a complicated and intricate one requiring the most detailed arrangements, and these arrangements must be prepared beforehand and laid down somewhere.

Even when all this has been done another requirement still remains to be satisfied, as an army in the field has to be maintained in personnel, animals, clothing, equipment and supplies from the moment the first troops arrive in the concentration area. The machinery of supply has already been allowed for, but the machine will not work until power is applied to it and supplies cannot be delivered to the consumers until bases, depots and other holding establishments have been stocked and until the flow of supplies from rear to front has been established. This is not a process which will happen automatically unless all the necessary preparations have been made and until the necessary orders have been issued. These preparations and orders must be completed in peace and a place must be found for them so that they can rapidly be brought into force in war.

These additional requirements are met by the preparation in peace of a detailed plan or plans designed to satisfy the conditions arising from a specific campaign or campaigns, as visualized from a careful appreciation of the many factors involved. In certain cases the role of the army may be clear-cut and it may be possible to forecast its task so accurately that preparations can be confined to the production of one plan which will enable the army to carry out that role; in other cases several possible contingencies may have to be allowed for in which event alternative plans may have to be prepared; in all cases minor or subsidiary tasks will require consideration, the plans for which should fit as far as possible into the framework of the main plan. As these plans are prepared in peace and at leisure, time is available for their elaboration in great detail and, as the assumptions on which they are based may any day become a reality, there is every justification for elaboration and for making as complete and as thorough preparations as possible. The production of appreciations and of plans of this nature will always be a fundamental part of the duties of the higher command and of the staff of the army in peace and, if the army is to be prepared to meet the conditions of the next war rather than those of the last, these appreciations and plans must to a large extent form the basis upon which the policy governing organization, training and equipment is built. So much must be admitted, but at the same time it should be pointed out that if these plans are allowed undue influence or if too much belief is attached to their infallibility the results may be unfortunate.

It is a commonplace that no war has ever taken the exact form which has previously been envisaged in peace and it has seldom been found possible to implement in its entirety a plan of campaign prepared before the commencement of operations. The Great War had been foreseen by all the nations involved, the object of each of the contending armies was clear at least to its own commanders, plans had been prepared to meet a comparatively simple issue upon as firm a basis as can ever normally be possible and yet in no single instance did the first moves go strictly as they were expected. The French plan had to be dropped at a very early date and an entirely fresh one substituted; the German plan was subjected to major alterations; even the arrangements for concentrating the British Expeditionary

Force in France were changed and instead of six divisions, four only proceeded overseas with the first contingent. The real value of the plans which had been prepared in such detail was to set the machine in motion and thereafter to form the means by which rapid improvisation could be carried out. This, it is believed, will always prove to be the true value of such plans, their basis is only forecast and war is too much a matter of the unforeseen, of surprise and of uncertainty to make it possible for plans worked out upon peace forecasts to prove workable in every detail.

Unfortunately there will always be a tendency to invest these plans with a greater sanctity than they merit and to invest their details with the same authority as the premises upon which they are founded and which have been officially accepted as ruling factors in determining the policy governing the organization, training and equipment of the army for war. The plan is so complete, every detail appears to have been provided for, every part dovetails so exactly into every other part that it is difficult to visualize the basis of the plan being correct and the edifice built upon that basis with so much effort and so much trouble being unsuitable. This, however, may well prove the case and, if it is then found that our organization and our administrative preparations have been allowed to become too rigid and too specialized, it may be impossible to adapt the plan to meet the unexpected or to modify dispositions in time to deal with an unforeseen danger. These plans will always be a necessary part of our preparations for war but unless we continually remind ourselves of their real functions and of their limitations they will narrow our vision and end by defeating the object for which they were intended.

The ideal plan should include arrangements for placing upon a war footing the maximum fighting force which can be made available, complete with all ancillary units required for a major campaign; it should if possible allow for the production of this maximum force in stages which can be implemented either in sequence or simultaneously; it should include detailed arrangements for concentrating this force in the area or areas where its employment is considered most likely and for its initial maintenance in men, animals and material. It should not, however, prejudice in any way the power of the higher command to effect

major alterations at short notice nor should it rule out of consideration the possibility of an entirely different plan being forced upon the commander by the action of the enemy or by the development of an unforeseen situation.

For many reasons it may on occasion be desirable to place the army or only a portion of it on a war footing without taking the serious step of ordering mobilization. This can be effected by the issue whenever necessary of specific *ad hoc* orders detailing the force and ordering specifically the various steps to be taken to enable it to make itself mobile and fit to carry out the role which is expected of it. The chief objection to this method of issuing specific orders on each occasion is that they take time to prepare and still further time to issue and in cases of urgency it may be necessary for the troops to move before detailed orders can reach them. Another disadvantage is that there will always tend to be a lack of continuity in such orders and even when they are received by the troops there will often be changes in detail and these details will tend to obscure the principles upon which the orders are based. It is desirable therefore that the means should exist whereby effect can be rapidly given to what may be called the basic processes of mobilization without going to the extent of invoking the full implications involved by the order to mobilize. This result can be ensured by the issue in peace of "special procedure" regulations or "standing orders" which cover these basic processes and which can be adopted at short notice by troops called upon to operate under conditions when mobilization for one reason or another is considered undesirable. These regulations should include orders as to the organization and establishments to be adopted, procedure as regards depots, reinforcements and individuals' records, the system of pay accounting to be adopted, arrangements for completing the unit in its war outfit and for maintaining it in supplies, clothing and equipment, and the disposal of surplus peace holdings and families. These orders should not be designed to meet any particular case but should be of general application and should include, as far as possible, every separate process which is gone through when a unit passes from a peace to a war footing. In the final result the regulations as a whole may not be found to be entirely appropriate to a particular situation which may arise but this difficulty

can be overcome by making their application permissive rather than obligatory, in part or in whole.

These special regulations or "standing orders" can with advantage go somewhat further and authorise in advance certain measures, such as the war scales of disability pensions, which would otherwise have to be authorised with retrospective effect after much delay and much correspondence. This extension of the scope of these regulations must, however, be undertaken with extreme caution as the temptation to cater for peculiar administrative requirements of a particular situation will, if yielded to, only result in rigidity and in the inability of the regulations to deal with the actual situation which will eventually arise. Any provisions of this nature which are of purely local importance should be included in the specific plan of operations which must, or should, exist to deal with the situation envisaged.

To sum up, Mobilization Regulations and mobilization schemes should contain in great detail all arrangements to enable the army as it exists in peace to pass from a peace to a war footing but should not be concerned with any subsequent procedure. Specific plans should exist which should cover all further arrangements required to meet any particular situation which may be considered possible but these plans should not be too rigid nor should they be allowed to have undue influence upon the organization, equipment or peace location of the army. Finally the army should possess the means of placing itself upon a war footing or of producing a small force upon a war footing without having to resort to mobilizaion and, as Mobilization Regulations should be kept free from the influence of any particular plan of operations, so should these subsidiary regulations be of as general an application as possible. These requirements may constitute the ideal to be aimed at, but the closer we can manage to approach them, the more complete our mobilization machinery will be.

ORGANISED CHEMICAL INDUSTRY*

Its relaton to the outlook in Europe

By Herbert Levinstein, Ph.D., F.I.C.

A nation does not make war merely with the bodies of her armed soldiers directed by the High Command and General Staff, but with the whole of her resources, which include the industries, the discipline, and the will to win of the civilian population. The most careful plans for mobilising military forces have been for generations past docketed at the headquarters of the General Staff of the Great Powers. Industrial mobilisation, or the provision of complete plans for industrial mobilisation, is comparatively new and is a result of the above doctrine learnt during the Great War at bitter cost.

That war involving the principal Powers of Europe may come at any moment is clear. I do not say that war on a European scale is necessarily imminent, but I do say that the possibility is always there. When it does come it will be sudden and overwhelming. It is not, therefore, surprising that England is attempting to rearm. Our foreign policy is, and must remain, a policy of peace, but lack of power to make such policy effective may well be more dangerous to world peace than any other single factor in Europe.

Industries quite unprepared for war cannot suddenly be switched on to the requirements of war without great delay and immense cost. If planned in peace time and spread over a number of years, rearmament goes forward methodically and comparatively quickly in a totalitarian state. Here in England, where rearmament at present has to be accomplished without dislocating the life of the people or the industries by which they live, the difficulties are much greater.

Sir Thomas Inskip, the co-ordinating Minister, tells us that the plan for providing an adequate air force and for the requirements of an army, not yet mechanised or provided in adequate quantity with modern weapons, is meeting with success. In so far as the mechanical equipment for the fighting services is being

---

* From Presidential Address delivered at the Fifteenth Annual Corporate Meeting of the Institution of Chemical Engineers in London on February 26th.

(Reprinted by kind permission of the Chemical Trade Journal and Chemical Engineers.)

obtained from firms outside the armaments group, many obstacles are, I have no doubt, being encountered. Such outside firms differ greatly in character, and have but little centralised organisation. We in the chemical industry went through these difficulties in an acute form during the last war owing to the many independent chemical firms without any central control. We may be thankful, for it is of great national importance that the chemical industry is to-day more closely knit.

The chemical industry is now, in my opinion, the most up-to-date and best organised industry in this country. The contrast with 1914 is indeed astonishing.

The Position in 1914

In 1914 the idea of war seemed bizarre to the commercial classes of this country. This was not the case in Germany, where thoughts of war were never far away and talk of war frequent, if one visited one's competitors in the chemical world in that country.

Picric acid (lyddite) was the high explosive of the army. Small quantities of T.N.T. had indeed been purchased by the War Office, but from abroad. I should hesitate to say that the Navy had any high explosives at all; at any rate, torpedo heads and mines were filled with gun-cotton. Naval and military uniforms were dyed with German dyes. It is a little known fact that, owing to the forethought of our industry and the quick measures spontaneously taken, the woollen manufacturers were never held up by a shortage of khaki dyes. If they had been, Kitchener's Army would have come into the field months later.

At the outbreak of war the main responsibility for the supply of high explosives to the army lay with the Director of Artillery at the War Office. Two branches were concerned: A.-6 for high explosives and A.-7 for propellants. The quantity of picric acid that could be manufactured was small and the method wasteful. When T.N.T. was adopted by us as a high explosive during the war, following the German example, there was practically no established manufacture in this country.

Difficulties of the Moulton Committee

A Committee to investigate the subject was formed, and held its first meeting on November 16th, 1914—after we had been at war for three and a half months. Of this Committee, Lord Moulton, the famous patent lawyer, was the chairman, the other

members being: Mr. (now Sir Percy) Ashley, Board of Trade; Dr. Chas. Carpenter, Governor of the South Metropolitan Gas Company; Major A. Cooper-Key, H. M. Chief Inspector of Explosives, Home Office; Mr. U. F. Wintour, Director of Army Contracts; Dr. W. R. Hodgkinson; Mr. W. Macnab; Mr. P. H. Hanson (Deputy for Mr. Wintour); Sir R. Southern Holland; with Mr. R. R. Linfield as Secretary.

The composition of this Committee indicates clearly the difficulty the Government had in 1914 in approaching the chemical industry. At the beginning, members of the Committee had to go round the country with a trade directory—Lord Moulton himself was most energetic in this respect—interviewing manufacturers to undertake the manufacture of high explosives.

When Lord Moulton came to Manchester, amongst others he saw me, and asked me if I would turn over the nitrating plant at Blackley to the manufacture of T.N.T. I told him that this plant supplied the requirements of our dye-stuff works, which seemed to me to be of crucial importance at the time. The amount of T.N.T. that it could make was comparatively small, and the change-over would close down the dye-stuff plant. The situation, close to a dense population, rendered the location undesirable for an explosives' works. If he wished us to put down a T.N.T. plant, we would do so, but with great respect, not at Blackley. I do not think that Lord Moulton appreciated at the time, or even later, this common-sense view. But all through the war similar rivalry between departments existed.

At that time the requirements of high explosives were estimated to be approximately 1,400 tons per month. It was found that there were a few firms, mostly small firms, able to manufacture picric acid. In January, 1915, after five months of war, five firms were so engaged with a total monthly output of approximately 130 tons; T.N.T. was being made by two firms, with a monthly production of 35 tons.

To show how amateurish at that time was the direction, I might say that Lord Moulton was of opinion that there would be plenty of fuming sulphuric acid available for both his programme and for others. He persuaded me not to put down the fuming-acid plant required to serve the large intermediates department of the new dye-stuff industry. Needless to say, the supply of this promised acid was not available when it was wanted.

In December 1914, the Committee recommended that the Government should take possession of all the picric acid in the country. By June 1915, the responsibility for providing all explosives to the army was transferred from the War Office to the Department of Explosives Supply (D.E.S., Ministry of Munitions).

Help from the Du Pont Company

At this point, I would like to remind you of the valuable service rendered to the Allied cause by the Du Pont Company of America. Their great organisation threw itself wholeheartedly into the manufacture of the propellants and high explosives required by the Allies, and especially by France. As time went on, the position changed and we were able not only to meet our own requirements but also to help our Allies.

We were able to buy from abroad, in the course of the war, the following quantities, which at the time were of vital importance, as they helped to bridge the gap: propellant—nitro-cellulose powder, 220,239 tons; nitro-glycerine powder, 54,855 tons; High Explosive—tri-nitro-toluol, 31,600 tons; picric acid, 1,383 tons; ammonium nitrate, 18,300 tons.

All methods for making picric acid involved the use of benzene; all but one, the use of phenol. The phenol obtained from coal tar proved in this country, as also in Germany, insufficient, and plants for the synthetic product were erected by various concerns under the direct auspices of the department. Five private firms and three Government factories (one of which never came into real production) were engaged in making synthetic phenol. No less than ninety-eight firms were contractors for supplying benzole, toluole and carbolic acid crystals. By November 1916 there were seventeen makers of picric acid in this country, and the production was 449 tons per week or 1,800 tons per month. The total production of picric acid in the country during the war was approximately 71,000 tons, an average of 1,400 tons per month, which was the estimated requirement for all explosives in 1915.

How the T.N.T. demand was met

At first the toluene required for T.N.T. was contained in benzole obtained from coke ovens, gas-works and tar distillers. The output of benzole in 1913 was 18 million gallons from coke-ovens and 5 million gallons from gas-works. The extraction of

toluene was a problem, as few distillers had suitable fractionating plants.

Very considerable difficulties were experienced in obtaining delivery of T.N.T. from entirely inexperienced people with whom in certain cases contracts were placed. In due course, as the department grew and their own plants came into operation, some of these works were taken over and administered by the Government. The location of some of these plants was such as to startle any chemical engineer conversant with the manufacture of explosives.

The Munitions (Liability for Explosions) Act of 1916 was passed to relieve contractors from liability in respect of loss and damage from explosion. The risks run by the workers, the property owners and inhabitants of the neighbouring crowded areas, in which many of these factories were situated, was having a prejudicial effect on the prices required by contractors.

Altogether sixteen private firms were employed in making T.N.T., as well as twelve Government factories. In November 1916, a weekly output of 1,080 tons of T.N.T. was produced from seventeen sources—that is, more than three times the estimated total requirements of high explosives originally made. The total production of T.N.T. in this country during the war was 172,647 tons, an average of 3,385 tons per month.

The amount of toluene obtained from gas-works and coke-ovens would have been quite inadequate for the manufacture of the above quantities of T.N.T. Here the Dutch came to our assistance. A fraction of Borneo petroleum contained about 55 per cent. to 60 per cent. of toluene which could not be separated by fractional distillation. On nitration to the mononitro body only the toluene in the fraction reacted. The mononitro toluene could be separated from the unreactive paraffins very simply. This Borneo petroleum became indispensable to the completion of the T.N.T. programme.

Ammonium Nitrate for Amatol Production

The most important high explosive used towards the latter end of the war was neither picric acid nor T.N.T. but amatol, which consists of a mixture of ammonium nitrate and T.N.T., the 80—20 mixture being largely used. The pre-war production of ammonium nitrate in this country was negligible. Calcium nitrate could, however, be imported from Norway, where the Birkeland-

Eyde process was worked on a large scale. In this important work the great firm of Brunner Mond played the leading part, but the Ammonia Soda Company also did good work and was an early supplier.

The first contracts for ammonium nitrate gave a weekly output of about 150 tons. With increased plant and the erection of new factories, the weekly output reached the imposing figure of over 3,000 tons. The total production in this country during the war of ammonium nitrate was 322,181 tons, much more than the combined output of picric acid and T.N.T.

We became independent of oleum only in the early part of 1916. The national factories put up Grillo plants, burning exclusively sulphur, not pyrites. To save sulphuric acid it became compulsory to use nitre cake, then a by-product of nitric acid manufacture, wherever possible. The department had no less than 115 different factories, including those of 42 firms, making sulphuric acid. By September 1918, the production of concentrated sulphuric acid and oleum was: sulphuric acid (C. O. V.) 4-5,000 tons per week; oleum, 5-6,000 tons per week.

The Shortage of Chemical Plant

There was little experience here in making chemical plant. Autoclaves, as used in the dye-stuff industry, came exclusively from Germany, as did all acid-resisting enamel-lined pans. Nearly everything had to be specially designed, little standard plant was available; few well-trained chemical engineers could be obtained. In 1916, two hundred and fifty chemists were recalled from the Chemical Corps in France for service at home, so acute was the shortage; and an appeal was even made to the Australian Government, who let us have twenty-two chemists.

The colossal size of some of the large national factories, which were erected towards the close of the war, will scarcely be realised by those who never saw them. Gretna was nine miles long, and 30,000 men were engaged at one time in its construction.

It should not be thought that the machine as it grew to maturity was careless of yields. It carried out a great piece of work in a highly competent manner, of which those associated with it may well be proud. Accountancy and costing, for instance, were carried out stringently. The waste lay in the hurried erection of *ad hoc* plants in war-time with largely unskilled personnel, using processes many of which had no peace-time value. We were

an unprepared, peaceful, individualistic and industrially unorganised people. Thus the war was prolonged almost beyond endurance while we prepared, organised, and then struck.

Germany's Flying Start

Very different was the position in Germany. Some years prior to the war the great dye-stuffs companies formed a combination, and at once, therefore, the German Government had the nucleus of a strongly centralised and organised industry for the chemical side of the production of munitions of war. This centralisation of authority proved to be of the utmost value to Germany.

The way in which plant most suitable to the process required was used was carried to the logical conclusion in that several factories might be concerned in the manufacture of one product. Thus a plant at Ludwigshafen was used before the war for the preparation of ethylene and ethylene chlorhydrin in the early stages of the synthetic indigo production. When mustard gas was being manufactured, this plant was used for the production of thiodiglycol, which was then sent to Leverkusen for conversion into mustard gas. In the same way, several other works combined in the preparation of diphenylarsinic acid in the azo-dye-stuff departments used for the production of diphenyl-chlorarsine.

Standardised plant used in the manufacture of dyes was converted for explosives production with extraordinary rapidity, in fact, one plant at Leverkusen, producing 250 tons per month of T.N.T., was put into operation in six weeks. The military importance of a well-organised dye and fine-chemical industry thus became apparent.

No expense was spared on the new chemical works erected in Germany during the war, the Oppau factory having, it is said, cost nearly £15,000,000. The buildings were of brick and concrete; engine-houses were lined with white tiles, offices and laboratories were most extensive, thoughtfully designed and ornamentally decorated. At the time of the armistice, Germany had the most perfect and up-to-date factories ready to start on civilian production, and there can be no doubt that these fine and elaborate works were definitely designed to ensure that, Germany, after her expected victory, would be able to assure complete control of the world's chemical markets. To show how this was frustrated would take me far beyond the scope of this address.

Post-War Developments in the British Industry

Since the war there have been several developments of importance in the organisation of chemical industry. The first and the most important was the formation of Imperial Chemical Industries, Ltd., in 1926, with a capital of £65,000,000, an amalgamation of Brunner Mond & Co., and the United Alkali Company with Nobel Industries and the British Dye-stuffs Corporation. With the exception of fine and pharmaceutical chemicals, artificial silk, films and photographic material, Imperial Chemical Industries, Ltd., covers the whole of the chemical industry. The omissions are mostly part of a sound policy. Imperial Chemical Industries, Ltd., does not manufacture finished products where existing firms to whom they supply either the raw materials or intermediate products cover the ground. The formation of Imperial Chemical Industries, Ltd., was made advisable, if not imperative, by the great German and American combines which could only thus be successfully met on level terms, a task brilliantly accomplished.

Another important step which took place in 1916, during the war, was the formation of the Association of British Chemical Manufacturers. As the result of endeavours to bring chemical manufacturers and plant workers together, and of the increasing interest in specialised branches of the industry, other associations, now numbering thirteen, have been formed and become affiliated to the Association. Among these, mention should be made of the British Chemical Plant Manufacturers' Association, founded in 1920.

Another development is the formation of our own Institution. This is a direct outcome of the war. The need for trained chemical engineers in industry became apparent during the war, and the late Professor Hinchley gathered together a band of enthusiasts who, after much effort, saw the Institution soundly established. The Institution is an examining and qualifying body, and can supply, in categories according to their professional experience, the names of a large number of trained chemical engineers whose services in war-time industry would undoubtedly be required, and this is appreciated by the relevant authorities.

LHASA MISSION 1936

Extracts from Diary of Events.

September 27th, Sunday

As far as possible Sunday is kept as a holiday. Morgan, Chapman, Nepean and Richardson climbed to 17,450 feet overlooking the Drepung monastery. It is a very holy place called Gyenbay Ri. A kind of *via sacra* marked with stones leads along a steep ridge to the summit which is covered with cairns and prayer flags. We were told that the Dalai Lama and every monk must climb the hill on certain occasions. Those who are too old for much effort go up on yaks. Only the yaks belonging to the Dalai Lama are allowed to graze on so sacred a mountain.

October 6th, Tuesday

The Regent, accompanied by two Shapés, one Depon, a Chief Secretary and many minor officials, left this morning for Samye monastery.

The streets were crowded with people taking this rare opportunity of seeing the Regent. Monks, holding coloured hangings and banners on long staffs, lined the route and officials were busily driving cattle and stragglers from the way. A guard-of-honour was waiting three miles from the city.

The Regent rode in a sedan chair of dark gold lacquer carried by bearers in green with red hats; beside him walked officials and a servant carrying the yellow state umbrella. Mounted outriders in tall conical hats with plumes, rode in front; the foremost carrying a sacred picture to ward off evil, the others with banners on lances.

Those officers who were accompanying the Regent rode in his procession and many monks and lay officials and servants made up his retinue.

All other officials of Lhasa were waiting to receive him at the park. Those of the highest rank wore yellow brocade robes embroidered with dragons of blue and gold; minor officials wore less resplendent brocade tunics and skirts of black silk; they had, perched on their heads, curious little white hats like cockle shells. The park was bright with all this finery and with the many shades of red and claret and the gilded hats worn by monk officials and incarnation lamas who were sitting on the grass or walking about

until the arrival of the Regent. On his arrival he walked from his chair, through ranks of bowing officers to a tent which had been prepared for the ceremony and when he had taken his seat the officials prostrated themselves three times before him. Then all came forward in a long stream and offered their scarves. The Regent blessed each according to his rank either with both hands or with one hand or with a tassel on the end of a stick. When all the scarves had been offered the company sat down in precedence on cushions of various heights and tea and rice were handed round. Norbhu and Richardson sat apart from the Tibetan officials, on the right of the Regent. The Chinese (who had arrived with flags flying and with an armed guard) sat opposite in the place of less honour, on the left.

The Regent soon left the tent and was carried in his chair the short distance to the river where two hide coracles tied together and decorated with yellow cloth even to the paddles, were waiting to take him across to where another tent and, presumably, more tea was awaiting him.

October 7th, Wednesday

No engagements. We seem to have come into more quiet times and can each return to his respective occupation. Mr. Gould, Norbhu and Richardson to their files; Chapman to sorting cinema films and flowers and to writing up bird notes; Dagg and Nepean to overhauling wireless and electrical equipment; and Morgan to his hospital where in a dingy Tibetan room (rather like a stable) lighted by an open well in the roof, he removes cataracts, amputates fingers, gives injections and performs the many other mysteries of his profession.

In front of the hospital is an encampment of tents which the patients with more serious illness, bring and inhabit while under treatment.

No engagements and nothing to record.

October 11th, Sunday

Morgan, Nepean, Dagg and Chapman climbed the hill on the other side of the Kyi Chu to collect seeds and take photographs. As this is the nearest hill to Lhasa there is an excellent bird's-eye view of the city, Potala and surrounding monasteries. In the tranquil early morning the whole vale is obscured in a thin mist of smoke drifting from the city. This is not only the result of innumerable dung fires, but each roof has at least one

stone incense burner where fragrant leaves are burnt to propitiate the gods. As we prepared to cross the Kyi Chu in coracles we saw herds of ponies brought down to the riverside to drink. At this time of the year, when the floods have subsided, and while there is still abundant pasture, herds of ponies and mules are brought down from Mongolia to Lhasa where they command a surprisingly high price—the average figure is about 200 rupees, while as much as 100 rupees is paid for a good ambling mule.

October 12th, Monday

Jetsun Kusho called to-day. She is a sister of Dorje Khagmo (the thunderbolt sow), the only woman incarnation in Tibet. She is a shy, little, old nun and has come to Lhasa from Samding, where she lives with Dorje Phagmo, to look after a brother who is ill.

October 18th, Sunday

To-day we visited Sera Monastery. Sera, Drepung and Ganden are the three vast monasteries significantly known as the Three Pillars of the State. Although there were 5,500 monks in Sera, compared with Drepung's 7,700, the former gives the impression of being only about a quarter as big—although both are more like fortified cities than the abodes of contemplative monks. Both monasteries gave one the same impression: narrow, steep-walled pathways leading deviously from college to college, huge dark vault-like temples, with floors slippery with the spillings of innumerable daily tea-drinkings. And in contrast to this magnificent frescoes on the outer walls of the temples, and hanging *tankas* within, more beautiful and richer in colour than any we have seen elsewhere. These depicted conventional subjects such as the Wheel of Life, a superb blazing god of wrath ten feet high surrounded by a thousand lesser deities, and a line of seated Buddhas each with a different expression—placid, saturnine or cynically smiling.

The roofs of these monasteries are the most beautiful parts. The top few feet of the walls are formed of innumerable willow twigs laid horizontally and cut straight like a half used hay-stack. This matt surface is ornamented with gold signs and stained a deep, rich maroon forming a most attractive contrast with the gilt ornaments on the roofs, some of which are of great size. Having drunk tea with each of the abbots of the four colleges we gave a donation to the monastery funds.

October 19th, Monday

The weather has suddenly changed from summer to winter conditions. A week ago some of us were bathing in the Kyi Chu which in the last few weeks has changed from a swirling brown torrent to a sparkling blue stream. To-day we woke up to find several inches of snow on the ground and a bitterly cold wind blowing.

October 20th, Tuesday

To-day we were challenged to a game of "soccer" by Lhasa United, a team picked from Tibetan, Ladaki (Mohammedan) and Nepalese sides.

They turned out in garish Harlequin-coloured shirts. After a good, clean, hard game the Mission Marmots (as we call ourselves) won by scoring the only goal of the day. The goal was so small that the only hope of scoring was to go through oneself with the ball. Playing at 11,800 feet is not as much of an ordeal as one would imagine, and we appeared to be no more breathless than our opponents.

October 21st, Wednesday

The snow still lies deep in the hills. The Tibetans say it is unusual to have snow so early in the year. The sky is continually overcast and it is bitterly cold.

The harsh-voiced cranes which formerly collected in hundreds on the stubble fields are now moving South. Fish-eagles, kites, and some of the smaller birds have already gone. But in their place many species previously absent from Lhasa, or seen only in small numbers, have come down from the North to enjoy the comparative warmth of this sheltered valley. Vast flocks of brahminy, teal, gadwall, and other ducks are to be seen on the Potala ponds; Harriers and buzzards beat the open country for unsuspecting mouse-harts and small birds and by the river-side the more hardy cormorant and Tibetan gull have taken the place of the tern and swallow.

October 27th, Tuesday

We all lunched with the Chikyah Khempo, a mild and courteous white-haired monk who is the head of the Ecclesiastical party.

On arrival—Indian tea with Jacob's biscuits and hard dried apricots.

Later—Bowl containing three sweet rose-flavoured dumplings in warm sweet milk. (Tung-yan.)

Chopsticks, and squares of Tibetan paper on which to put the chopsticks, were provided and renewed after this course.

After another interval many small dishes were put on the table. These contained:

Stewed mutton in gravy with onion and carrots.
Tinned herrings.
Halved green peaches.
Stewed peaches.
Tinned pine-apple slices.
Dried dates.
Chinese sweets. (Koten.)
Melon seeds.
Pea nuts.
Mongolian ham.
Yak tongue.
Pressed beef.
Plain beef.

Small dishes of sauce and a Chinese spoon were brought for the above and were retained for the rest of the meal. (Tsu-de'.)

A continuous supply of chang (Tibetan barley-beer) was provided.

Then the main course followed. The above small dishes were left on the table until the last course (15th) appeared and there was no longer room for them.

These courses appeared in one or two large China bowls which were put in the middle of the table so that each person could take what he wanted with his chopsticks or spoon.

The dumplings (courses 3, 6, 9, 14)—two or three on a small dish—were brought round to each guest.

1. Shark's fins and minced mutton in gravy. (Yu-ti.)

2. Fine mince rolled in butter with vermicelli, celery and cabbage. (Chi-chou.)

3. Firm mince meat in pastry. (Sha-pa-le.)

4. Slices of a very firm-fleshed fish (rather like tunny) with onion, carrot, and boiled bacon. (Bou-yu.)

5. Sea slugs in soup with boiled pork. (Hay-sing.)

6. Round meat dumplings. (Rupoutsi.)

7. Green peas and mince. (Tre-ma.)

8. Hard boiled eggs, quartered and attached to a similar quarter of mince, in sauce. (Bo-bo-yun-tse.)

9. Pastry dumplings. (Chou-tse.)

10. Bamboo roots with boiled pork in soup. (Sin-tse.)

11. Eels in soup with pork and onion. (Chang-yow-tse.)

12. Rice with raisins, cherries, etc. (Chu-mi.)

13. Small squares of sweet fried bread.

14. Jam dumplings with sponge cake. (Meko-pin lama cow.)

15. Shark's stomach (Yuto); Boiled pork and carrot (Hlobay); Minced yak (Teru); Pieces of mutton (Hor-ru); Steamed rice with four varieties of wet bread-pastry in the form of flowers, peaches, horse-shoes and also soup (Ti-mo-mo).

November 2nd, Monday

The opening meet of the Lhasa Vale Hunt, "Mr. Gould's Hounds," hunted by Nepean, started—rather surprisingly perhaps—by hunting Gould (who laid a red-hot trail of paper) for several miles. The "kill" occurred within a mile of our house. This was such a success that in future "Mr. Gould's Hounds" will hunt twice a week. The Tibetans, by the way, could not understand what we had lost. They also have a tiresome habit of sweeping up any odd bits of paper they find.

November 8th, Sunday

Gould, Nepean and Chapman, in the course of a ride, put up a fox and hunted him for several miles over rather difficult country. Since the inauguration of Mr. Gould's Hounds our ponies have become much more handy.

November 10th, Tuesday

A few days ago we were challenged by the Ladaki football team. To-day we received a note from their Captain asking us to refrain "from wearing those fearful boots which some of you used last time. Because we are not able to buy such boots in the market and because we fear if you use those boots."

We played on the somewhat stony parade ground in front of the Norbhu Lingka barracks, and beat them six-love. Their team ranged from a bearded shaven-headed goal-keeper to a crowd of boys who closely followed the ball in a breathless pack.

November 21st, Saturday

Tsarong came to dinner with eight or nine of his family. Once again we found what a valuable source of entertainment is our 16 millimetre projector. With a selection of films mainly consisting of Charlie Chaplain's pre-war successes and our own

colour films taken in Tibet, we kept an audience of about sixty people (including servants) enthralled for nearly four hours.

Tibetans are indeed delightfully easy to entertain: though anything but uncritical, they appreciate everything that is done for them, laugh at every opportunity, and generally convince their hosts that they have thoroughly enjoyed themselves.

November 23rd, Monday

To-day the Regent returned to Lhasa, while Richardson and Norbhu went, officially, to present scarves to him, Nepean and Chapman rode out to photograph the procession.

In the valley the early-morning light was still more attenuated by having to pierce a pall of smoke over Lhasa city where housewives were already lighting their dung fires and burning fragrant incense to Buddha. Looking eastward we were amazed to see the Potala looming mysteriously above the haze, unsubstantial, like some fairy castle conjured up by a magician and poised precariously above the earth. All at once the sun's rays lit up the golden shrines on the summit, and the outlines of the building emerged, now to assume the solidity of a vast mediæval castle.

Even at this hour could be heard the deep droning boom of the ten-foot-long monastery trumpets, and a monotonous beating of drums and cymbals.

As we rode along we passed many of the pious at their morning oblations. Although it is scarcely seven o'clock the beggars have already reached their stations—unless they have slept there all night. From one patchwork of rags a goitrous face appears with protruding tongue (in Tibet the usual sign of respect), while an emaciated arm with fist clenched and thumb raised importunes us for alms.

Here are a party of swarthy nomads Hor states visiting from Kham, or the Holy City for the first time, to see the Potala and especially the shrine of the late Dalai Lama. They are dressed in rough sheep skins and the women folk have their hair done in innumerable tiny plaits; on top of their heads are what appear to be several large yellow apricots each surmounted by a cherry; actually they are ornaments of amber and coral representing the savings of years. They are doing the holy morning walk, a longish circuit round the Potala. Each turns the inevitable prayer-wheel as he walks, and with downcast eyes murmurs the

interminable formula—OM MANE PADME HUM (the jewel is in the lotus). Several people lead tame sheep on yak-hair traces; many small dogs follow, usually with collars of tinkling bells round their necks. Some of the sheep are so accustomed to the proceeding that they follow without leads.

Here is a group of those whom we disrespectfully call "curb-crawlers." Bare-headed, dressed in coarse clothes with a leather apron in front, and flat wooden "shoes" on their hands, they prostrate their way round the holy walk. You see them lie flat on the ground with their hands outstretched in front of them, then they rise, bring their hands together in an attitude of prayer, take a step or two forward—just so far as their hands reached, and so it goes on, and their sins (one hopes) are purged away.

Among the crowd of worshippers, dressed much like the rest but usually preceded and followed by several servants, you may meet a member of the Cabinet or even the Duke himself—but not this morning. Like ourselves, to-day, all officials will be going out to pay their respects to the Regent.

He has been away from Lhasa nearly six weeks visiting monasteries. His chief task was to assist in the ceremony of placing the golden ornaments on the roof of the great monastery of Samye which has recently been rebuilt.

We are going as far as a village called Singdonka, four miles to the west of Lhasa, to film the procession as it mounts the steep village street. There is more traffic than usual to-day. Much of it is the Regent's baggage sent on ahead. Here is a train of sleek mules with its tents and camp furniture. Here the road is blocked by a herd of sleepy slow-moving yak returning to Lhasa for more barley-meal or wool. Respecting their sharp horns we leave the track and canter along on the grass where the hoar frost glitters purple in the thin sunlight. From the bordering marshes skeins of bar-headed geese rise and fly across the road with harsh cries, followed by lines of chestnut-yellow Brahminy ducks.

In honour of the Regent a line of stones has been put down on each side of the road, and at every few hundred yards improvised incense burners have been built of sods. When the Regent passes, azalea and artemesia leaves will be burnt to produce clouds of white smoke. And up above, quick to realize that something unusual is about to happen, are lammergeyers and vultures wheeling in great circles with apparently effortless wings. Passing

Drepung monastery, we reached Singdonka at eight o'clock. We had been told the procession would pass the village at about half-past eight. But as time means very little in Tibet we expected to wait an hour or two before anything happened.

More lines of mules pass, their loads covered with cloths of the Regent's colours—golden-yellow bordered with scarlet. Some servants with broad red hats like lamp shades appear in a cloud of dust to clear the way. They are followed by a group of monk officials in mulberry coloured robes and gold-lacquered hats. More officials pass, then a tiny incarnation lama, aged about four, is led past on a pony. He is dressed splendidly and wears on his hat an exquisite ornament of turquoise and gold. Slung across his back is a gold charm box containing a Buddha almost as big as himself.

At last the procession itself comes into sight. Women who were flailing barley beside the river drop their wooden flails and hurry to the roadside where a dozen incense burners start belching forth smoke.

It is difficult to see the procession clearly for the cloud of dust it raises. Leading it are mounted standard-bearers dressed in cloth of silver and high witch-like Mongolian hats. Following them are fifty or sixty mounted monk officials wearing gold lacquer hats or large yellow fireman-like helmets of wool. Nearer the Regent's palanquin are the higher officials in gala attire. The Shapes and Dzasas in embroidered yellow and blue brocade robes; lower officials in resplendent multi-coloured silk costumes with pleated black skirts and little white cockle-shell hats. The Regent's horses are led past, gaily caprisoned. The palanquin is carried by men in green coats and scarlet hats; the Regent himself is not visible.

November 28th, Saturday.

There was a great procession in the city to-day. An enormous image of the goddess Palden Lhamo was taken from the Cathedral and carried through the streets. This is the goddess of whom Queen Victoria was supposed to be an incarnation. Lamas, many of them grotesquely masked, first cleared a way through the densely crowded streets. When the goddess appeared long trumpets were blown, drums were beaten, and a great pyramid of straw was burnt in the street, while lamas danced and chanted. This goddess, when the world was young, was

about to destroy all creation; but in the nick of time a husband was found for her and he, apparently, appeased her wrath. On the day that she is taken round Lhasa her husband, who is kept in a monastery on the other side of the Kyi Chu, is also taken out and they are allowed to behold each other annually, at a distance of several miles.

November 29th, Sunday

In the afternoon several of us crossed the Kyi Chu by an ancient and dangerously leaky ferry and rode out to explore a ruined fort six or seven miles to the West of Lhasa. In the very heart of the ruin we found a secret temple of the Bom religion, a pre-Buddhist form of devil-worship. In an outer room was a collection of animals crudely stuffed with straw and suspended from the ceiling. They included a dog, a sheep, a snow leopard, a musk-deer, a gazelle and a shau (Sikkim stag). In an inner room, so obviously in recent use that we thought a monk was actually hiding there, were devil-traps and a variety of hideous images.

December 1st, Tuesday

The Yapshi Kung, with his wife and large family, came to dinner. These dinner parties preceded and followed by film shows, are now a great feature of our life here.

To-night's party was typical.

Our guests, having been invited for six o'clock, arrived an hour early.

The party consisted of the Duke, a lean, very short-sighted but very charming old aristocrat in his long yellow silk Shape's robe; his wife, a shy, rather florid woman wearing her hair looped up over a coral-studded triangular crown, with immense turquoise earrings, a charm box and a striped brown and red apron over an exquisite dragon-patterned Chinese silk dress; several grown up sons and daughters, one of the former being a favourite of the Regent; and four small children.

After drinks—we find Tibetans drink Cinzano, rather reluctantly, or lemonade—we went downstairs for the first part of our performance. Here it was at once apparent that something unusual was afoot. It transpired that Norbhu had told three or four of the Potala monks that we were having a cinema show and that they could come. But about thirty monks, reinforced by as many soldiers from the neighbouring Norbhu Lingka barracks, had "gate-crashed" the room, and while several monks had already

taken the chairs reserved for our guests the rest of the crowd completely blocked all ways of approach. As soon as the monks had been forced to sit on the floor and our guests—though somewhat crowded—had taken their seats we started, as some of them had never before seen films, with something familiar to them, a film we have taken of the Potala and the Lhasa bazaar. This was followed by Rin-Tin-Tin in "The Night Cry." This film has been a tremendous success in Lhasa. By the end of the fifth reel the women were weeping on each other's shoulders and imploring Rin-Tin-Tin to bite the villain's nose. After a Charlie Chaplin to restore their emotions we went upstairs to dinner while the uninvited monks and soldiers were ejected.

At dinner, to make the most of the small room, we sat, backs to the wall, on high Tibetan cushions while a variety of hors d'oeuvres-like dishes were served on the usual low Tibetan tables. Our guests proved less able to accustom themselves to foreign food than ourselves; but when Gould appeared with an armful of crackers the spirit of the party improved, and we were amazed to see a four-year-old girl fearlessly holding a firework, while her brother, aged six, who had been told to behave exactly as his father, smoked a cigarette with apparent enjoyment.

At eight o'clock bedecked with paper hats, we went downstairs to continue our film show. Colour films of Tibet, more Charlie Chaplin, the Hendon Air Pageant 1929, colour films of Sikkim, yet more Charlie Chaplin; then after a few more reels of Tibet, what would they like for the last reel? After some deliberation, well perhaps they would like to see a Charlie Chaplin. And so at eleven o'clock the party ended, and after a final drink our guests mounted their ponies and rode home through the clear Tibetan night.

December 23rd, Wednesday

Chapman spent four days at the Yamdrok Tso. The scenery there is quite different from that of the vale of Lhasa. In the first place there are no trees, and the whole landscape is dominated by an immense lake shaped like an irregular star-fish with twenty miles between the points. From the water-side, hills, in the summer brightened by a wild profusion of flowers, but now covered by sere brown grass, rise steeply for three thousand feet above the lake which is itself 14,500 feet above sea level. In folds of the hills, where the land flattens sufficiently to allow a certain amount of cultivation, are scattered villages often dominated by

a fort. Ruined villages and the derelict remains of an extensive irrigation system show that the land has suffered considerable depopulation. As one rides along the narrow stony track between the hills and the lake, countless minute black dots can be discerned usually near the summit of the most remote ridges: these are grazing yaks. Lower down are flocks of sheep and goats, tended by a solitary shepherd, often a mere child. Between the sheep and the yaks, a sharp eye might detect a number of fawn-coloured animals. Powerful glasses show them to be a herd of Tibetan gazelle. In the early morning these graceful animals come low down the hill sides to drink from the lake as all the mountain water-courses are frozen. By getting above them, before dawn, and waiting as they grazed slowly upwards, some cinema "shots" were obtained. But so wary are these animals that at the instant they come into the field of the camera's finder they become aware of it, and bound away up the mountain-side.

All along the edge of the lake were innumerable bar-headed geese, gadwall, mallard, pintail and wigeon; while a few hundred yards from the shore were packs of diving ducks—red-crested and common pochard, tufted ducks and goosanders.

At the eastern extremity of the lake, by Nagartse, there are shallows; and here alone save for a border of a few feet right along the margin, was the lake frozen. What had been weedy shallows and red-shank-haunted marshes in the summer was now a desolate frozen plain, swept by bitter winds and blinding sand-storms. However, in the still early morning, hundreds of tiny mouse-hares came out of their holes and basked in the sun, often sitting up, marmot-like, to squeak shrilly at any intruder; while ground choughs and several varieties of snow-finches and larks searched the ground for food. For miles this plain slopes imperceptibly towards the foothills of the great mountain belt which one has to cross (by the Kara La, 16,500 feet) on the way to Gyantse.

December 24th, Thursday

There was a strange ceremony on the Cathedral roof at dawn to-day. The Kashag and most of the senior officials, in ceremonial dress, visited the many shrines of the Cathedral, and then as the sun rose above the hills to the east of Lhasa they assembled on the roof where a tent had been put up so that they could drink their tea in comfort. Meanwhile a number of men, dressed in

ancient and somewhat dilapidated Tibetan armour and helmets, assembled in a line around the roof. One old warrior with drawn sword and uncouth cries led the war dance, while the rest sang and danced in chorus.

December 29th, Tuesday.

Any stranger visiting the Deyki Linka this morning might well have imagined either that the pied piper had just passed by or that we were starting a school. Actually we were having a children's party; and by lunch time about seventy of the sons and daughters of the Lhasa officials had arrived. They came on horse-back, either independently, preceded and followed by red-hatted servants, or sharing the saddle with a nurse or groom.

As soon as the children arrived they went upstairs for tea and Christmas cake; it was lucky that a good many were late, as there were more than we had expected and it was difficult to find a seat for everybody in our small room.

At about one o'clock the cinema show started. Rin-Tin-Tin, Charlie Chaplin, Aeroplanes, the Grand National, Jubilee Procession—it must have been a bewildering experience for children who had never been away from Lhasa, never even read a book (other than the Tibetan scriptures), much less previously seen a cinema show. After three hours of this we persuaded them, with some difficulty, to go upstairs for "supper." We were much struck to see how charmingly they behaved to each other: if a child was unable to master the difficulties of spoons and forks his neighbour helped him; when one boy spilt his curry into his lap, the others laughed with him—not at him—and immediately helped to clear it up.

Then followed the great event of the day, the Christmas Tree. Admittedly a synthetic one, made by tying fronds of evergreen on to a carefully selected poplar; but nevertheless when the children came down to our darkened dining-room, at one end of which the tree glowed like a miracle, lit with electric bulbs of every colour, glistening with tinsel and festooned with teddy bears, humpty-dumpties, scarlet soldiers and other things entirely new to them, they gasped with astonishment and delight.

Then Norbhu, disguised as Father Christmas, but made more familiar by the addition of a helmet-like monk's hat, made a speech in Tibetan explaining the tree and wishing them all a

Happy Christmas. After that each child was given a present, and at six o'clock they set off to ride home.

We heard afterwards that on the way home the chief topic of conversation was whether there would be another Mission at Lhasa next Christmas!

January 1st, Friday

To celebrate New Year's Day we invited the following to a luncheon party: the Prime Minister; the four Shapes or Cabinet Ministers; the Yapshi Kung or Grand Duke; Tsarong Dzasa and Chikyap Khempo, the head of the Ecclesiastical party. Unfortunately the last named was unable to attend; he is a man of great age who suffers from rheumatism. Ringang, one of the boys who were sent by the late Dalai Lama to Rugby, came to assist Rai Bahadur Norbu with the interpreting. The guests arrived in reverse order of precedence; in Tibet, as in other countries, the more important a man is the later he can afford to be.

On arrival the first act of the Cabinet was to hand to Norbu a sealed packet made of coarse Tibetan paper, together with the customary white silk scarf of greeting. This turned out to be the permission for an Everest expedition in 1938. The Cabinet had been considering the question for some weeks and it struck us as an act of the greatest courtesy to hand over the permit so unostentatiously as a New Year's present.

After a six- or seven-course luncheon we went into the garden for coffee while Dagg prepared the cinema projector. In the shelter of our walled garden the sunshine was as warm as one could want.

One reason for our feeling of comfort and good cheer was to be found in the activities of the Chang girls. Normally these girls, resplendent with turquoise ornaments and coral and pearl head-dress, wait on the guests and keep their glasses full of chang. They also force guests to drink by jogging their arms and saying "tunda nang-ro-nang" (empty it, please). In really obstinate cases they are allowed to use a pin—even on the Prime Minister himself. But on this occasion most of us were drinking whisky, and once the girls had mastered the art of using a soda-water syphon there was no stopping them; and on more than one occasion they attempted to fill up the glass with neat whisky.

Out in the garden we had the Lhasa Band and dancers. The former consists of two Chinese fiddlers, one of them blind, a

bearded Ladaki who plays a flute, and a Tibetan with another curious stringed instrument. The blind fiddler, incidentally, enjoys the privilege of being allowed to smoke even in the presence of the Cabinet. The dancers, three women dressed like the Chang girls but less smartly, kept time with the band by stamping on a board, waving their arms about and singing traditional Tibetan melodies.

The cinema show lasted for two hours. The most popular feature was a film of the Jubilee. The Prime Minister remarked upon the extraordinary cleanness of London. One of our guests expressed surprise that the King couldn't afford amblers to pull his coach. (In Tibet everyone who can afford it rides an ambler; one reason for this is that the jolting of a trotting horse shakes the stones out of their jewelled ornaments.)

January 7th, Thursday

Chapman went out in the early morning to photograph a party of nomads who have recently arrived at Lhasa. These swarthy uncouth-looking men, dressed in a single sheep-skin garment are much larger and more healthy-looking than are the inhabitants of Lhasa. They have a reputation similar to that of the Pathan: if they make friends they will do anything for you, but if roused they are quick to use their knives.

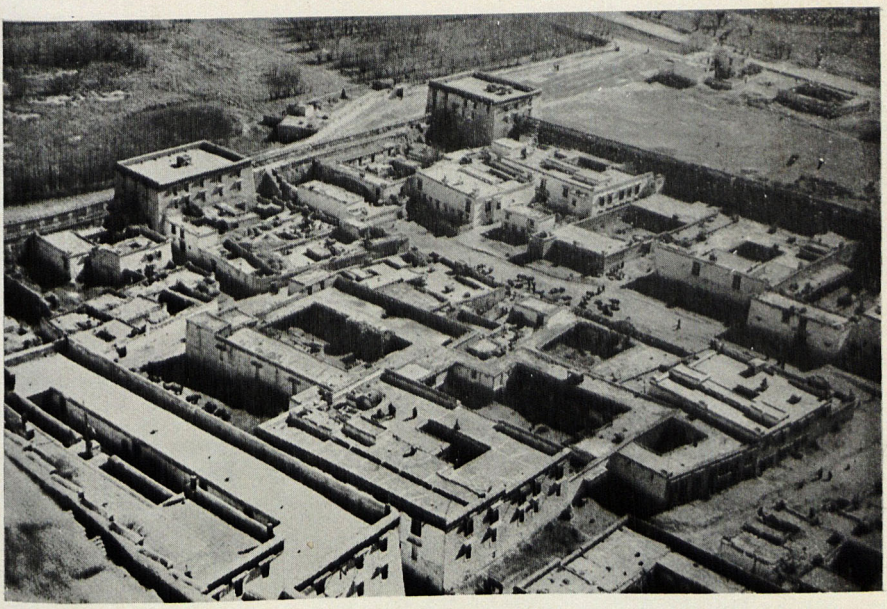
These nomads had come down from the Chang Tang, the vast arid semi-desert away to the north of Lhasa. The journey took them fifty days. Hundreds of yaks carried wool while each sheep was loaded with a bag of salt on each side of its back. This salt is deposited on the shores of brackish lakes by the evaporation of the water. As barley cannot grow up there they exchange their wool and salt for tsamba (roasted barley meal) and other wares.

Their dialect differs very noticeably from that of Lhasa, indeed our Tibetan clerks can hardly understand them. They were vastly amused at being photographed, and showed none of the reluctance which characterises the attitude of most of the Lhasa people to the camera.

The women, who are remarkably handsome, wear their hair in innumerable minute plaits which are attached at shoulder level to a multi-coloured piece of canvas which hangs down almost to the ground. This cloth is ornamented with silver buttons, Chinese dollars and other trinkets.

THE FOUR SHAPES

Left to right—
Tendong, Bhondong, Kalon Lama and Lanchunga



View from the Potala roof down on to the fortified court-yard and gateways.

The Regent's palanquin. This one is gold lacquered and is only used near Lhasa. Notice the gigantic orderly behind.

Teising Rimpochu wearing the gold lacquered papier-mâché hat of a monk official.

The Regent of Tibet

Sonam Kazi and Norbhu Dzasa reading the Everest permit.

January 15th to 31st

Already there are signs of the early Lhasa spring. The ravens are now in pairs and on the last day of the month two were seen carrying beaks full of wool to line their nest on the craggy northern face of the Hospital Hill.

Now that there is no grazing to tempt the pack-animals to dally by the way, and no rain to spoil their loads, there is much traffic on the trade routes. Any day you can see trains of mules, donkeys and yaks carrying the rough Tibetan wool down to India; and, approaching the city, loads of brick tea sewn in compact square packages, bundles of dried yak-dung for fuel, and striped yak-hair bags of barley flour, which with the salt buttery Tibetan tea forms the staple diet of all the poorer classes. There are also many travellers on the road; most of them are coming into the Holy City to celebrate the Tibetan New Year (February 12th by our calendar).

Most of the travellers are nomads from the Chang Tang or the Hor and Kham provinces. At any time of the day these handsome dark-skinned nomads are to be seen doing the "Holy Walk" round Lhasa. In one place they have to turn several huge fixed prayer wheels; further on just below an immense painted Buddha carved on the cliff, they must put their foreheads to the rock, which is now polished to marble smoothness by the attentions of the faithful. In another place they must crawl through a hole formed by a boulder which leans up against the cliff. Nearby there is a deep hole worn in the rock since each pilgrim, as he passes, must put his finger there.

RECRUITING FOR THE ARMY AT HOME

By "Assaye Lines"

The measures recently announced by the Secretary of State for War and which have been designed to ameliorate the lot of the British private soldier and to increase the attractions of service in the Army cover a wide field. That they will have some effect in improving the recruiting situation goes without saying but whether this effect will be sufficient to ensure that recruits will in future come forward in adequate numbers is a debatable question. Before it is possible to express a reasoned opinion upon the results which are likely to be achieved, it is necessary to analyse, first the motives which induce the average recruit to present himself for enlistment in the Army, and, secondly, the extent to which these new measures will tend to strengthen these motives. Improved conditions of service must always have inherent in them some element of attraction, but unless they have a bearing on fundamentals they will only attract the few who join for exceptional reasons and not the large majority who join for normal reasons and to whom we look to fill the bulk of our recruiting demand.

In considering this question of motive, it is essential to distinguish from the outset between the motives which lead a recruit to join the Regular Army and those which influence recruiting for the Territorials. The latter force is composed of part-time soldiers —this is not intended in any derogatory sense—and behind each man is his civil employment or the hope of such employment. Service in the Territorial Army is undertaken for many motives but the necessity of earning a living is not one of them. The attractions of soldiering without many of the disadvantages of a soldier's life, the desire to join the local unit and to share in the many forms of corporate activity which it offers, the persuasion of friends and of persons of local influence, and, above all, a very definite feeling of patriotism and of duty to the country all play their part. This latter motive has great influence, especially in times of stress, and for this reason we may confidently expect the present improvement in the figures of Territorial Army recruiting to continue due solely to the fact that the people of Britain are at last becoming aware that, in the ultimate resort, the Empire must

stand or fall by its own efforts and that a unilateral desire for peace is not sufficient by itself to ensure it.

These motives have, however, nothing like the same effect upon recruiting for the Regular Army. Local connection is of the greatest value and attracts a percentage of recruits who might otherwise hesitate to join for general service; some men join from a spirit of adventure and a desire to see the world; the assistance and co-operation of local authorities and of persons of local importance will always be required if maximum figures are to be attained, but it should never be forgotten that the underlying factor behind recruitment for the Regular Army is the economic one. While admitting that no direct comparison is possible between pre-war conditions and those which exist to-day, the pre-war situation can well be used as a starting point and that situation can be depicted most simply by two short quotations:

(*a*) ". . . nothing approaching 35,000 recruits could be got annually in normal times (pre-war), except by a form of pressure which the most distinguished soldier of his day described as 'the conscription of Hunger.' " (F. S. Oliver in "Ordeal by Battle.")

(*b*) "The majority of eighteen-to-nineteen-year-old recruits enlist because they have just ceased to be boys, and are unable to find regular employment as men. About four-fifths of them come to us because they cannot get a job at fifteen shillings a week." (Sir Ian Hamilton in 1911.)

Conditions have altered greatly since 1911 and however much we may have owed to it in the past, there can be no regrets that we can no longer count upon Hunger as a recruiting sergeant. Boys are still growing up and, no longer boys, still find difficulties in obtaining regular employment as men at the post-war equivalent of fifteen shillings a week, but these difficulties no longer necessarily force them into the ranks. The Army has no longer available the huge field of recruitment previously offered by the hungry adolescent unemployed but has now to compete with the many benefits conferred by our post-war social legislation. No one will grudge these benefits to our unfortunate fellow-citizens and no reasonable person will claim that the unemployed are enabled thereby to lead a life of ease and luxury, but the fact remains that it is now possible for the potential recruit to avoid

the recruiting sergeant and to tide over evil times while waiting for brighter days when the hope of a good and permanent job may become a reality. There are various other factors which have tended to reduce the attractions of Army life, such as competition from the other services and from sheltered trades, the desire of mechanically-minded youth to seek a technical occupation and the even more important effects of the psychological reaction resulting from the Great War. This reaction is to some extent natural but its importance has been greatly increased by the large post-war output of anti-military literature of all types and in the personal propaganda which has been poured forth in order to prove that the war was won by the individual politician in spite of the blunders committed and the avoidable slaughter incurred by the military commanders. These other factors have their influence but the basic fact remains that the youth of nineteen or twenty is no longer impelled to enter what may be a blind-alley occupation, and if the Army of to-day is to attract him it must offer something better. The new measures designed to improve the recruiting situation can only be considered in that light.

These measures can therefore suitably be placed in three categories:

(*a*) Those designed to remove existing, and legitimate, grievances but which do nothing to improve the attractions of service in the Army as a career or as a stepping-stone to a career.

(*b*) Those which tend to improve the conditions of a man's service beyond the minimum which he has the legitimate right to demand, but which still do not improve the man's chances of permanent employment.

(*c*) Those which hold out the attraction that enlistment in the Army is a first step towards a career or towards permanent employment.

The contract now entered into between the man and the State implies that the man will be paid at a certain rate and that he will be fed, equipped, clothed and accommodated at no cost to himself. It is true that no standards are laid down and there is no guarantee that anything beyond bare necessities will be provided but, whether he has the right to expect it or not, the modern recruit will only be satisfied with a standard of living and of amenities similar to the standard he has been taught to expect in

civil life. Further, he will have a definite and reasonable grievance if he finds that he is compelled to accept certain deductions from his pay in order to provide himself with clothing which he is forced to maintain or with other items which are necessary to supplement the official scales of rations, clothing and equipment. The new concessions have done much to remove these grievances and to bring the conditions of life in the Army into line with modern standards, but the items which fall under this head can only claim to make service in the Army less unpopular rather than to make it more popular. Few officers will deny that these innovations are in fact long overdue, and little credit can be claimed for tardy reforms which have had to await the impulsion of a recruiting crisis to force their adoption. For eighteen years successive Governments have increased the country's social services, as often as not for the benefit of the very men who would not come forward to serve their country, but the soldier has been neglected, one is almost tempted to say exploited, until changing circumstances have once more forced the fact into recognition that a trained soldier is sometimes worthy of as much consideration as a semi-illiterate voter. Under this head of "social service" must be placed the majority of the new measures, such as improvements in rations, better barrack accommodation and barrack equipment, higher rates of allowances, etc., while measures such as the increase in recruit's kit allowance and the free provision of all extra uniform required by troops ordered abroad can only be described as the removal of methods of exploitation from which the Army has suffered too long.

The abolition of "holding" may with some difficulty be admitted into a higher category. The right to retain a man for an extra year with the colours does exist as part of the contract between the man and the State, but it is extremely doubtful whether the exercise of that right has ever been normally justified during the past fifteen years, at least to the extent to which it has been enforced. The liability to serve the extra year is admitted, but when one party enters into the contract knowing that the liability "may" be enforced, while the other party is quite certain that the liability "will" be enforced, a charge of bad faith is difficult to counter. Even if such a charge is legally untenable, the impression of sharp practice remains and such an impression is difficult to live down. There would therefore have been certain advantages from the purely recruiting point of view in making "holding" illegal with-

out the prior consent of the legislature but practical considerations render this impossible or at least extremely undesirable. It is to be hoped, however, that the abolition of the practice itself will be sufficient to restore confidence among our potential recruits.

There remains one measure which has the right to be placed in the third and highest category—the great increase in the facilities now offered for Vocational Training and in the efforts to absorb men in industry after they leave the colours. The transfer of the responsibility for Vocational Training from the War Office to the Ministry of Labour must prove advantageous both from the point of view of training facilities and of co-ordination with Trades Unions and with the demands of the labour market, and the only criticism which can be offered is to ask whether the present proposals go far enough. These proposals strike at the root of the problem and if they strike deep enough may go far to find the solution, but it is not yet certain that they in fact do so. The chance of competing fairly in the labour market at the end of his army service will do much to attract the type of recruit which the Army requires, but it is doubtful whether even the increased number of vacancies will enable every man who wishes it to be given the opportunity of learning a trade. A further difficulty lies in the fact that a trade qualification is not an end in itself but only the means to an end, and what the soldier really desires is employment after leaving the colours. At a time of expanding industry employment may follow automatically, but industry is not always expanding, and at a time of depression unemployment is almost as serious among the skilled as among the unskilled categories of labour. The ex-soldier rightly considers that at such times his previous services rendered to the State should count as an additional qualification in his favour. It must also be remembered that a certain percentage of soldiers have neither the inclination nor the capacity to learn a trade, and quite reasonably wish to return to the small towns or the country areas where they were born and where there may be little scope for skilled workmen. It may be impossible to force the private employer of labour to give preference to ex-soldiers, but it should not be beyond the powers of the Government to give the private employer a lead, and to take a very great step towards popularising service in the Army by reserving for ex-servicemen a proportion of vacancies in all civil departments of State, in the services controlled by municipal bodies and in all undertakings which enjoy a statutory monopoly.

To sum up, it is only fair to admit that the steps which have been taken represent perhaps one of the biggest advances made in modern times towards improving the conditions of service of the British soldier. These steps do not, however, justify a complacent attitude and it has to be acknowledged that the majority of the reforms merely tend to ease the hardness of the bargain which the State in the past has driven with the private soldier and to ensure for him a fairer deal in the future. Something further will be required before service in the Army can be made "popular" and before the Army can count in peace upon the services of the pick of the youth of the country up to the numbers it requires. The situation will never be entirely satisfactory under any voluntary system of recruiting until the recruit can contemplate the practical certainty, if not the guarantee, of employment at the end of his colour service, combined with reasonable amenities of life while he is the Army and with the chance during his service of saving a small sum, however modest, which will help him to make a start when the rifle and the pack are laid aside.

AUTHOR'S NOTE

Since the above article was written, Mr. Hore-Belisha has announced that, as an experimental measure and for a limited period of time, all serving soldiers due for transfer to the reserve will be permitted to "extend" their service and that army reservists of Sections A and B will be allowed to rejoin the colours, with a view to "re-engaging" when their present engagement has expired so as to qualify for a pension after 21 years service. Although it is too early yet to endeavour to forecast the results of the experiment or the numbers of serving soldiers and reservists who will avail themselves of the opportunity offered them, the possibility of important changes in future terms of service to be offered to the soldier is clearly foreshadowed. These changes, if the results of the experiment justify their introduction, will have many far-reaching implications beyond their effect in keeping the peace strength of the Regular Army in future up to authorised establishments.

The first question which springs to mind is the effect which long service will have upon what is somewhat loosely called the Cardwell system: upon the system whereby our overseas garrisons are maintained by drafting annually from the garrison at home, the strength of both garrisons being kept at an approximately equal

level. If it were not for certain other modern complications, which will be referred to later, a return to a long-service system would have no appreciable effect upon this aspect of the organization introduced by Mr. Cardwell. A long-service battalion at home which exchanged periodical drafts with a long-service battalion abroad would, for example, prove an ideal arrangement compared with the pre-Cardwell system whereby a battalion was sent overseas, maintained by drafts of untrained recruits and left to stagnate abroad almost indefinitely.

It is upon another aspect of the Cardwell system that a change to a long-service army would have the greatest effect: upon the functions now carried out by the overseas garrison in training and passing to the reserve a large proportion of the men required to raise the home forces to their war establishment and to maintain them at that establishment until the post-mobilization recruit can be made available. A long-service army cannot build up a reserve and without a reserve, or some equivalent, the home garrison cannot in emergency produce a Field Force and replace the wastage which will be incurred during the initial stages of a major campaign.

If long service is to be introduced for the army or a proportion of it, some other means must be found for building up this reserve or, if the Army Reserve, as we know it, cannot be kept up to strength, some alternative methods must be thought out for obtaining a supply of trained soldiers from civil life on mobilization. Simultaneously with the introduction of long service it may be possible to introduce for a portion of the army conditions of engagement with an even shorter term of colour service than is now normal, the long-service portion being primarily concerned with manning our overseas garrison, the short-service portion being used to pass men rapidly through their colour service into the reserve. Alternatively the functions of the present Army Reserve may be transferred to a Special Reserve on the lines of the old Militia, the personnel of which would receive an initial period of training and thereafter come up for short periods of refresher training, annually or biennially. It is more probable that some form of combination of the above two expedients would prove most suitable.

Apart from the question of an army reserve, the chief complications which can be foreseen in attempting to maintain a long-

service overseas garrison from a long service garrison at home arise from modern developments which have resulted in an increasing divergence between requirements at home and abroad in standards of organization, training and equipment. It will be many years before the horse, for instance, is entirely eliminated from our overseas establishments and even when that situation is reached, it is very doubtful whether we can ever again hope to attain the approximate similarity which has hitherto existed in the basic organization of our forces at home and abroad. For this reason alone the introduction of long-service will tend to weaken the links forged by Mr. Cardwell—not necessarily the links between individual units so much as those which connect our home and overseas garrisons considered as a whole.

The weakening of these links leads us to the chief difficulty inherent in any scheme for a long-service overseas garrison—the length of tour which the soldier is to be called upon to serve abroad. The personnel of the Navy serve for 21 years to earn a pension, but during these 21 years they alternate between foreign and home stations and, for the majority, a foreign service tour lasts from two to three years. If the long-service soldier is to be called upon to serve for the most of his 21 years abroad, the pension of 14/- a week which the private soldier can now earn may not prove a sufficient attraction, unless in the place of a tour of service at home he can be sure of regular periods of home leave, and unless the conditions under which he and his family are called upon to live in many overseas stations can be greatly improved. A long-service army must of necessity make greater provision for married families and, if the service is to be popular, the army in future will have to make better provision.

It is premature at this stage to do more than draw attention to the fact that, even if long-service proves popular enough to solve the problem of keeping the strength of the army up to peace establishments, it will bring with it many other problems to which a solution will have to be found. None of these other problems should prove insoluble, but in the meantime we can only watch the progress of the experiment in the hope that it will to some extent at least prove successful. It is only when the results of the experiment become apparent that all the implications which will arise from a change of policy can usefully be considered in detail.

ON READING FOR THE STAFF COLLEGE

By Hydrochloric

From time to time articles appear in the service journals advising young officers how to prepare for the Staff College Entrance Examination. Usually the authors map out a programme which includes several hours a day of private study, frequently recommend a formidable number of books to read, and convey the impression that the Staff College is never entered except by prayer and fasting. In the advertisement pages of the same journals there will probably be found an invitation to take "Messrs. So-and-So's" course of cramming which in the last few years has scored so many successes in the examination. This course probably costs about £20. Such methods of preparation may be a necessity to some, but they are calculated to deter the more modest officer who feels that he will never be able to assimilate so stupendous a quantity of book-learning. The purpose of this article is to suggest that there are other ways of attaining the end, and that, for various reasons, they are worth trying.

We are an overworked and underpaid generation of soldiers and should therefore practise economy in both time and money. No one supposes that success can be obtained without work; the point is to avoid unnecessary work. Many officers who are preparing for the examination are a curse to their wives and friends. Every normal activity is partially eliminated, a bare minimum of time is allowed for exercise, and life becomes a burden to themselves and their associates. Their regiments are the losers, for they spend the minimum amount of time on parade, in the lines and playing games, and are fretting all the while to get away to tackle that "three-hour paper" that must be sent home next mail. What prospect is there of an officer expanding his outlook to the best advantage when he undertakes his noviciate in such narrow fashion?

Crammers may be a necessary evil but they should at least be regarded as a last resort. First of all they cost money, which means, in many cases, the curtailment of leave and other amenities, and, secondly, they have all the failings of any mass production plant. Those who have been to the Staff College will remember the type of man who, at a syndicate meeting, has to turn up his crammer's

notes before saying what he (or his crammer) thinks. The examiners do not really care what "Messrs. So-and-So's" views are, for example, on mechanization, and, when they have come across them in five or six consecutive papers, they hail with relief the answer of a man who has thought things out for himself.

The Staff College candidate is now allowed to sit for a total of three examinations. Let him consider his first effort as a trial trip. In the second, if necessary, let him profit from the mistakes he made on the first occasion. In the third, if any, let him seek what adventitious aid he pleases, such as the midnight oil, the abandonment of leave and the employment of "Messrs. So-and-So."

How then is the candidate to prepare himself for the first sitting and what are the tips worth knowing so that he may avoid the drudgery to which so many competitors sacrifice themselves? I can only put forward a few ideas for the benefit of those who, like Jurgen, are prepared to "try anything once," but I do know from actual results that there is a measure of virtue in them.

The first essential for satisfying the examiners is proficiency in what, for want of a better description, may be termed "military writing." This is a most difficult variety of literature, and before going further I can state at once that this article is *not* in the best tradition of military writing. I sometimes think that in days gone by, when, for instance, Wolfe of Quebec continued to study Latin after he was commissioned, someone must have given Tacitus more than was his due, and that the result was the exactingly brief type of expression which is nowadays demanded of the soldier. In military writing you must be brief, grammatical and clear; you must avoid any suspicion of imagery and you must be impersonal—there must be none of this nonsense of "you" or "I" as in my last few sentences. It is a queer form of English and deadly dull to read, but it is no use arguing about it because it is the acknowledged model. The best examples of this form of writing are found in the training manuals and the section on "Leadership" in Infantry Training, Volume I, shows how an expert can produce really classic English without offending the canons of military writing. War dispatches and training memoranda are also of interest, but the majority of generals do not conform to their Staff College teaching, especially when they

write books. Much advice on this subject has already been given by the Military Training Directorate and by examiners in their criticisms of papers submitted; these injunctions will repay study. There are also three books which are invaluable to those who find it difficult to believe that the pen is mightier than the sword. They are "On the Art of Writing," by Quiller-Couch; "How to Write Clearly," by Abbot, and "The King's English," by the Fowlers.

Perhaps the detailed method of attack is better left to the candidate—how much he works, the times he works, and when, for the sake of sanity, he will cut out work altogether—but it is possible to suggest a general framework upon which a plan in detail may be built. With most people, I think, there must be what can conveniently be called a "preliminary" period and an "active" period. To dogmatize as to the time to be devoted to each would be foolish, but remembering that it is the candidate's first attempt at the examination, I doubt if the preliminary and active periods need in most cases exceed one year and two months respectively.

It is a popular fallacy that it requires a brain quite out of the ordinary to get into the Staff College; in actual fact men with good average intelligence often do better work at the College and in staff appointments afterwards than their more brilliant contemporaries. Brains are not needed so much as the broad mind which can only be acquired by extensive reading. Much of the preliminary period must, therefore, be taken up by a conscious attempt to broaden one's outlook; this was certainly true of my own generation though it may not have quite so much force to-day. With some otherwise good officers this means heaving themselves out of a narrow regimental rut and realizing with difficulty that the world does not revolve round Dogsbody's Horse or the Loamshire Rifles. But to become well-read is not really a burdensome business though to many soldiers it means a change of reading. If the candidate swears to himself that he will read nothing that might not reasonably be found in a military library, he may regret Sapper or Edgar Wallace at first, but he will soon realize what he has been missing if he has left alone such writers as Winston Churchill and Guedalla.

In the preliminary period also one must do the spadework for the empire paper, the campaigns and the optional subjects.

To keep abreast of empire developments *The Times* and even its weekly overseas edition are most useful. Now is the time also to read the standard works on optional subjects other than languages, and to make notes sufficiently adequate to bring everything back to mind in the shortest space of time. Part of the preliminary period also must be devoted to a reasonably thorough but unhurried study of the campaigns prescribed. Their number is almost astronomic and calculated to deter the bravest candidate; the only solution I know is to take an approved book on each campaign and to reduce it to notes, chapter by chapter, so that, on the eve of the examination, important lessons can again be rapidly called to mind. The critic may say that this is a heavy programme for the preliminary period, but there are two things to be said in mitigation. One is that the candidate can take just as long as he likes over it, and the other is that this is the period from which one derives lasting value whether the examiners are kind or not. It opens up to the average soldier avenues of study which, but for the existence of the Staff College, he might never have thought of exploring, and which, if followed in leisurely fashion, amply repay the effort involved.

The active period is not so amusing. It is nothing more nor less than "cramming," for it involves storing in one's head a mass of information which is intrinsically useless, or at the best, of only temporary value. By this I mean such things as current tactics which change with weapons or fashions, military law for whose proper exposition the Judge-Advocate-General's department exists, and facts about the Empire and its communications, so admirably set out by Cole, but the memorizing of which, except for examination purposes, would be sheer lunacy. It is a soul-destroying business and is, therefore, better condensed into the minimum possible time. Some students will not undertake it in fact until the New Year's Ball is over, and the Proclamation Parade next morning has reminded them that the Christmas holidays are at an end. Whatever else is done in the active period, the official manuals must be thoroughly mastered. In the ordinary course of duty officers come to know them fairly well but that is not enough; there are so many problems, such, for example, as transportation and the work of the services, with which the regimental officer is usually unacquainted. The manuals are, after all, the set books for the examination, and the

examiners cannot be blamed if they fail candidates for obvious ignorance of their contents.

It is not possible in a short article like this to discuss each one of the examination papers in detail, but there is room for a few general remarks about the obligatory subjects, followed by a brief consideration of the merits of the various optional subjects the candidate may take. I have emphasised the need to study the manuals and I can give two examples of what is likely to occur if these are neglected. Some years ago a man who had been made a brevet-major, largely for work in a junior "Q" staff appointment, failed in the organization papers. In the same year an officer who had been commended for work on a particularly complicated court-martial failed in military law.

But though the manuals must be "crammed" in the active period, every possible opportunity should be taken in the preliminary period of increasing one's practical professional knowledge. It sometimes occurs that a commander knows an officer, sufficiently well to be able to sign Certificate D of his application without attaching him to his staff; to miss an attachment in this way is to be avoided. There is much tactical knowledge and experience to be picked up by being in close contact with a formation commander and his staff during the collective training season. A candidate should also make every effort to obtain an attachment to one or more of the other arms of the service, get permission to attend every training exercise he possibly can, and, remembering the Achilles heel of so many, apply to be a member of every interesting or difficult court-martial in his station. Lastly he should try to get a vacancy on the Army Headquarters Staff College Course which provides the best instruction of its kind in India.

The first thing to remember about optional subjects is that they must play a very definite second fiddle to obligatory subjects. Three are permitted but two are quite enough for the average man to undertake. Moreover (though I write without access to statistics), between 60 and 70 *per cent.* in each of two optionals will, in most years, secure a candidate a competitive vacancy.

Languages are obviously good value if the candidate has at any time been up to interpreter standard, but many more humble linguists may score marks if they possess a good groundwork in grammar and construction, and the "feel" of the language

as regards idiom. It is also necessary to become familiar with military terms in the language chosen; these can be easily acquired from works on modern campaigns, and from a training manual or military magazine of the particular country. I have been told that many candidates have found Urdu an unprofitable venture, presumably because they had not realized that the Higher Standard which many of them had been required to pass was comparatively not so "high." The great advantage of languages to the man who is not a natural linguist is that there is no *viva voce* test, and the French candidate who is completely obfuscated after two minutes conversation with a Marseilles taxi-driver has no need to lose heart.

The history of Europe and the United States is doubtless an interesting subject, but its ramifications are so wide and the possible variety of questions so great that it does not seem to be a very good investment. Better value is to be gained from the history of India, for the field of study is much more circumscribed, and, for the Indian Army Officer at least, more appropriate and probably more useful. Moreover, the later part of the Indian period is fairly well known already to the majority of officers who have served in India for any length of time.

The obsolete title of "Political Economy" is a fair indication of the standard expected in this subject. Fundamentally economics is a common-sense science, but it has been hedged around by pundits with a great deal of technical jargon. It is also highly controversial and I believe our universities are frequently at economic war. To win marks from this paper the chief requirements are a knowledge of present-day economic problems and the ability to discuss them in the economist's language. This is not as hard as it sounds, for there are a number of good, simple works published from which the main principles of the science and the jargon already referred to can be acquired. At one time the examiners in "Political Economy" were so pleased to find anyone who had read even one book on economics that marks fell like manna from heaven; even now it is a profitable subject.

I am not qualified to advise on the business organization paper, but it is a study which may be of secondary value as a qualification for civil employment when the harness is unbuckled. The very high standard of the mathematics paper was reduced

a few years ago but it is still out of reach of the average school-and-Sandhurst soldier. It may appeal to some officers from the "Shop" and the universities.

Now I recollect that in military writing "all papers must have a conclusion," and so I will try to summarize these rather random views in an exhortation to the imaginary candidate. Firstly, do not take the examination too seriously. If you do, you will lose your sense of proportion and your sense of humour and become incredibly tiresome to your friends and to the examiners as well. Secondly, take full advantage of the natural facilities for extending your professional knowledge which your normal life offers, as opposed to the artificial assistance sold by crammers. Thirdly, study the syllabus and decide before you begin to work in what optional papers you are likely to score the most marks, and then, having made ample provision for the obligatory subjects, allot to each the time you consider necessary. Finally—and this is not a real "conclusion" because the point is mentioned for the first time—do not fail to get into the Staff College. Much of what has been written above may be quite useless to many candidates, but not so this last piece of advice. You will have to work like a nigger at the College and many times you will refer with scorn to that classic phrase "the best two years of your life." But those years *are* good. You will get excellent teaching from first-class instructors, you will become humanized from long contact with intelligent contemporaries, and you will make friends that you will never lose.

THE FINAL PHASE OF THE MESOPOTAMIA CAMPAIGN 12TH MARCH 1917 TO THE ARMISTICE—(*Continued*)

By Lieut.-Col. J. E. Shearer, M.C., 1/15th Punjab Regiment

14. *Summer* 1917

The hot weather was spent in training, and in consolidating our defences and administrative arrangements. 200,000 Turks had been set free by the Russian collapse, and it was known in April that a large force under Von Falkenhayn* was being collected probably to advance down the Euphrates in the autumn. So General Maude decided to capture first Ramadi and then Hit to dislocate the enemy's preparations for this counter-offensive. It was also necessary to capture Ramadi to cover the repair of the Sakhlawiya dam.

The first attack on Ramadi was made on 11th July, but was a failure on account of intense heat and dust-storms. Our casualties from heat-stroke were greater than from the enemy's fire, so the attempt was abandoned until the climate became cooler.

In the meantime a railway was built from Kut-al-Amara to Baghdad, and the civil administration was organised on a permanent basis under special political officers. Throughout the summer it was steadily becoming evident that little further help could be expected from the Russians.

15. *Completion of General Maude's preliminary preparations (August and September* 1917)

By the middle of August General Maude considered that the main Turkish counter-offensive would probably come down the Diyala as well as down the Euphrates, with subsidiary attacks only down the Tigris. But he was confident that he would easily defeat these attacks, even without Russian assistance, as the Turkish lines of advance were widely separated, the enemy were known to have insufficient transport, and he himelf was on interior lines. He concentrated, therefore, on making his force mobile by building bridges, collecting local supplies on the Diyala and Euphrates as well as at Baghdad, replacing his animal transport by Ford Van Companies, and by building railways from Baghdad to Baquba and Falluja.

* Note.—This force was the much vaunted "Yilderim" group of armies.

He obtained the promise of reinforcements consisting of two divisions, a Cavalry Brigade, a squadron R. F. C., and certain Light Armoured Motor Batteries, Trench Motor Batteries and Machine-gun Companies in order to enable him to hold the Baghdad Vilayat by means of an active defensive. The maintenance of our gains at Baghdad and the denying of Persia to the enemy was essential for the safety of India, as the enemy's Pan-Turkish propaganda in Persia was on the increase.

All through September there were persistent but confused rumours of the concentration of Von Falkenhayn's army about Aleppo; but on 20th September the War Office reported that a big counter-offensive on Baghdad was unlikely as the Turks did not dare to risk failure. The C. I. G. S. also informed General Maude that General Allenby would carry out an offensive in Palestine in October 1917, and that that should assist the defence of Baghdad appreciably. But it was not until much later that General Maude knew for certain that the Turkish counter-offensive to retake Baghdad had been cancelled.

By the end of September 1917, the 15th Indian Division (from the Euphrates about Nasariya) had almost completed concentration at Baghdad and the leading Infantry Brigade of the new 17th Indian Division had taken over Falluja from the 1st Corps. The despatch of the 18th Indian Division early in 1918 had been promised, but all the other reinforcements mentioned above were already *en route*.

The weather was becoming cooler and General Maude's preparations were sufficiently advanced to allow active operations to recommence.

16. *Capture of Ramadi (27th to 29th September 1917)—(Vide Sketch Map No. 4)*

The Turks were holding Ramadi with about 100 cavalry, 3,500 infantry and 10 guns. As will be seen from Sketch Map No. 4, their defences were mainly facing east astride the Falluja-Ramadi road. They thought that their right flank was secure, resting as it did between the Euphrates Valley Canal and the Aziziya Canal, since the water of the Habbaniya Lake was too saltish for our force to drink if it did advance by that flank.

The attacking force consisted of the 15th Indian Division, 6th Cavalry Brigade, a Flight R. F. C., a Bridging Train detach-

ment and various other army artillery, armoured car and engineer units. Of this force the 50th Indian Infantry Brigade was already at Falluja, but the rest had to march from Baghdad. While the concentration was taking place in the area Falluja-Madhij-McCudden's Post, General Brooking skilfully confirmed the Turks in their wrong appreciation of his probable line of attack. He built a bridge at Madhij and sent a battalion across the Euphrates there; he ostentatiously had the main road improved; and the 6th Cavalry Brigade made demonstrations along the left bank of the Euphrates. All real reconnaissances were done by air. Even the intention paragraph of his operation orders for the first attack only stated that he intended to capture the Mushaid Ridge preparatory to the attack on Ramadi itself. It gave no indication of his real plan of attack.

During the night 27th/28th September the advance commenced, and by 07-00 hours on the 28th, the 42nd Infantry Brigade, supported by the 12th Indian Infantry Brigade, had captured Mushaid Ridge and Escape Hill, and the sappers had repaired the dam near Escape Hill and made it fit for the passage of all arms.

At 06-50 hours General Brooking ordered the 6th Cavalry Brigade, which was demonstrating north of the main road, to move south-west, under cover of Mushaid Ridge, cross the dam and the Aziziya Canal, cut the enemy's line of retreat west of Ramadi and attack his rear. These orders were fully carried out by 16-00 hours with little opposition.

At 07-00 hours General Brooking ordered the 42nd Infantry Brigade to side-step across the dam and capture Middle and Double Hills. This order was apparently quite unexpected by Brigadier-General Lucas, the Commander of the 42nd Infantry Brigade, who thought that his brigade was too scattered to comply quickly with this order; so he asked for this task to be given to the 12th Indian Infantry Brigade instead. However, the 42nd Infantry Brigade managed to cross the dam first after all and captured Middle and Double Hills by 10-30 hours with little loss. The next stage of the attack, the capture of Ramadi Ridge by the 42nd Infantry Brigade and of Aziziya Ridge by the 12th Infantry Brigade, succeeded after heavy fighting and many casualties, and those positions were maintained throughout the night.

During the night the Turks made a determined but unsuccessful attempt to break through the 6th Cavalry Brigade.

The 12th Infantry Brigade renewed their attack at dawn on the 29th September and, after heavy fighting, captured Shaikh Faraja Ridge and the Aziziya Bridge by 07-30 hours. The situation was then somewhat anxious until 09-15 hours, when large numbers of Turks began to surrender to the 2/39th Garhwalis who were holding the Aziziya Bridge.

At 09-30 hours the 42nd Infantry Brigade were ordered to advance from Ramadi Ridge. As soon as they did so the Turks on their front began to surrender, and by 11-00 hours the Turkish commander and his whole force had surrendered. This success had a decisive effect on the inhabitants of the Baghdad Vilayat who regarded it as the death knell of Turkish hopes in Mesopotamia.

17 *Lessons of capture of Ramadi*

This hard-fought and skilfully planned battle has many interesting lessons, the principal of which are:

(*a*) *Misleading the enemy as to one's intentions*

This principle was always difficult to apply in Mesopotamia because of the swarms of Arab labourers in our supply depots and river-craft. These were all potential enemy spies. I have shewn how skilfully General Brooking used this leakage of information to confirm the enemy commander in his original wrong appreciation.

Apparently General Brooking did not even let his own brigadiers know his real intention until after the battle had started.

(*b*) *Proper use made of the mobility of cavalry*

Mesopotamia is excellent riding country but it is bad country for dismounted cavalry action, as there is no cover for led horses near the firing line.

In this brilliant action the Cavalry Brigade had used its mobility to get to the decisive place quickly and then risked everything by taking up dismounted fire positions well away from their led horses. The moral effect on the enemy of this bold use of their mobility, despite their limited fire power was amply justified. It is interesting to compare the uniformly successful

results obtained by the bold mounted tactics employed by our cavalry after April 1917 with the conspicuous lack of successful cavalry actions during the earlier periods of the Mesopotamia campaign.

(*c*) *Control by Commander*

It is interesting to contrast General Brooking's effective control throughout this battle with the lack of control of our commanders during 1915 and 1916, once their attacks were launched. Of course one reason is that General Brooking had a far better Signal Organization than was available earlier in the campaign; but the real reason seems to have been that General Brooking used his cavalry for the distant outflanking movement, while keeping his infantry concentrated. He thus gave his infantry a real "punch" and also had a reserve available in his own hand throughout the battle.

The earlier commanders largely used their cavalry in the passive role of keeping off Arab marauders, and from the start spread their infantry over a very large front, thus making the infantry attack weak everywhere and leaving themselves no reserve at all with which to meet emergencies. (The battles of Es Sinn, 1915, Ctesiphon and Dujailah all support this criticism.)

(*d*) *Water-supply*

The Turks had thought that the lack of drinkable water on their right flank would render that flank safe from a turning movement, but General Brooking overcame this difficulty by organizing water convoys in Ford vans. On 28th September alone 14,000 gallons of water were thus supplied to the fighting troops.

18. *Strategic situation in October* 1917

By the beginning of October 1917 it was becoming increasingly certain that no large-scale Turkish counter-offensive was to be expected in the near future in Mesopotamia as Von Falkenhayn's troops at Aleppo had started to move to Palestine, where General Allenby's preparations for an offensive had been noticed by the Turks.

On the other hand there were indications that the enemy meant to take advantage of Russian inactivity to send small parties

into Persia to carry out anti-British propaganda there and towards the Indian Frontier.

As soon as the weather was cool enough, and the light railway had reached Shahraban, General Maude decided to drive the Turks from the left bank of the Diyala and occupy the Jabal Hamrin astride the river in order to—

(*i*) Prevent enemy parties getting into Persia.

(*ii*) Deprive the enemy of a screen behind which to stage attacks on our right flank.

(*iii*) Prevent him from interfering with the supply of water for irrigating the land along the Diyala.

19. *Second action of Jabal Hamrin* (*18th to 20th October* 1917)—(*Vide Sketch Map No.* 1)

This task was entrusted to General Marshall, the G. O. C. IIIrd Corps.

For this operation he divided his Corps into three groups as follows:

(*i*) *Right Group.*—14th Division (less 35th Indian Infantry Brigade and 7th Cavalry Brigade).

(*ii*) *Centre Group.*—35th Indian Infantry Brigade.

(*iii*) *Left Group.*—13th Division (less 39th Infantry Brigade).

His plan was first to drive the Turks out of their advanced position at Delli Abbas with his Left Group, and then to hold them in front with his Left and Centre Groups on both banks of the Diyala, while the Right Group drove in the enemy's left flank.

The attack started on 18th October with the capture of Delli Abbas by the Left Group. The Centre Group was then north of Shahraban in contact with the enemy outposts. During the night 18th/19th October the Right Group (less the 7th Cavalry Brigade at Mandalli) concentrated in the area Chahriz-Tel Ibara.

On the 19th and 20th October, the 37th Indian Infantry Brigade, moving along the northern slopes of the Jabal Hamrin with the 7th Cavalry Brigade in the plain on their right, captured Qizil Robat and the left bank of the Diyala. Meanwhile the Left Column occupied the Jabal Hamrin on the right bank north of Mansuriya.

The enemy's retirement was an orderly one, obviously according to plan, and General Marshall accomplished his task with only 37 casualties.

It is noteworthy how this well-conceived, flanking attack succeeded; whereas the hurriedly-prepared, ill-concealed plan for a frontal attack on the same position on 25th March 1917 failed with considerable casualties to us.

20. *Actions at Daur and Tikrit on 2nd and 5th November 1917—(Vide Sketch Map No. 5.)*

(*a*) *Preliminary Moves*

As General Maude was now certain that the Turkish main forces were being employed in Palestine, he considered that he had a good chance of striking their XVIIIth Corps on the Tigris. They had an Advanced Base at Tikrit, so the destruction of the dumps there would mean a serious delay in the staging of any future counter-offensive by the Turks on the Tigris. The position at Tikrit and the covering position at Daur were both well-entrenched and strongly held. The general lay-out of these defences can be seen in Sketch Map No. 5. There were also some 5,000 Turks at the Fat Ha Gorge, some 30 miles north of Tikrit.

General Maude ordered General Cobbe, the G. O. C. 1st Corps, to attack the Daur Position on 2nd November, with the object of destroying the Turkish 51st Division there before it could be reinforced. The operation was to be carried out by the 7th Division (less 21st Indian Infantry Brigade) plus the 8th Indian Infantry Brigade and the Cavalry Division on the Right Bank of the Tigris, and by the 21st Indian Infantry Brigade on the Left Bank. As surprise was essential, the concentration of these troops was carried out at night, and they remained concealed as far as possible from air observation during the day. The measures for concealment appear to have been successful.

(*b*) *Action at Daur*

The attack was to commence at first light on 2nd November after a night march, on the general plan shewn in Sketch Map No. 5. The role of the 21st Infantry Brigade was to protect our watering parties; the Cavalry Division was to surprise the enemy and exploit vigorously any success which might be achieved.

The 7th Divisional attack was carried out with the greatest sion whose attack was made exactly as planned; but the Cavalry Division were misled by some enemy camp fires and so did not get round the enemy's flank as intended.

The 7th Divisionall attack was carried out with the greatest gallantry, with the 28th Infantry Brigade leading and by dark the entire position had been captured after hard fighting.

Next day the Cavalry Division confirmed that the enemy had retired to their Tikrit Position. General Cobbe then proposed to return to Samarra, but General Maude telegraphed that the enemy might evacuate Tikrit if attacked, as they were already removing their stores from there. A plan of attack was suggested, but the actual date was left to General Cobbe to decide.

(*c*) *Action at Tikrit*

General Cobbe decided to attack on 5th November, after a night approach. The ground along the river bank was too broken for night marching, so the general plan for the 7th Division's attack was on much the same lines as for the attack on Daur. But as the enemy position was 8 miles long and very strongly held, the Cavalry Division was given the task of pinning the Turks on the right of the enemy's position to their ground to prevent them counter-attacking the left flank of the 7th Division.

Detailed information of the enemy's dispositions was obtained soon after dawn by patrols of the 47th Sikhs. It took considerable time for our artillery to prepare a barrage, but all arrangements were ready by 11-30 hours. At that hour the 8th Infantry Brigade attacked under a barrage and penetrated right through to the enemy's third line of trenches. The rest of the day was spent in a determined "dog fight" in which the Turks made many counter-attacks and the 7th Division lost heavily from enfilade artillery and machine-gun fire.

The Cavalry Division successfully accomplished its task of holding the Turks opposite them to their positions throughout the day. And in the evening the 13th Hussars (of 7th Cavalry Brigade) successfully carried out a mounted attack on the enemy trenches to prevent the flank of the 19th Infantry Brigade being counter-attacked.

The next morning it was discovered that the Turks had retired well to the north. A certain amount of stores fell into our hands, but the bulk had been destroyed.

General Cobbe's force then returned to Samarra.

21. *Comments upon the Actions at Daur and Tikrit*

(*a*) *Good Preliminary Staff Work*

Both the secret concentration of such a large force on very open ground and the accuracy of the night marches prove that the preliminary staff work was thorough and accurate.

(*b*) *Use of Cavalry and Infantry*

Here again the lesson which I have drawn from the capture of Ramadi regarding using the mobility of the cavalry for the wider movements and thus keeping the infantry concentrated for the main "punch" applies. But in this case an entirely different task was successfully given to the cavalry (*i.e.* that of holding the enemy infantry to their trenches and so preventing them from counter-attacking our Infantry).

(*c*) *Water-supply*

The official history does not say how the water-supply of the 7th Division was arranged so far from the Tigris, but doubtless here again the Ford van convoys made it possible for General Cobbe to keep his infantry much farther from the river than was possible during the battles of 1915, 1916 and early 1917, when there were no Ford vans and no water carts with infantry formations. The added circuit of action obtained by a commander who has adequate water-supply arrangements is worthy of note.

On 18th November General Maude died of cholera, to the deep regret of everyone in the Force. He was succeeded by General Marshall, while General Egerton succeeded to the command of the IIIrd Corps.

22. *Third Action of Jabal Hamrin* (*3rd to 5th December* 1917)—(*Vide Sketch Map No.* 1).

(*a*) *General Plan of Attack*

Soon after assuming command, General Marshall decided to attack a Turkish force which held Qara Tepe, and the right bank of the Diyala from Suhaniya, in the Jabal Hamrin, to Qala Shirwan. He hoped for surprise by a converging attack of the IIIrd Corps from Qizil Robat and Suhaniya, combined with a movement up the Adhaim by the Cavalry Division to cut the enemy's communications near Qara Tepe.

(*b*) *Action of Cavalry Division*

On 2nd December the Cavalry Division was unable to force the only practicable passage which they could find through the Jabal Hamrin north-east of Adhaim Village. On 3rd December the Turks opposing them had considerably increased, so General Marshall ordered them to hold their ground and on 5th December he ordered them to withdraw.

(c) Plan for IIIrd Corps Attack

General Egerton had planned to carry out his attack in two phases:

1st Phase. To attack the enemy on the whole front Qizil Robat—Suhaniya and turn both his flanks, his left by a crossing of the Diyala above Qizil Robat and his right by capturing Suhaniya and the Sakaltutan Pass.

2nd Phase. An advance on Qara Tepe along both banks of the Narin River.

The eastern attack was to be carried out by the 14th Division and the western attack by the 13th Division. Colonel Bicharakoff, with 500 Cossacks, 350 infantry and some artillery, who had recently arrived from Persia, was detailed, along with the 12th Indian Cavalry, to cover the right flank of the 14th Division during both phases of the attack.

At dawn on 3rd December, after a night advance, the 35th Indian Infantry Brigade were to secure the left bank of the Diyala from Qizil Robat to the Jabal Hamrin to cover the crossing by the 37th Indian Infantry Brigade. The 35th Brigade, the 12th Cavalry and Bicharakoff's Russians were then to move up the eastern bank of the Narin River and secure Qara Tepe.

The 38th Infantry Brigade, also after a night march, was to secure the hills north of Suhaniya; meanwhile the 40th Infantry Brigade was to outflank the enemy there and secure the Sakaltutan Pass. The 40th Infantry Brigade was then to advance on Qara Tepe in co-operation with the 35th Infantry Brigade.

(d) Capture of Qara Tepe

This plan was successful and Qara Tepe was captured on 5th December. The two Infantry Brigades of the 13th Division met with little opposition, but the 35th Infantry Brigade, 12th Cavalry and Bicharakoff's Russians all had hard fighting throughout and all displayed much gallantry. The Turkish rear-guards were handled skilfully and fought with courage, so we inflicted little material loss on the enemy, but General Marshall had attained his object in making it more difficult in future for the Turks to attack his right flank on the Diyala or to send small forces into Persia. Consequently, he ordered the IIIrd Corps to retire on 6th December to the line Khaniquin—Qizil Robat—Sakaltutan Pass.

SKETCH MAP No 1.
UPPER MESOPOTAMIA.

Scale of Miles.
10 5 0 10 20 30 40 50

KEY

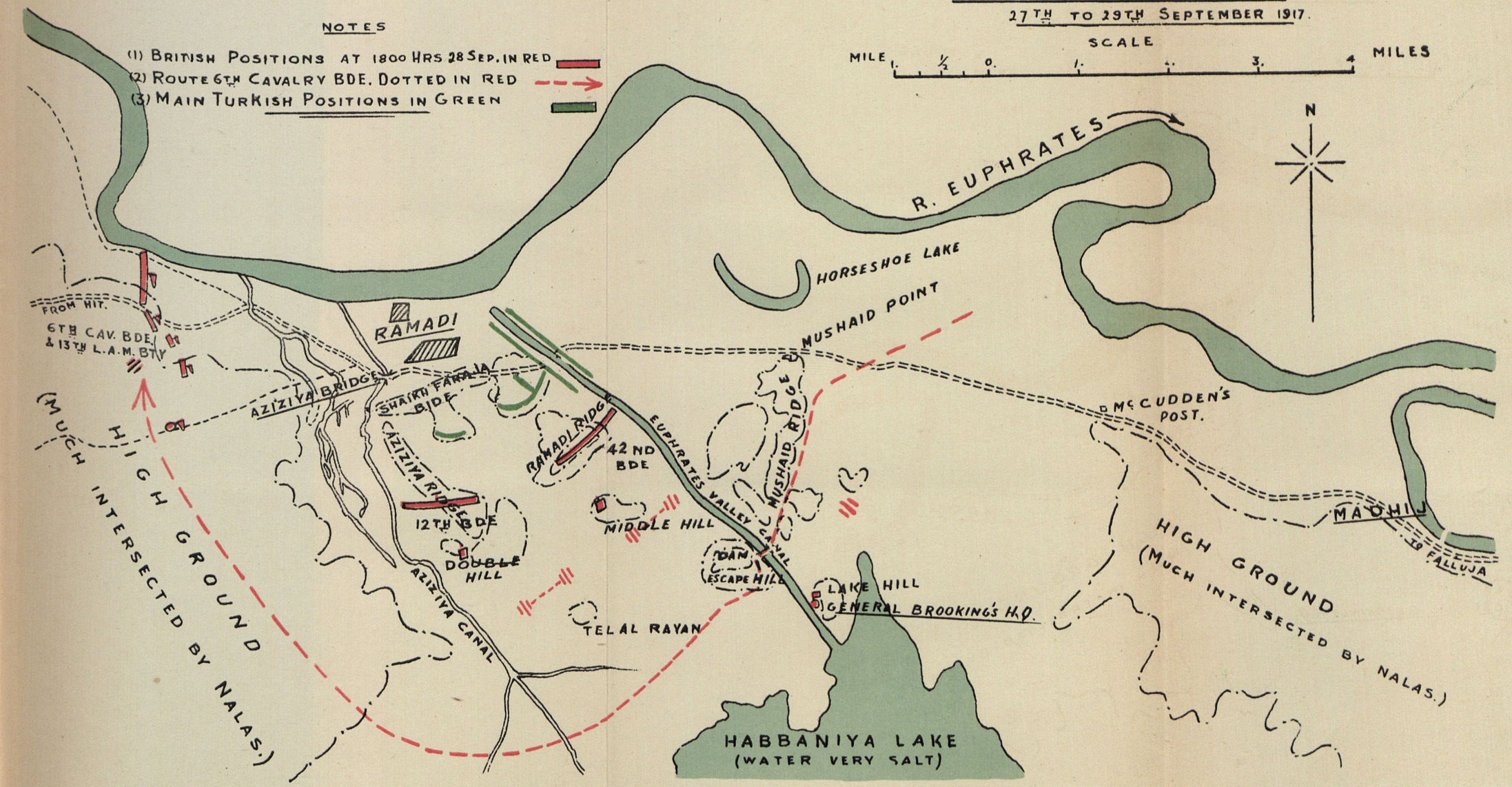
MOUNTAINOUS COUNTRY
MAIN ROADS
SECONDARY ROADS
PLAN FOR ATTACKS 24-29 APR. 1918 — A ETC.

JABAL SINJAR
MOSUL
GREAT ZAB R.
ERBIL
RUWANDUZ.
PERSIA
KURDISTAN
BANE
ALTUN KOPRI
SHARGAT
LITTLE ZAB R.
KIRKUK
SULAIMANIYA
PENJWIN
AINDIBS
JABAL MAKHUL
HUN
TAZA KHURMATLI
FAT-HA
JABAL HAMRIN
DARB-AL-KHAIL PASS
AIN NUKHAILA PASS
SHURAIMIYA
R. TIGRIS
TUZ KHURMATLI
A.
KIFRI
R. DIYALA
PERSIA
NORTHERN BOUNDARY OF BAGHDAD WALAYAT
TEKRIT.
DAUR.
JABAL HAMRIN
D.
RAND-I-ADHAIM.
ABU GHARAIB
ADHAIM R.
B.1.
B.2.
C.
DARA TEPE
SHATT-AL-ADHAIM
AINLAILA
SAMARRA R.S.
SAMARRA.
SUMANIYA
SARA LUTAN PASS
QIZIL ROBAT
MANSURIYA
KHANIQUIN
QASR-I-SHIRIN
PAITAQ PASS
To HAMADAN 100 M.
KERMANSHAH
ISTABULAT R.S.
DELLI ABBAS
KHALIS CANAL
SHARABAN
SHAHRABAN R.
RALAD R.S.
DUQMA
KHAN BAGHDADI
SUMAIKA R.S.
DILTAWA
JABAL HAMRIN
RUZ CANAL
SHAHVIE
MANDALI
PUSHT-I-KUH MOUNTAINS
BAQUBA
TEL IBARAB
BALAD RUZ
HIT
R. EUPHRATES
MUSHAHIDA R.S.
RAMADI
FLOODS
LAKE ABAROS
FLOODS
R. DIYALA
SAKHLAWATA
FALLUJA
KALHINA
NUKHTA
BAGHDAD
LAKE HABBANIYA
DIYALA
R. EUPHRATES
MUFRAZ POST
R. TIGRIS
CTESIPHON
BOUNDARY OF MESOPOTAMIA & PERSIA

SKETCH MAP No 4

CAPTURE OF RAMADI

27TH TO 29TH SEPTEMBER 1917.



SKETCH MAP No. 5

ACTION AT

DAUR & TIKRIT

2ND. & 5TH. NOV. 1917.

6TH CAV. BDE

CAV. DIV. H.Q.

7TH CAV. BDE.

TURKISH POSITION

CLIFF 80'

TIKRIT

PIQUET LINE

H.Q.

21ST INF BDE

CLIFF 60'

NALA

8TH INF. BDE

JUBN WADI 60 DEEP

19TH INF. BADE

28TH INF. BDE

7TH DIV. H.Q.

GENERAL COBBE'S H.Q.

AUJA.

N.

R. TIGRIS.

ACTION OF TIKRIT, 5TH NOV 1917

SCALE OF MILES.

0. 1. 2. 3. 4.

ACTION OF DAUR. 2ND NOVEMBER. 1917.

CAV. DIV. AT DAV BREAK

TURKISH POSITION

NALA

DAUR

DIRECTION OF 7TH DIVISION ATTACK

ADV. GD. (0530 HRS.)

7TH DIVISION. (0430 HRS.)

21ST INF. BDE GROUP (0600 HRS.)

23. *End of Russian Co-operation and move of 3rd and 7th Indian Divisions to Palestine*

The Russians and Turks arranged an armistice on 6th December, and opened peace negotiations at Brest-Litvosk on 22nd December. But in spite of this the situation in Mesopotamia was so much improved that in December the C. I. G. S. commenced moving experienced troops from Mesopotamia to Palestine. By the end of that month the 7th Indian Division had left, and their place in the 1st Corps was taken by the recently formed 17th Indian Division. During January 1918 the 18th Indian Division (consisting of the 53rd, 54th and 55th Indian Infantry Brigades) was formed, and in March 1918 joined the 1st Corps in place of the 3rd Indian Division, which also went to Palestine.

MAHSEER FISHING—II TACKLE

By Captain J. R. Morris, 9th Gurkha Rifles

1. *General Description*

Rivers vary so much in size that it is difficult to specify an exact list of tackle that would be ideal for all waters. The tackle described is that considered necessary for average mahseer fishing conditions and should enable an angler to fish in all rivers with a large measure of success. The days have gone when rods of enormous strength were considered necessary for mahseer. Game fighter as this fish is, the rods that are used at home for Spring spinning for salmon and for fly fishing for trout are eminently suitable. The rest of the tackle will probably have to be modified as shown in the subsequent paragraphs. It is essential, particularly when purchasing treble hooks, that the buyer should deal with firms who have experience of the tackle suitable for mahseer.

2. *The Spinning Rod*

An 11½ feet spinning rod weighing, if of greenheart, about 25 ozs. is perhaps the best size for general work. The exact length is not important but the limits should be 10 feet and 12 feet in length respectively. Rods shorter than 10 feet are not satisfactory when you have to cast with a steep bank, or rocks, or bushes directly behind you. Rods longer than 12 feet are too cumbersome and very tiring when fishing in the hot weather.

The action of the rod is difficult to describe; it should be pliant without being too lissome. A very stiff rod will not communicate to the angler the variations of tension and strain and will result in a beginner acquiring "bad hands." Those with no experience of these rods should put themselves in the care of a friend who knows or in the hands of a reliable tackle-maker. The chief factor is not so much the size of the fish that are to be caught, as the weight of the bait that has to be cast. As is shown later the maximum weight of these together with the lead will be 2¼ ozs.

If a new rod is being purchased, under no circumstances should a split cane rod be selected. It is a pity that this wonderful material should be unsatisfactory in India, but this is the experience of most anglers I have met. I have owned a number of these rods, both with and without steel centres, and in every case

the material has gradually weakened until at last the rod became useless for either casting or playing a fish. I have attended the *post-mortem* examination of three steel-centred rods and have seen the one-time steel centres shaken out as red rust powder. Greenheart is a much better material for these climates. It has the advantage of being easily repairable by an amateur; loose joints can be rectified and even a break quickly spliced with material available on the spot. When fishing some hundreds of miles away from the nearest tackle-maker this is a great advantage.

Metal joints are a nuisance. They give constant trouble, and will continue to do so until some metal is discovered which will expand and contract at the same rate as the wood of the rod. Spliced joints offer the solution to this problem and the assembling of the rod, when using splicing tape, takes very little extra time.

The "Ringall" cane makes quite a good spinning rod. In Bengal the natural canes can be bought for about one rupee each. They are sold, ready mounted, by Messrs. Manton & Co., Calcutta. Of the two, I prefer greenheart to the "Ringall" cane as it has a nicer action.

3. *The Spinning Reel*

A good reel is the most essential item of the whole outfit. A cheap reel of inferior workmanship will be sure to bring disaster; a wooden reel will not stand the climate. The plain Nottingham type of reel, which is controlled by the pressure of the top of the finger or the thumb on the exposed rim of the drum, is suitable for an angler with experience of spinning. Though certainly difficult to manipulate, this reel gives the angler more sensitive control and hence greater accuracy in casting. For a novice this reel is not suitable. He should purchase one of the automatic control type, such as the deservedly famous "Silex" reel. Reels of the stationary drum type (thread line reels) are not in my opinion suitable for general all-round work. Though ideal under certain conditions for light spinning, they do not hold sufficient line of the required breaking strain for heavy work. Whatever type of reel is purchased it must be large enough to hold 200 yards of line of a breaking strain of about 20 pounds.

4. *Spinning Lines*

Backing is that portion of the line which is wound first on to the reel, and which does not come into play during casting. For

this an undressed silk line or a braided linen line of 24 pounds breaking strain is suitable. To this should be spliced 100 yards of dressed spinning line of a breaking strain of 18, 24, or 32 pounds, according to the weights of the baits being used. For most rivers the 24-pound line will suffice. Messrs. Manton & Co.'s "Lignum Vitae" line is, without doubt, the best spinning line for India.

Both backing and dressed lines require particular care. During fishing expeditions, on return to camp, the portions of the lines that have been used during the day should be taken off the reel and dried. On return from the expedition both line and backing should be thoroughly dried and well rubbed with some such dressing as "Ceroline." In the non-fishing season lines will keep better if hung loosely and in large coils on nails stuck into the wall. During the monsoon the nails should be covered with a piece of cloth, paper, or binding silk, to prevent the rust coming into contact with the line. The above precaution is well worth the trouble if one wants lines to last as long as possible.

5. *Leads*

Of these there are many types, most of which fulfil the double purpose of sinking the bait and preventing the spinning of the bait imparting twist to the line. My own choice is the "Jardine" or spiral type of two sizes weighing $\frac{3}{4}$ and $\frac{1}{2}$ oz. Of these, according to the pace and depth of the water, I put on one or sometimes two of the smaller size at the end of the line just above the swivel. One ounce is the heaviest weight ever likely to be required. If these leads are bent into a partial half-moon shape they will stop any tendency of the line to twist. The "Hillman" ball leads which clip on to the ring of the swivel are also very good.

Another form of lead, which can be made very easily by oneself, is the flat half-circle or rectangular lead. To make these, obtain a sheet of lead from the local bazaar, cut out either circles or rectangles of a size to give the required weight, bend these double across the centre, and pinch them on to the end of the line with a pair of pliers.

6. *Swivels*

These are required for attaching the line to the trace and also for mounting spoons. Open box swivels are satisfactory and can be either of steel or bronze. A dozen of each of sizes 3 and 4

should be sufficient for a start. These are Manton's and Hardy's sizes.

7. *Traces*

Single steel wire (Killin wire) is a good material for traces. It is enormously strong and very cheap. Its main disadvantage is that if it kinks it breaks. This, however, rarely happens and will not occur if the angler takes the precaution of examining his trace occasionally, and changing it for a new one whenever it shows signs of being bent or twisted. The wire is so cheap that many anglers put on a new trace after each fish. Though perhaps ideal, this practice is not strictly necessary. Another small disadvantage is that if taken to the river the spool is apt to get wet, and the wire rusty. This can be easily avoided by keeping the spool at home and by oiling it from time to time. Before setting out, cut off half a dozen lengths of one and a half yards, coil them, place them in a trace tin or an old Barney's tobacco tin, and so be free of the rust bogey. This steel wire is usually made in stout, medium, and fine sizes. The fine size is suitable for all normal fishing.

To make the trace take 1½ yards of the wire, pass it through the eye of the swivel, bend it back to make a narrow U, with one arm of the U about two inches in length, and the other the remainder of the wire. Cross one arm over the other, insert a match between the crossing of the wire and the swivel and twist four to six times, making sure that each wire twists round the other. The latter is essential; if only one wire is twisted round the other it will pull out when a strain is applied. This is quite simple in practice and readily understandable by reference to Plate II. Join the other end of the wire, in the same way, to the swivel of the spoon, and the trace is mounted. A large number of anglers also insert another swivel in the centre of the trace. This is not essential but a second swivel does no harm.

The knot given in paragraph 17 may be used for attaching the line to the trace.

8. *Spoons*

Spoons are without a doubt the most popular lure for mahseer fishing. They are of all sorts of shapes, colours and sizes.

Plate I shows three common shapes, namely, the "Ordinary," sometimes known as the "Special" spoon, the Norwegian spoon, and the Hog-backed spoon.

Colours vary from all silver, silver and copper, silver and brass, silver and black, to all copper. Sizes vary from $1\frac{3}{4}$ inches to 4 inches. Even for the biggest rivers sizes larger than three inches are unnecessary. It will probably be better for a novice to purchase two or three of each type. He can, later, decide on his personal choice. The following initial outlay is suggested:

Two Ordinary spoons	3″	weighing	$1\frac{1}{4}$ ozs.—all silver colour.
Two Norwegian ,,	3″	,,	1 oz.—copper colour outside, silver inside.
Two Hog-backed ,,	2″	,,	$\frac{1}{2}$ oz.—brass outside and silver inside.
Two Ordinary ,,	2″	,,	$\frac{1}{2}$ oz.—copper outside and silver inside.

The weights are very approximate and are merely given as a guide.

For those who take the trouble to mount their own spoons the above will be more than sufficient. In nearly every bazaar in India and Burma the local *mistri* will, if given a sample, turn out excellent spoons at the cost of a few annas each.

A few makers mount their spoons with split rings. Nearly all writers on fishing condemn these as they are liable to rust inside where the damage cannot be seen. Should this occur, they will surely lose one a fish. For a number of years I have, however, used Hardy's Attachment Links for mounting spoons. These have never given any trouble and being convenient to use are well worth purchasing. For three-inch and two-inch spoons sizes No. 3 and No. 4 are suitable. The attachment links can also be used for joining the hook to the spoon. Together with an additional swivel they are ideal for this purpose, making a very pliable and reliable mount. A flying mount, as illustrated in Plate I, will be found to be most satisfactory; Punjab wire may be used in lieu of the attachment links, but the additional swivel already recommended, should not be omitted.

I have only met one angler who used single hooks with large spoons. The most common and the best practice is to use one treble hook in both spoons and dead bait mounts. For two-inch spoons (Hardy's) size B6 hooks, and for three-inch spoons size B4 are recommended. It is essential that one should specify SPECIAL MAHSEER trebles when ordering these. The hooks used for salmon and pike fishing at home are not suitable and, if used,

will be crushed flat or pulled out by the powerful jaws of the mahseer.

9. *Dead-Bait Mounts*

Plate I shows two of the many forms of mounts for the small fry that are used as bait. Whether to spin or wobble is often a matter of serious debate. It is really one of personal choice. Though I carry both, I use the wobbler more frequently, because it is easier to alter the bend of the spear and so control the speed with which the bait revolves and because the wobbler can so easily be made by oneself. To do this, brass wire (or an old fashioned hair pin) is used, and the swivel and the hook attachment are fixed in a manner similar to that shown in Plate I for fixing a swivel to a trace. The only disadvantage of these home made wobblers is that one has to use a needle and thread to sew up the fry's mouth and to bind the hook to the side of the fry.

There is, too, the question of whether the lead should be on the line (or trace) or in the stomach of the small fry. The latter is better for light spinning in low water. The former is better for the heavier normal work because half the duty of the lead is to anchor the swivel and prevent the line twisting; because the weight of the lead can be more easily altered to suit the different types of water; and because an unleaded bait spins (or wobbles) at a better angle and in a more lively fashion.

10. *Et Cetera.*

To complete the spinning outfit one requires a casting net with which to catch small fry for dead bait; a file for sharpening hooks; a pair of pliers that "will" cut wire; a spring balance; and a bag to hold all.

11. *The Small Fly Rod.*

The extra light type of trout fly rod so popular at home will not stand up to the casting of even the smallest of fly spoons. On the other hand the owner of an average trout rod, of length from 9 to 10½ feet, need not go to the expense of a new rod. The small rivers he is to fish are unknown and it will be better to defer a purchase until experience of these rivers has been gained.

For normal purposes a greenheart rod ten feet in length weighing about eight ounces is recommended. The type of action is largely a matter of choice. Some anglers prefer a whippy action, others a stiff action. If the beginner will ask his tackle-maker for

a rod whose action is suitable for both dry and wet fly fishing at home he will not be making an unsuitable purchase.

It has been my experience that most tackle-makers at the mere mention of the words "fly spoon" rush off to the darkest corner of their store-room and unearth one of the old pattern of heavy dry-fly rods. Though this will certainly cast a fly spoon, it is far too powerful to give sport when playing the small mahseer. Even the extra light type of trout rod is sufficiently powerful for playing the mahseer, and, if one confines oneself to fly only, quite suitable. The fly spoon is, however, such a popular and successful lure that a rod of the dimensions given above is recommended.

12. *The Reel*

A good reel is an essential part of the outfit. With the tackle-maker many hundreds of miles away such accessories as a spare tongue, fitted to the reel, are essential. When dealing with fish which may vary in weight from one to ten pounds, an adjustable check is also advisable. The reel should be of metal and of the contracted form for quick winding. Chosen to suit the balance of the trout rod, a reel, in size from 3 inches to $3\frac{5}{8}$ inches, should also be capable of holding the line and backing mentioned in the next paragraph.

13. *The Line*

An ordinary, double-tapered, thirty-yard trout line should be selected to suit the action of the trout rod. Compared with a level line, the tapered line is so much more pleasant to use that it is well worth the extra expense. The line should be purchased spliced to 100 yards of undressed silk backing line, of a breaking strain of about 9 pounds, which, when using the trout rod, will be found strong enough for all purposes. If a stronger backing is used, the reel will not hold the required length of line. Although 100 yards will only occasionally be required for dealing with a large fish, this amount, by filling the reel, facilitates the quick recovery of the line.

14. *Casts.*

For the sizes of fly spoons and flies recommended below, level untapered casts of wire gauge .010 and .009 are suitable. The former is often known as refina or fine lake and the latter is usually referred to as 1 "X" gut. Makers' names and sizes vary so considerably that it is inadvisable to specify the wire gauge until one

knows the particular terms used by a dealer. Casts of one and a half yards in length are quite suitable for most mahseer fishing.

By far the cheapest method of obtaining casts is to purchase hanks of natural gut and to tie these oneself, using the well-known blood knot. (See Plate III.)

Before tying a cast, soak the gut for 24 hours in water to ensure that this is really soft. A useful tip when tying the blood knot is to apply a little glycerine to the knot before pulling it tight. This is particularly useful with the larger sizes of gut, and effectively stops any tendency of the gut to fray.

Casts should be wrapped in a piece of old wash leather and kept in a tin (again one of the Barney's tobacco tins is most suitable). The day before using take out a couple of casts and soak them over-night in a cast damper. After use dry them in a cool shady portion of the house, and store as already described. If so treated, and if sound at the end of the fishing season, gut of the above dimensions will last from one season to another.

15. *Fly Spoons*

For the rod recommended nothing larger than the $\frac{1}{2}$ inch fly spoon should be used; for most occasions the $\frac{3}{8}$ inch spoon is quite sufficient. They may be all silver, all gold, or gold outside and silver inside. Such spoons can be mounted with small single hooks.

16. *Flies*

Though the fly spoon is the most common and popular lure, I would like to persuade the angler to try flies on all rivers. The March Brown, Teal and Green, Silver Doctor, Yellow Spider and the red hackle Dandy Lure would be a suitable collection. The two latter are special mahseer flies of Messrs. Manton & Co.

On the tributaries of the Ganges and Jumna the fly is so successful that I only use fly spoons in cases of high and discoloured waters. Here the Alder, Teal and Black, Teal and Yellow, Black Doctor, Jock Scott, and for fishing after dark the Coachman and the White Moth, are also used. (The Dandy Lure is also very good after dusk.)

In Upper Burma fish are caught on the Silver Doctor, the Yellow Spider and, in the evenings, on a small Black Gnat. The sizes of flies are those of Hardy's sea trout hook Nos. 7 and 9 which are approximately 9/16 and 13/16 inch in length. The Dandy Lure is about $1\frac{1}{4}$ inches and it is better if Punjab wire is used, instead of gut, when dressing these. On some of the over-

grown streams of Assam, dry flies tied to represent the insects that drop from the trees have been effective.

There is no known principle on which to base the choice of a fly. Selection is almost entirely a matter of fancy. Luckily the mahseer is not very fastidious and two or even three flies can be fished on the cast.

17. *Knots*

There remains the task of tying the cast to the line and to the fly or fly spoon. For this the "Turle" knot may be used:

Thread the line through the loop of the cast and place this as shown in figure 1 of Plate IV. Tie the knot shown in this figure and pull tight. (This method may also be used for attaching the swivel of the trace to the spinning line.)

For tying the cast to the fly, thread on the fly as shown in figure 2 of Plate IV and move this up the cast out of the way; tie the same knot and pull this almost tight as shown in figure 3; place the fly, moving it clockwise, through the loop formed, and pull tight on to the eye of the hook. Though there are many knots, a beginner may find it easier to employ this one for all purposes.

The blood knot referred to in paragraph 14 above is illustrated in Plate III. To tie this knot hold the two pieces of gut between the first finger and thumb of the left hand (figure 1). With the right hand twist the smaller end (a) of the gut that is shown shaded twice round the unshaded gut, and place the end as shown in figure 2. Change hands and twist the shorter piece (b) of the unshaded gut, towards the body, round the shaded gut, and place the end of the former as shown in figure 3; ease the gut tight to its final form, figure 4.

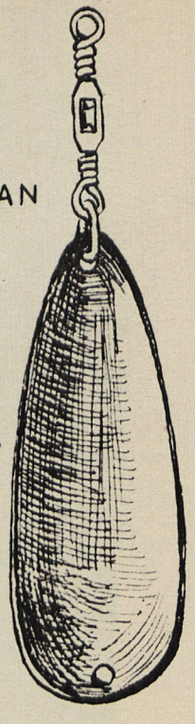
18. *The Large Fly Rod*

In these last two paragraphs yet two more methods are described. The novice to angling should neglect these, he will find that not only are they, at the beginning, superfluous, but that the majority of anglers restrict themselves to the methods previously recommended for his use.

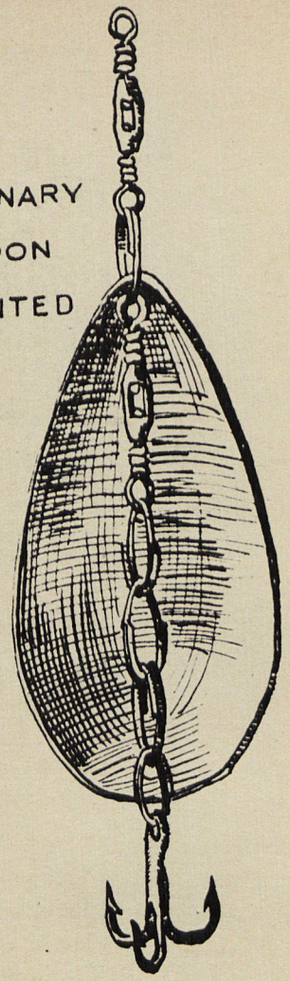
On a number of rivers the use of a large fly rod is delightful. Rods of various lengths may be used though it will be found that anything larger than fourteen feet is very tiring in the hot weather.

Though the most popular lure is the fly spoon of about an inch in length, flies are equally successful. On the smaller rivers

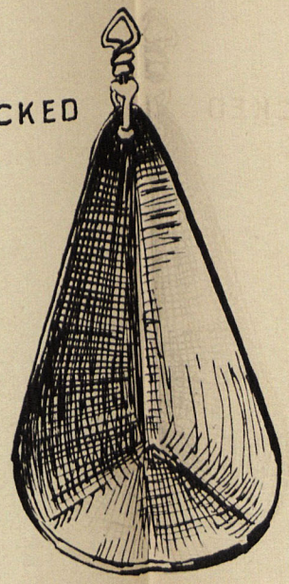
PLATE I



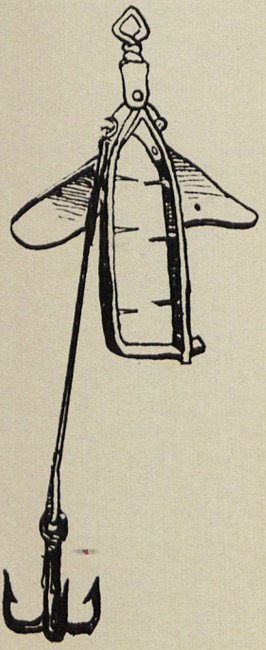
NORWEGIAN



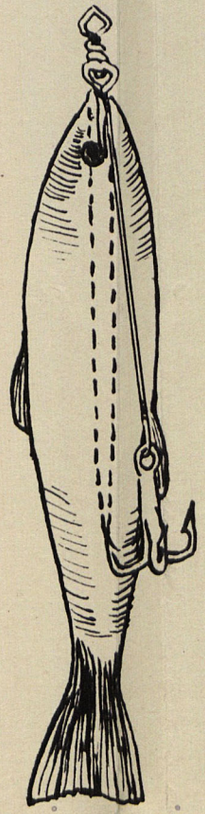
ORDINARY SPOON MOUNTED



HOGBACKED



CROCODILE SPINNER



WOBBLER MOUNTED

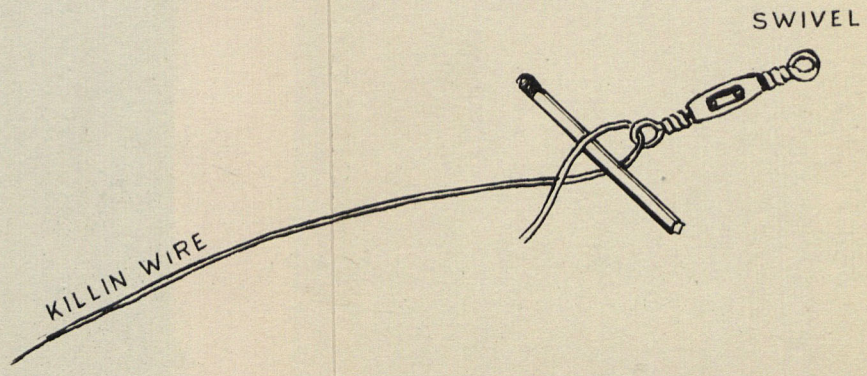
WOBBLER

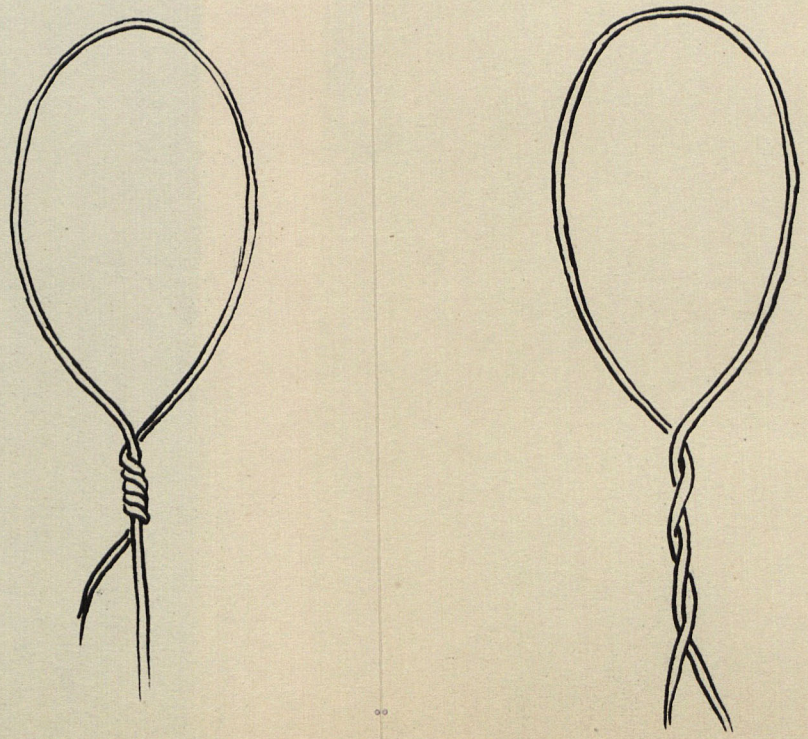
JARDINE LEAD

HILLMAN LEAD

PLATE II

MAKING A WIRE TRACE





WRONG

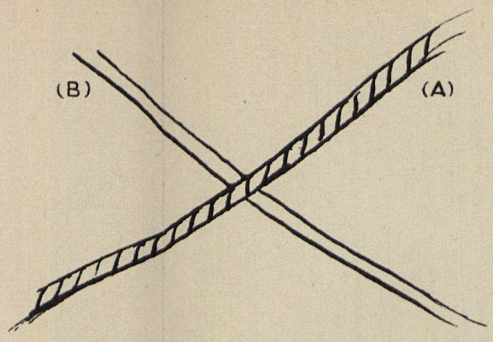
RIGHT

PLATE III

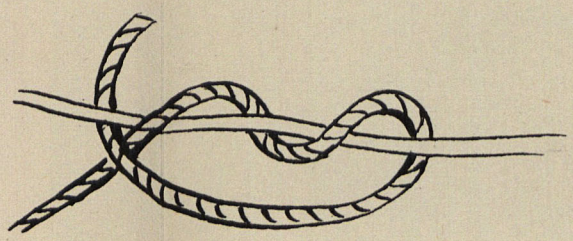
THE BLOOD KNOT

FIGURE

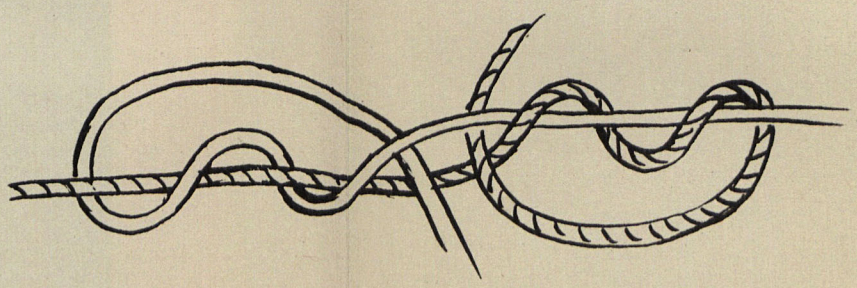
(1)



(2)



(3)



(4)

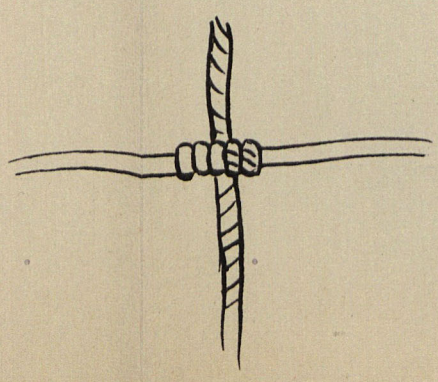
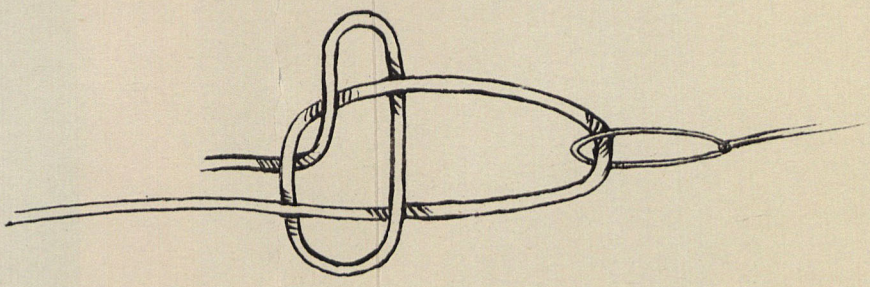


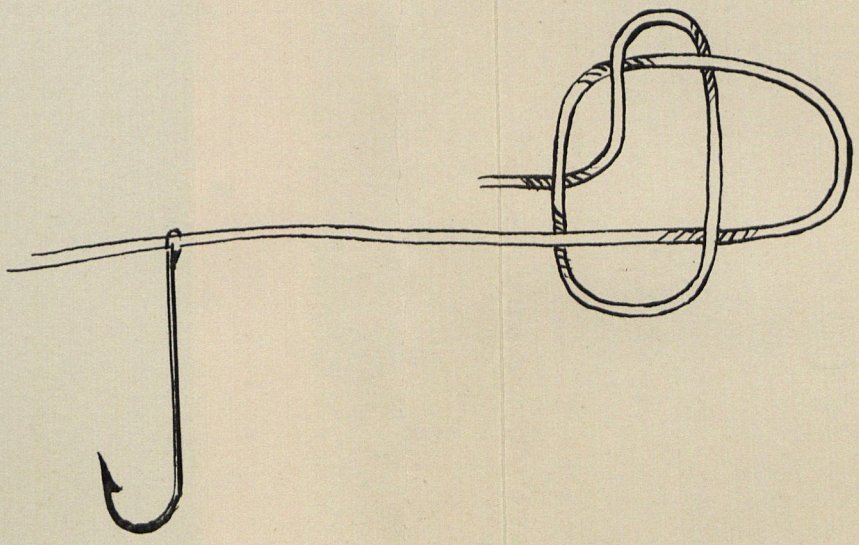
PLATE IV

FIGURE

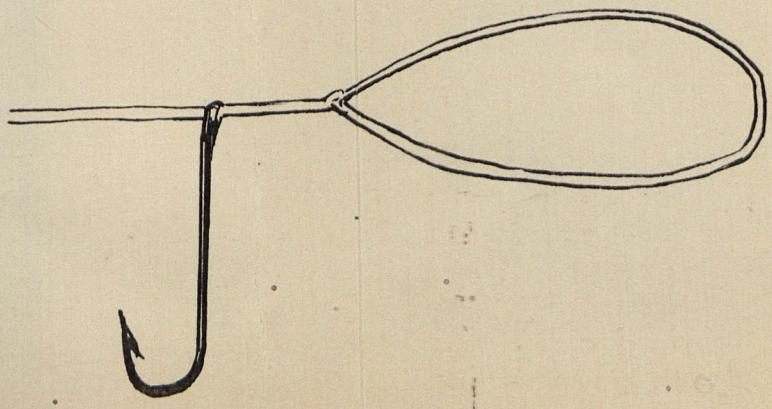
(1)



(2)



(3)



flies from 1¼ to 2 inches in length are often all that are required. On the larger rivers flies from 2 inches up to lures of 3¼ inches are necessary. Apart from experimental flies I now limit my choice to the Silver Doctor, Jock Scott, Mar Lodge, and the Teal and Green in the big sizes. The latter is only successful when the Chilwa fry are running, at which time it is the best lure.

19. *Light Spinning*

Though I do not think that light spinning rods can ever replace the heavy rod for general use, each type will find its use on some particular river. For those who require a rod of general utility, in addition to the big spinning rod, the one described as suitable for trout and sea trout will prove the most useful. Thread line reels are suitable in many rivers. Their ease and accuracy of casting are a real joy. At home a gut substitute line is generally considered preferable to a silk line. In India, with the dry heat so often experienced, these are very difficult to manage. Contrary to the practice with the heavy rod, the use of dead bait and gold and silver devons is preferred to that of spoons. The devons are used for a change; the more natural dead bait being considered better for the low waters for which this outfit is so suitable. The thread line spinners, with transparent celluloid fins, and the light wobblers, modified by being mounted with mahseer trebles, are also an improvement on the older types. The light spinning rod has so many other uses, such as fishing a live bait, both with and without a float, that the owner of one should certainly bring it out to this country where it will provide many hours of delightful sport.

LETTERS TO THE EDITOR

EDITOR'S NOTE.—A number of criticisms on points of detail contained in the article "Learning to Fly," which was published in the April issue of this Journal, have been received.

Mr. B. S. Leete, Technical Officer to the Directorate of Civil Aviation in India, to whom the matter was referred, explains the conditions under which a pilot, licensed at Home, may fly in India.

DIRECTOR OF CIVIL AVIATION
IN INDIA.

Demi-Official No. L1
Dated Simla, the 26th July 1937.

DEAR SIR,

I am replying to your letters of the 28th April and 5th July.

As the writer states in the article to which you refer, he has no experience with flying in India and the conclusions which he has drawn are in some cases erroneous. He is right, however, in saying that Rs. 600 is a fair average for the cost of an "A" licence. Allowing 15 hours dual at Rs. 35 an hour and five hours solo at Rs. 30 an hour this works out to Rs. 525. Some pupils, however, take more time than this and others take less, on the average slightly more. It must be remembered, however, that the conditions for obtaining an Indian "A" licence are more strenuous than those for an English "A." In fact the standard demanded in India is higher in all categories of pilots' licences.

The writer of the article goes on to say that the Indian authorities do not accept Home licences. This is not quite true, for, if a pilot arrives flying a British registered aircraft, he can continue to fly in India on his English licence which is valid for flying aircraft registered in Great Britain, although it is not normally valid for flying aircraft registered in India. Should, however, the pilot wish to fly Indian registered aircraft he may have his English licence validated for a limited period for this purpose. This will give him time to get in the requisite experience to obtain his Indian "A" and to do the tests which are not demanded of the English "A," and it will also give him time to learn the regulations governing flying in India in which he has to pass an examination. Should a pilot from England only be staying in

India about two or three months there would not be any necessity for him to take out an Indian licence as his English licence could be validated for that length of time. As regards the "A1" and "B" licences, the "A1" has now been extended so that its holder can fly for hire or reward during the hours of daylight anywhere in British India other than as pilot on a scheduled air line, although he may fly as second pilot on such a service to gain the necessary experience to obtain his "B" licence. The Indian "B" licence also requires blind flying experience under the new rules.

The "curious situation" to which the writer refers towards the end of his article, that is with reference to an "A" licence pilot with private passengers, does not arise. Neither in India nor in England can a pilot fly beyond the three-mile limit without an "A" licence. Indian aircraft rules do not allow an "A" licence pilot to carry a passenger until the pilot has done 25 hours solo flying and has a certificate as to his competency from a pilot instructor. I think this covers all the points raised. However, should you require any further information, we shall be pleased to help you as far as we can.

Yours sincerely,
B. S. Leete.

Dear Sir,

In the July 1937 number of your Journal I saw an article entitled "Object!!" by Major M. R. Roberts, which set me thinking. In the article it is suggested that the word "Object" is not definite enough and that in some cases it is apt to be confused with "Objective." Believing, as I do to a certain extent, that "Object" is not definite enough I cannot help saying that, for the matter of that, nothing is really definite in the sphere of tactics. War being an art and not a science it can never be worked out with mathematical precision. That is why superior generalship has counted, counts, and will always count.

If we leave the word "Object" severely alone and take it for what it is worth, we will invariably attain what we want. Let us see what we aim to express in the "Object" of an appreciation. The answer, I am sure, is that we wish to explain, in a nutshell, our role for the task in hand, with enough terseness to make that

role absolutely clear. If that is what "Object" implies then nobody should be confused about it.

On the other hand, if we take a very broad view of the word, then "Object" can never change and therefore can never be confused, because the object of one and all in war is to subjugate the will of the enemy.

Now that is definite enough but not elaborate enough to guide and control our detailed action in an operation. Hence these off-shoots.

"Object" is of different significance and magnitude to different grades of commanders in the field. But it all boils down to the same thing really, that is to put the task, whatever it may be, in a nutshell. To replace "Object" by "Problem" as suggested by Major Roberts will not in my opinion help a soldier. If he is apt to confuse "Object" he is just as liable to confuse "Problem" also. In fact the chances of confusion in the latter case are much greater, because in any situation the object is always one and the problems are many. As for confusing "Object" with "Objective" the only remedy in my opinion is for the confused to have more and intensive training.

An instance is quoted in the article of a junior officer who, although he gave excellent orders for an attack, had in fact made an unsound plan because his line of advance took his troops into an area which would have forced machine-guns supporting the advance to stop firing. I am certain that this was not due to that unfortunate word "Object" but to one or other of the following reasons:

Faulty or inadequate reconnaissance;

Preparation of T.E.W.T.s under shady trees;

Concentration on the academic rather than the practical side of framing orders; and, last but not least,

the lack of live bullets.

I am therefore of opinion that "Object" is good enough for the purpose and should be left severely alone.

Yours faithfully,

GHULAM MOIN-UD-DIN, Major,

Nizam's Horse Artillery.

EDUCATION AND THE INDIAN ARMY

SIR,

In the interesting article published in your July issue under the title of "Education and the Indian Army" the writer states that "in Roman Urdu the graceful, phonetic Persian script is replaced by the ungraceful, unphonetic Latin one, and much of the difficulty of teaching soldiers is caused by the unfamiliarity of the symbols."

A phonetic script is generally accepted to be one in which each sound or phoneme is represented by a separate symbol. In the Perso-Arabic script as modified for use in Urdu there are seven phonetically redundant letters—a result of the phonetically indiscriminate use of 2 letters for the soft 't', 4 letters for the 'z', 3 letters for the 's' and 2 letters for the 'h' sounds. There is no constant symbol for the semi-vowel 'y' frequently found compounded with the preceding consonant in such words as 'kya'—what? (indistinguishable in Perso-Arabic script from 'kia,' the past participle of 'karna'), 'kyon'—why?, 'pyara'—dear and 'gyara'—eleven. In certain words, *hamza* is used to indicate semi-vowel 'y' (e.g. 'lie') though it is also used in Arabic words with its proper function of a glottal stop. There is no established method of writing short vowels or of distinguishing 'ai' from 'i' or 'au' from 'o'. The Perso-Arabic alphabet as used in Urdu is therefore not phonetic.

Major Richards seems to suggest that the Perso-Arabic script is less unfamiliar to the average enlisted Indian than the Latin. Except for the comparatively small number of recruits who have any pre-enlistment Urdu education, the Latin script is more easily acquired by Indians because it is written from left to right—the most natural way for Indians to write and the way in which the bulk of Indian languages are in fact written, and because, like most Aryan languages and particularly Hindi to which most of the tongues of northern India are akin, it has proper symbols for vowels and diphthongs.

The above observations would perhaps seem merely academic and trifling were it not for the fact that Major Richards, unless I am mistaken, wishes to point to the shortcomings of Roman Urdu in order to push his plea for the encouragement of English. I do not wish to give the impression that I am opposed to the teaching of English. I am opposed to its extension on the lines recom-

mended by Major Richards and I am unable to see how his suggestions would "satisfy both schools of thought" whose arguments he enumerates with great fairness. If, for instance, all instruction in Roman Urdu were abolished after the Third Class Certificate, there would be no one who knew Roman Urdu above the Third Class Standard which is necessarily low and quite unable to cope with field message-writing and the training manuals. If these are to be in English there seems to be little point in teaching Roman Urdu at all. A big drive indeed would have to be made to bring the comprehension of the English manuals up to the present standard of comprehension of the Roman Urdu ones and would, I believe, only be possible if English were finally made the *lingua franca* of the Indian Army.

If a middle course is to be steered towards a higher standard of education the possibilities of an improved form of Roman Urdu should be examined. In spite of considerable opposition Roman Urdu has come to be accepted in the Indian Army. In a large number of cases it is the only script which Indian ranks, including Indian officers, can write. It has greatly contributed to the remarkable advances made in Army Education since its introduction. Do not these facts suggest that, rather than face new and possibly far stronger opposition by increasing the use of English, it might be more advisable to aim at perfecting Roman Urdu and developing its use? The alphabet at present in use is not phonetic but it could very easily be made so. The question of the soundness or otherwise of spelling English words as in English might be re-examined in the light of experience gained in this matter in Turkey and Soviet Turkestan. Once a real push backed by expert linguistic knowledge were given to Roman Urdu, there would soon be little shortage of books to embarrass the student.

Roman Urdu provides a convenient compromise between the use of a difficult vernacular script which might be objectionable to certain classes and the greater and eventually universal use of English which, as Major Richards appreciates, has many weighty objections. This does not only apply to the Army. Recent expert enquiries have resulted in a strong recommendation that the vernacular should be far more widely used as the medium of instruction in schools and there is a considerable body of opinion which holds that this would be greatly facilitated by the use of a proper

phonetic Roman alphabet for the preparation of school and technical handbooks. There are many communal and religious difficulties in the way of such a reform the benefits of which have been so amply demonstrated in Turkey and it might not be unfitting if the Indian Army were to show itself as pioneers in this contentious sphere just as it has done in the sphere of rural reconstruction and village uplift.

Your obedient servant,
G. E. Wheeler, Major,
5th Bn. The 7th Rajput Regt.

REVIEWS

THE MAN WELLINGTON

Through the Eyes of Those who knew Him

By Muriel Wellesley. (Constable) 18 sh.

Miss Wellesley follows the promise given in the title. Her story of the great man is told almost entirely by others. Yet her many quotations, culled from nearly a hundred different sources, are chosen with such discrimination, and welded together with such skill, that, instead of a jerky and disconnected narrative, as might well have been expected, this story of her great-grand-uncle runs easily and smoothly throughout. The result is an interesting and very charming study.

Perhaps wisely, no attempt has been made to discuss Wellington's strategy or tactics. The book deals only with the character of the Man, and its effect on his personal dealings with others.

Naturally enough, Miss Wellesley has contrived to portray the Duke in the best possible light, and one gets the impression of a man, who, in his strength of purpose, simplicity and modesty is almost a god. His weaknesses are glossed over, and even, at times, made into virtues,—his virtues are magnified. Yet one cannot doubt his inherent kindliness, his constant anxiety for the sufferings of the wounded, his complete and utter disregard of public opinion, and his steadfast belief in the justice and righteousness of his own actions on behalf of his country.

The balance between the various stages of his life is well preserved, from the time of his "unostentatious" birth, until he becomes the world's peacemaker. We read of his early days, when he was a "lonely little boy" and the "dunce of the family," and of his life of comparatively idle pleasure in Ireland, during which time he changed rapidly from one regiment to another (five in all!), until at the age of 25, we find him, as a young colonel of the 33rd Regiment, "blooded" for the first time in the Netherlands Campaign of 1794. One can hardly wonder that during his eight years in India, spent under the patronage of his brother, the Governor-General, his seniors were sometimes embittered by the obvious favour shown to this young officer of 30 years of age, however brilliant his capabilities as a leader.

Before describing his Indian and Peninsular Campaigns Miss Wellesley gives a brief, but very clear description of contemporary

events,—a useful addition to the book, and in the narrative she avoids the burden of innumerable dates by the satisfactory method of showing the year, and her hero's age, at the top of each page.

Wellington's reactions to events in the Peninsula are well told. Surely no other General in history has ever made such a profound personal impression on his troops as he did. And, realising this fact himself, no wonder that, after Waterloo, he said "By God! I don't think it would have done if I had not been there."

In her description of Waterloo the authoress goes into more military details than elsewhere, and it is here that she tends to give a wrong impression, by belittling the effect of the Prussians on the battlefield as a whole. "When the Duke's army had made its great advance, the Prussians began to arrive upon the battlefield, and, joining in the pursuit, sealed the victory." Admittedly the concentration of the Allied Armies was delayed until the late afternoon, but the battlefield was not limited to Waterloo alone. The Prussians, apart from occupying the attentions of Grouchy during the day, began to influence the result of the battle much earlier. This does not however affect the picture of the Man.

Few details are given of his married life,—his marriage itself seems to have been an example of his sense of duty, as opposed to any satisfaction of personal inclinations,—but there is no doubt of his devotion to his two sons, who seem always to have been his first thought.

The book ends with a description of Wellington as the British Ambassador in Paris, before his return to England in 1818.

A. J. D. R.

The I. C. S.

By Sir Edward Blunt, K.C.I.E., O.B.E.

[(*Faber and Faber, Ltd.*). 8*s.* 6*d.*]

Familiar as these initials—I.C.S.—may be, there exists in Britain and elsewhere an astonishing ignorance of the life and duties of the members of the Service. That this should be so is not surprising when we consider the lack of a book providing not only a history of the Service but an intimate description of the day-to-day work of its members and the tasks which they are called upon to perform. This notable gap in our literature has now been ably filled by Sir Edward Blunt.

The opening chapters of the book appropriately contain a brief history of the Service, which traces its origin back to the trading days of John Company. As the Company began to acquire territories, so its traders were gradually transformed into administrators. Moreover, in tracing the development of the Service down to the present day, the author incidentally presents the reader with one of the most compact and lucid sketches of Indian constitutional history that it is possible to find.

Full of interest, however, as these chapters are, the most valuable part of the book is undoubtedly that which describes the life and duties of the present-day civil servant in India. In this intimate sketch the author rightly stresses the two chief characteristics of the service—the variety of the duties which its members perform and the close contact which they have with the people. The civil servant may be administrator, revenue expert, judge, secretary to Government, or diplomat. There is in fact something to suit almost every taste. The life of the district officer (or sub-divisional officer) is perhaps in itself the most varied. He is not only a magistrate who tries criminal cases, suppresses riots, and maintains order generally, but is an administrative officer with a multitude of tasks not the least interesting of which to-day is rural reconstruction. To the people, as the author says, he is not merely the representative of Government, but Government personified.

Sir Edward does not omit to deal with the problems of the very young civilian—his entrance to the Service, probation, arrival in the country and probable domestic arrangements and his training and promotion. Nor does he omit to deal with sport in all the forms in which it is offered to the civilian in India.

Much misgiving has been felt in India and in Britain as to the prospects of the Service under the new Constitution. The author is, we are glad to say, no subscriber to the pessimistic belief that the great days of the I.C.S. are over, and he emphasises that its opportunities for service and valuable work have never been greater than they are now.

Many books about India are marred by the failure to remember that diversity of customs and lack of uniformity in administrative procedure and nomenclature between one province and another are such a marked feature of India that generalised statements are dangerous. It is therefore with particular pleasure that

we note Sir Edward's painstaking and almost entirely successful effort to avoid that pitfall.

In conclusion, we are confident that this book will prove a boon to parents and to the prospective civilian, and we would commend to all who are interested in India this admirably written description of what Lord Willingdon has described as "what is still the finest and most interesting Service that there is in any part of the British Empire."

W. G. A.

BOOKS RECEIVED

"A History of Peaceful Change in the Modern World," by Cruttwell. (Presented by The Oxford University Press, Bombay.)

"Modern Warfare: Armies, not Air Forces decide Wars," by Lt.-Colonel B. C. Dening. (Presented by the North Hants Printing Co., Ltd., Fleet, Hants, England.)

"Delhi: A Historical Sketch," by T. G. P. Spear. (Presented by the Oxford University Press, Bombay.)

Sole Official Agents for Advertisements in the British Isles, Gale & Polden Ltd., Ideal House, Argyll Street, Oxford Circus, London, W.1.
Telephone : Whitehall 4922.

United Service Institution of India

JANUARY, 1937

CONTENTS

I.—NEW MEMBERS

The following new members joined the Institution from 1st September to 30th November 1936:—

Life Member:

Lieut. F. D. I. Wood.

Ordinary Members:

P. Mason, Esq., I.C.S.

Captain C. J. A. Grove.

Captain Jaswant Singh.

Captain R. R. Wisher.

Lieut. K. Bhagwati Singh.

Lieut. St. H. W. T. Lewis.

Lieut. H. C. H. Mead.

Lieut. C. L. Richardson.

Lieut. M. Umrao Khan.

2/Lieut. W. W. Stewart.

II.—THE JOURNAL

The Institution publishes a quarterly Journal in the months of January, April, July and October, which is issued postage-free to members in any part of the world. Non-members may obtain the Journal at Rs. 2-8 per copy, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—CONTRIBUTIONS TO THE JOURNAL

Articles may vary in length from two thousand to ten thousand words. They should be submitted in duplicate and typewritten on one side of the paper. Manuscript articles cannot be considered. Payment is made on publication at from Rs. 40 to Rs. 100 in accordance with the value and length of the contribution.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 535, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

The Committee reserve to themselves the right to omit any matter which they consider objectionable.

Articles are only accepted on these conditions.

IV.—READING ROOM AND LIBRARY

The United Service Institution of India is situated on the Mall, Simla, and is open all the year round—including Sundays—from 9 a.m. until sunset. The Reading Room of the Institution is provided with most of the leading illustrated papers, newspapers, magazines and journals of military, naval and service interest.

There is a well-stocked library in the Institution from which members can obtain books on loan free in accordance with the following rules:—

(1) The library is only open to members and honorary members, who are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) A member shall not be allowed, at one time, more than three books or sets of books.

(4) No particular limit is set as to the number of days for which a member may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member, it will be recalled.

(5) Applications for books from members at outstations are dealt with as early as possible and books are despatched post free per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of the date of issue.

(6) If a book is not returned at the end of one month, it must be paid for if so required by the Executive Committee. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print, the value shall be fixed by the Executive Committee and the amount, when received, spent in the purchase of a new book.

(7) The issue of a book under these rules to any member implies the latter's compliance with the rules and the willingness to have them enforced, if necessary, against him.

(8) The catalogue of the Library has been revised and is now available for sale at Rs. 2-8 per copy plus postage. The Library has been completely overhauled and all books re-classified, hence the new catalogue meets the general demand for an up-to-date production containing all military classics and other works likely to be of use to members of the Institution. Members who have not yet ordered their copies are advised to send a post card to the Librarian of the Institution, Simla.

V.—LIBRARY BOOKS

A list of the books received during the preceding quarter is enclosed in loose leaf form suitable for cutting into strips for pasting in the Library catalogue.

The Institution is in possession of a collection of old and rare books presented by members from time to time and, while such books are not available for circulation, they can be seen by members visiting Simla.

The Secretary will be glad to acknowledge the gift of old books, trophies, medals, etc., presented to the Institution.

VI.—PROMOTION EXAMINATIONS

(*a*) *Military History*—(Reference I. A. O. 257 of 1935).

The following table shows the campaigns on which military history papers will be set for Lieutenants for promotion to Captain in sub-head *b* (*iii*), and for Captains for promotion to Major in sub-head *d* (*iii*), with a list of books recommended for the study of each:—

1 Serial No.	2 Date of Examination.	3 Campaign set for first time.	4 Campaign set for second time.	5 Campaign set for last time.
1	March 1937.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).	..	Mesopotamia, from October 1915 to the occupation of Baghdad, 11th March 1917.
2	October 1937.	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).	..
3	March 1938.	..	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).
4	October 1938.	..	..	Mesopotamia, from 12th March 1917 to the Armistice.

The following books are recommended for the study of the campaigns: —

Campaign.	Book.
Mesopotamia—	
March 1936 to March 1937. ..	History of the Great War—Military Operations—Mesopotamia, Vols. II and III (less Chapters XXXIV *et seq*).
October 1937 to October 1938. ..	History of the Great War—Military Operations—Mesopotamia, Vols. III (Chapters XXXIV *et seq*) and IV.
All	A Brief Outline of the Campaign in Mesopotamia, 1914—1918. Major R. Evans, M C. (*Sifton Praed*).
The Russo-Japanese War ..	Official History of the Russo-Japanese War, Parts I (second edition) and II (*British—Military*), or Official History of the Russo-Japanese War (Naval and Military). Vol. I, Chapters 1—17 (less 4, 7, 9 and 10).

The campaigns set for Majors, R.A.M.C. and R.A.V.C., up to and including 1937, are published in I.A.O.s 72 of 1935 and 49 of 1936.

(*b*) *Other Subjects.*

In addition to the manuals and regulations mentioned in K.R. and R.A.I., the following books are recommended: —

"Modern Military Administration, Organisation and Transportation" (Harding-Newman).

"Military Organisation and Administration" (Lindsell).

"A. and Q. or Military Administration in War" (Lindsell).

"A Study of Unit Administration" (Gale and Polden).

"Military Law" (Banning).

"The Defence of Duffers' Drift," 1929 (Swinton).

"Tactical Schemes, with Solutions, Series I and II" (Kirby and Kennedy).

"Elementary Tactics or the Art of War, British School," Vol. I (Pakenham Walsh).

"Imperial Military Geography" (Cole).

"Elements of Imperial Defence" (Boycott).

"Changing Conditions of Imperial Defence" (Cole).

"A Practical Digest of Military Law" (Townshend-Stephens. Pub. Sifton Praed).

VII.—STAFF COLLEGE EXAMINATION.—[See Staff College Quetta, Regulations, 1930, obtainable from the Manager of Publications, Delhi or Calcutta.]

(*a*) Campaigns.

The following campaigns have been set for the Staff College Entrance Examination:—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign, up to and including the Battle of Salamanca.

The Strategy and Broad Tactical Lessons of—

The American Civil War.

Russo-Japanese War, up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The Strategy and Tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The Action of the British Expeditionary Force in France and Belgium up to and including the first battle of Ypres.

The 3rd Afghan War, 1919.

(*b*) In addition to his official books every student is recommended to provide himself with a copy of—

(*i*) Military Organisation and Administration (Lindsell).

Military Law (Banning).

British Strategy (Maurice).

Notes on the Land and Air Forces of British Overseas Dominions, Colonies and Protectorates (Official).

Outline of the Development of the British Army up to 1914 (Hastings Anderson).

Imperial Military Geography (Cole).

An Atlas.

(*ii*) The following pamphlets, etc., can be borrowed from the Orderly Room, and should be studied:—

Examination papers for admission to the Staff College.

Training Memoranda—War Office.

Training Memoranda—A.H.Q. India.

Notes on certain Lessons of the Great War.

Passing it on (Skeen).

(*iii*) Periodicals, etc., to which students should subscribe—

"The Times."

"U. S. I. (India) Journal."

(*iv*) Books which can be obtained from libraries—

(*Note.*—Those marked with an asterisk should be used only as books of reference.)

R. U. S. I. Journal.

Army Quarterly.

Round Table.

Journal of the Institute of International Affairs.

Science of War (Henderson).

Transformation of War (Colin).

The War of Lost Opportunities (Hoffman).

*The Principles of War (Foch).

*The Direction of War (Bird).

Soldiers and Statesmen (Robertson).

*Historical Illustrations to F. S. R. II (Eady).

*In the Wake of the Tank (Martel).

*The Re-making of Modern Armies (Liddell Hart).

*The British Way in Warfare (Liddell Hart).

*Napoleon's Campaign in 1796 in Italy (Burton).

*Waterloo Campaign (Robinson).

*Outline History of Russo-Japanese War, 1904, up to the Battle of Liao-Yang (Pakenham Walsh).

The Campaign of Liao-Yang (Rowan Robinson).

*The World Crisis (Churchill).

*A History of the Great War (Cruttwell).

The Palestine Campaign (Wavell).

A Brief Outline of the Campaign in Mesopotamia (Evans).

*The Dardanelles Campaign (Callwell).

*German Strategy in the Great War (Neame).

*Official Histories of the War—France, Egypt, Palestine, Mesopotamia, Gallipoli.

*Waziristan, 1919-20 (Watteville).

*The Third Afghan War (Official).

A. & Q. (Lindsell).

Changing Conditions of Imperial Defence (Cole).

The British Empire (Lucas).

*The Government of the British Empire (Jenks).

*The Foundation and Growth of the British Empire (Williamson).

*A Short History of British Expansion (Williamson).

*Expansion of the British Empire (Woodward).

(*v*) Books and Articles on Transportation—

Railways in War. Lieutenant-Colonel E. St. G. Kirke, D.S.O., R.E., Army Quarterly, January 1930.

Strategic Moves by Rail, 1914. Journal R. U. S. I., February and May 1935.

The Lines of Communication in the Dardanelles. Lieutenant-General Sir G. MacMunn. Army Quarterly, April 1930.

The Lines of Communication in Mesopotamia. Lieutenant-General Sir G. MacMunn. Army Quarterly, October 1927.

History of the R. A. S. C., Vol. II (all campaigns).

The Supply and Transportation Problem of Future Armies. Major B. C. Dening, M.C., R.E., Journal U. S. I. India, April 1932.

The Supply of Mechanised Forces in the Field. Journal R. U. S. I., 1929.

The Board of Trade and the Fighting Services. Journal R. U. S. I., 1929.

Railway Organisation of an Army in War. Lieutenant-Colonel Anderson, D.S.O., R.E., Journal R. U. S. I., 1927.

What is Required of a Railway in a Theatre of Operations. Major-General Taylor, R.E., Journal, September 1932.

F. S. P. B. War Office, 1932. Read Sections 36 to 38. Do not memorise detail. Know where to find it.

F. S. P. B. India.

VIII.—SCHEMES, ETC.

The following papers and précis of lectures set for the A.H.Q. Staff College Course, 1935, are available for issue to members of the Institution at the nominal price of annas four per copy, plus postage.

STAFF COLLEGE SERIES, 1935.

Tactical Schemes—

D. M. T.'s Paper No. 1.
" " " 2.
" " " 3.
" " " 4 (without solution).
" " " 5.
" " " 6.
" " " 7.
" " " 8.
" " " 9.
" " " 10.

Précis of Lectures

1. Staff College Examination.
2. Night Operations.
3. Strategy and Tactics. Political Objects in War.
4. Strategy and Tactics. Fog in War.
5. Strategy and Tactics. Gallipoli.
6. Maintenance of Material and Animals.

A.H.Q. STAFF COLLEGE COURSE, 1936.

The stock of complete sets of papers referred to in the notice published with I.A.O.s, dated 18th August 1936, is exhausted, but copies of the papers detailed below may be had at two annas each, postage free.

The following maps are for use with the papers noted against them, and may be had at Rs. 2 each, postage free:

Map 1" to 1 mile Sheet 93 (for papers Nos. 30 to 43).
Map 1" to 1 mile Sheet 94 (for papers Nos. 30 to 39).
Map 1" to 1 mile Sheet 38 N/14 (for paper No. 44).

Item.	*Subject.*	*Serial No.*
Notes for officers attending Course	... ...	1
Lecture ...	Military Writing	2
Exercise ...	Message Writing	3
Solution ...	" "	3-A
Lecture ...	Operation Orders and Instructions ...	4
Lecture ...	Appreciations	5
Lecture ...	Contact	6
Lecture ...	Reconnaissance and Infantry Deployment Drill	8
Lecture ...	Tactical Aspect of River Crossings ...	10
Lecture ...	Divisional Cavalry and Armoured Cars ...	17
Lecture ...	Co-operation between the Army and R.A.F. ...	18
Lecture ...	Artillery No. 1. Characteristics and Organisation	20
Lecture ...	Artillery No. 3. Divisional Artillery, Defence and Withdrawal	22
Lecture ...	Signals. Characteristics, Organisation and Employment	27
Exercise ...	March Orders	30
Solution ...	" "	31

Item.	*Subject.*	*Serial No.*
Exercise ...	Appreciation	32
Solution ...	„	33
Exercise ...	Withdrawal	38
Solution ...	„	39
Paper ...	Strategy and Tactics No. 1	40
Solution ...	„ „ „ No. 1	41
Paper ...	„ „ „ No. 2	42
Paper ...	„ „ „ No. 3	44
Solution ...	„ „ „ No. 3	45
Lecture ...	S. & T. No. 1. British Strategy and Higher Direction of War	46
Lecture ...	S. & T. No. 2. Concentrations and Detachments	47
Lecture ...	S. & T. No. 3. Surprise and Security ...	48
Lecture ...	S. & T. No. 4. Communications; Interior and Exterior Lines; Offensive and Defensive Strategy; Fortresses	49
Lecture ...	S. & T. No. 5. Some Thoughts on Morale and Leadership	50
Lecture ...	Transportation. Nos. 1 and 2 ...	58
Paper ...	Transportation	60
Solution ...	„	61
Lecture ...	"A"—Peace and War	62
Lecture ...	Medical Organisation and the System of Evacuation of Casualties in War ...	63
Lecture ...	"Q" War—In Theatre of Operations ...	65
Lecture ...	"Q" Peace and War	66
Paper ...	Organisation and Administration (Peace) ...	67
Solution ...	„ „ „ „ ...	68
Lecture ...	No. 1. Military Law—Court Martial Procedure	71
Lecture ...	No. 2 Military Law—Offences and Charges ...	72
Lecture ...	No. 3. Military Law—Evidence ...	73
Paper ...	No. 1. Military Law	74
Solution ...	Military Law	75
Paper ...	No. 2. Military Law	76
Solution ...	Military Law	77
Paper ...	Essay No. 1	78
Solution ...	„ „	79
Paper ...	„ No. 2	80
Solution ...	„ „	81
Paper ...	„ No. 3	82
Solution ...	„ „	83
Paper ...	„ No. 4	84
Solution ...	„ „	85
Paper ...	„ No. 5	86
Solution ...	„ „	87
Paper ...	„ No. 6	88
Solution ...	„ „	89
Paper ...	„ No. 7	90
Solution ...	„ „	91
Paper ...	„ No. 8	92
Solution ...	„ „	93
Paper ...	„ No. 9	94
Solution ...	„ „	95

IX.—HISTORICAL RESEARCH

The U. S. I. is prepared to supply members and units with typewritten copies of old Indian Army List pages, at the rate of Rs. 2 per typewritten page.

The staff of the Institution is always willing to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

X.—THE MacGREGOR MEMORIAL MEDAL

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June:

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal with Rs. 100 gratuity.

3. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the Fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

7. Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but, in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

8. When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

**N.B.*—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Royal Air Force, Indian Air Force, Royal Indian Navy and the Indian States Forces.

†Replacements of the ribbon may be obtained on payment from the Secretary, U.S.I., Simla.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1937

The Council has chosen the following subjects for the Gold Medal Prize Essay Competition for 1937:

(*i*) "It has been stated that the Defence of India and of Burma is, from the strategic aspect, a single problem. Discuss the truth of this statement, taking as the basis of your argument the threats which exist to the security of both countries in the world conditions of to-day;"

or, as an alternative subject,

(*ii*) "Mr. Baldwin has said that 'The Rhine is our Frontier.' Discuss this."

The following are the conditions of the competition:

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force, Auxiliary Forces and Indian States Forces.

(2) Essays must be typewritten and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1937.

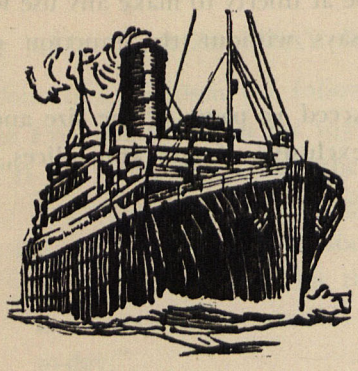
(6) Essays will be submitted for adjudication to three judges chosen by the Council. The judges may recommend a money award, not exceeding Rs. 150, either in addition to, or in substitution for, the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1937.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

ANCHOR LINE



BOMBAY
TO
LIVERPOOL

Calling at—

SUEZ, PORT SAID,
MARSEILLES & GIBRALTAR

SAILING DATES FROM BOMBAY
1937

Britannia	..	Jan.	5	Elysia	..	July	14
Castalia	..	Feb.	27	Britannia	..	July	31
Britannia	..	Mar.	11	Castalia	..	Sept.	24
Tuscania	..	**Mar.**	**25**	Elysia	..	Oct.	16
Elysia	..	Mar.	31	Britannia	..	Oct.	21
California	..	**Apl.**	**8**	**California**	..	**Oct.**	**28**
Britannia	..	May	20	**Tuscania**	..	**Nov.**	**11**
Castalia	..	June	12				

CALIFORNIA and TUSCANIA
First Class and Tourist

BRITANNIA
CABIN and TOURIST

CASTALIA and ELYSIA
CABIN ONLY

Passage rates by Anchor Line ships are moderate, and you have the choice of three classes. But in whatever class you choose to travel, you will find the accommodation extremely good, the service prompt, experienced and efficient, and the cuisine of a very high standard. The Company is proud of its reputation and determined to maintain it.

Through Bookings to U. S. A. and Canada

Full Particulars from Passenger Agents or—

GRAHAMS TRADING CO. (INDIA), LTD.

KARACHI **CALCUTTA** **BOMBAY**

Sole Official Agents for Advertisements in the British Isles, Gale & Polden Ltd., Ideal House, Argyll Street, Oxford Circus, London, W.1. Telephone : Whitehall 4922.

United Service Institution of India

APRIL, 1937

CONTENTS

I.—NEW MEMBERS

The following new members joined the Institution from 1st December 1936 to 28th February 1937:—

Ordinary Members:

Major T. R. Hurst.
Major H. J. Underwood.
Captain C. H. Campbell.
Lieut. Ajit Singh.
Lieut. G. I. Burgess Winn.
Lieut. J. H. L. Crichton.
Lieut. G. C. Richards.
2/Lieut. M. Abdel Ali.
2/Lieut. Abdul Aziz Jarral.
2/Lieut. Abdul Jabbar.
2/Lieut. M. M. Ali Baig.
2/Lieut. Bashir Ahmed.
2/Lieut. Chandra Shekhar.
2/Lieut. S. N. Dar.
2/Lieut. Khushwakt-ul-Mulk.
2/Lieut. M. A. Latif Khan.
2/Lieut. Mohindra Singh Virdi.
2/Lieut. R. G. Naidu.
2/Lieut. N. A. Qureshi.
2/Lieut. Rajendra Singh.
2/Lieut. Ram Singh.
2/Lieut. Rati Ram Chhikara.
2/Lieut. J. Ross.

II.—THE JOURNAL

The Institution publishes a quarterly Journal in the months of January, April, July and October, which is issued postage-free to members in any part of the world. Non-members may obtain the Journal at Rs. 2-8 per copy, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—CONTRIBUTIONS TO THE JOURNAL

Articles may vary in length from two thousand to ten thousand words. They should be submitted in duplicate and typewritten on one side of the paper. Manuscript articles cannot be considered. Payment is made on publication at from Rs. 40 to Rs. 100 in accordance with the value and length of the contribution.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 535, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

The Committee reserve to themselves the right to omit any matter which they consider objectionable.

Articles are only accepted on these conditions.

IV.—READING ROOM AND LIBRARY

The United Service Institution of India is situated on the Mall, Simla, and is open all the year round—including Sundays—from 9 a.m. until sunset. The Reading Room of the Institution

is provided with most of the leading illustrated papers, newspapers, magazines and journals of military, naval and service interest.

There is a well-stocked library in the Institution from which members can obtain books on loan free in accordance with the following rules—

(1) The library is only open to members and honorary members, who are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) A member shall not be allowed, at one time, more than three books or sets of books.

(4) No particular limit is set as to the number of days for which a member may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member, it will be recalled.

(5) Applications for books from members at outstations are dealt with as early as possible and books are despatched post free per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of the date of issue.

(6) If a book is not returned at the end of one month, it must be paid for if so required by the Executive Committee. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print, the value shall be fixed by the Executive Committee and the amount, when received, spent in the purchase of a new book.

(7) The issue of a book under these rules to any member implies the latter's compliance with the rules and the willingness to have them enforced, if necessary, against him.

(8) The catalogue of the Library has been revised and is now available for sale at Rs. 2-8 per copy plus postage. The Library has been completely overhauled and all books re-classified, hence the new catalogue meets the general demand for an up-to-date production containing all military classics and other works likely to be of use to members of the Institution. Members who have not yet ordered their copies are advised to send a post card to the Librarian of the Institution, Simla.

V.—LIBRARY BOOKS

A list of the books received during the preceding quarter is enclosed in loose leaf form suitable for cutting into strips for pasting in the Library catalogue.

The Institution is in possession of a collection of old and rare books presented by members from time to time and, while such books are not available for circulation, they can be seen by members visiting Simla.

The Secretary will be glad to acknowledge the gift of old books, trophies, medals, etc., presented to the Institution.

VI.—PROMOTION EXAMINATIONS

(*a*) *Military History*—(Reference I. A. O. 257 of 1935).

The following table shows the campaigns on which military history papers will be set for Lieutenants for promotion to Captain in sub-head *b* (*iii*), and for Captains for promotion to Major in sub-head *d* (*iii*), with a list of books recommended for the study of each—

1 Serial No.	2 Date of Examination.	3 Campaign set for first time.	4 Campaign set for second time.	5 Campaign set for last time.
1	October 1937.	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).	..
2	March 1938.	..	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).
3	October 1938.	..	..	Mesopotamia, from 12th March 1917 to the Armistice.

The following books are recommended for the study of the campaigns—

Campaign.	Book.
Mesopotamia— *October 1937 to October 1938.* ..	History of the Great War—Military Operations—Mesopotamia, Vols. III (Chapters XXXIV *et seq*) and IV. A Brief Outline of the Campaign in Mesopotamia, 1914—1918. Major R. Evans, M.C. (*Sifton Praed*).
The Russo-Japanese War ..	Official History of the Russo-Japanese War, Parts I (second edition) and II (*British—Military*), or Official History of the Russo-Japanese War (Naval and Military). Vol. I, Chapters 1—17 (less 4, 7, 9 and 10).

The campaigns set for Majors, R.A.M.C. and R.A.V.C., up to and including 1937, are published in I.A.O.s 72 of 1935 and 49 of 1936.

(*b*) *Other Subjects.*

In addition to the manuals and regulations mentioned in K.R. and R.A.I., the following books are recommended—

"Modern Military Administration, Organisation and Transportation" (Harding-Newman).

"Military Organisation and Administration" (Lindsell).

"A. and Q. or Military Administration in War" (Lindsell).

"A Study of Unit Administration" (Gale and Polden).

"Military Law" (Banning).

"The Defence of Duffers' Drift," 1929 (Swinton).

"Tactical Schemes, with Solutions, Series I and II" (Kirby and Kennedy).

"Elementary Tactics or the Art of War, British School," Vol. I (Pakenham Walsh).

"Imperial Military Geography" (Cole).

"Elements of Imperial Defence" (Boycott).

"Changing Conditions of Imperial Defence" (Cole).

"A Practical Digest of Military Law" (Townshend-Stephens. Pub. Sifton Praed).

VII.—STAFF COLLEGE EXAMINATION.—[See Staff College, Quetta, Regulations, 1930, obtainable from the Manager of Publications, Delhi or Calcutta.]

(*a*) Campaigns.

The following campaigns have been set for the Staff College Entrance Examination—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign, up to and including the Battle of Salamanca.

The Strategy and Broad Tactical Lessons of—

The American Civil War.

Russo-Japanese War, up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The Strategy and Tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The Action of the British Expeditionary Force in France and Belgium up to and including the first battle of Ypres.

The 3rd Afghan War, 1919.

(*b*) In addition to his official books every student is recommended to provide himself with a copy of—

(*i*) Military Organisation and Administration (Lindsell).

Military Law (Banning).

British Strategy (Maurice).

Notes on the Land and Air Forces of British Overseas Dominions, Colonies and Protectorates (Official).

Outline of the Development of the British Army up to 1914 (Hastings Anderson).

Imperial Military Geography (Cole).

An Atlas.

(*ii*) The following pamphlets, etc., can be borrowed from the Orderly Room, and should be studied—

Examination papers for admission to the Staff College.

Training Memoranda—War Office.

Training Memoranda—A.H.Q. India.

Notes on certain Lessons of the Great War.

Passing it on (Skeen).

(*iii*) Periodicals, etc., to which students should subscribe—
"The Times."
"U. S. I. (India) Journal."

(*iv*) Books which can be obtained from libraries—
(*Note.*—Those marked with an asterisk should be used only as books of reference.)
R. U. S. I. Journal.
Army Quarterly.
Round Table.
Journal of the Institute of International Affairs.
Science of War (Henderson).
Transformation of War (Colin).
The War of Lost Opportunities (Hoffman).
*The Principles of War (Foch).
*The Direction of War (Bird).
Soldiers and Statesmen (Robertson).
*Historical Illustrations to F. S. R. II (Eady).
*In the Wake of the Tank (Martel).
*The Re-making of Modern Armies (Liddell Hart).
*The British Way in Warfare (Liddell Hart).
*Napoleon's Campaign in 1796 in Italy (Burton).
*Waterloo Campaign (Robinson).
*Outline History of Russo-Japanese War, 1904, up to the Battle of Liao-Yang (Pakenham Walsh).
The Campaign of Liao-Yang (Rowan Robinson).
*The World Crisis (Churchill).
*A History of the Great War (Cruttwell).
The Palestine Campaign (Wavell).
A Brief Outline of the Campaign in Mesopotamia (Evans).
*The Dardanelles Campaign (Callwell).
*German Strategy in the Great War (Neame).
*Official Histories of the War—France, Egypt, Palestine, Mesopotamia, Gallipoli.
*Waziristan, 1919-20 (Watteville).
*The Third Afghan War (Official).
A. & Q. (Lindsell).
Changing Conditions of Imperial Defence (Cole).
The British Empire (Lucas).
*The Government of the British Empire (Jenks).

*The Foundation and Growth of the British Empire (Williamson).

*A Short History of British Expansion (Williamson).

*Expansion of the British Empire (Woodward).

(*v*) Books and Articles on Transportation—

Railways in War. Lieutenant-Colonel E. St. G. Kirke, D.S.O., R.E., Army Quarterly, January 1930.

Strategic Moves by Rail, 1914. Journal R. U. S. I., February and May 1935.

The Lines of Communication in the Dardanelles. Lieutenant-General Sir G. MacMunn. Army Quarterly, April 1930.

The Lines of Communication in Mesopotamia. Lieutenant-General Sir G. MacMunn. Army Quarterly, October 1927.

History of the R. A. S. C., Vol. II (all campaigns).

The Supply and Transportation Problem of Future Armies. Major B. C. Dening, M.C., R.E., Journal U. S. I. India, April 1932.

The Supply of Mechanised Forces in the Field. Journal R. U. S. I., 1929.

The Board of Trade and the Fighting Services. Journal R. U. S. I., 1929.

Railway Organisation of an Army in War. Lieutenant-Colonel Anderson, D.S.O., R.E., Journal R. U. S. I., 1927.

What is Required of a Railway in a Theatre of Operations. Major-General Taylor, R.E., Journal, September 1932.

F. S. P. B. War Office, 1932. Read Sections 36 to 38. Do not memorise detail. Know where to find it.

F. S. P. B. India.

VIII.—SCHEMES, ETC.

The following papers and précis of lectures set for the A.H.Q. Staff College Course, 1935, are available for issue to members of the Institution at the nominal price of annas four per copy, plus postage.

STAFF COLLEGE SERIES, 1935.

Tactical Schemes—

D. M. T.'s Paper No. 1.
" " " 2.
" " " 3.
" " " 4 (without solution).
" " " 5.
" " " 6.
" " " 7.
" " " 8.
" " " 9.
" " " 10.

Précis of Lectures

1. Staff College Examination.
2. Night Operations.
3. Strategy and Tactics. Political Objects in War.
4. Strategy and Tactics. Fog in War.
5. Strategy and Tactics. Gallipoli.
6. Maintenance of Material and Animals.

A.H.Q. STAFF COLLEGE COURSE, 1936.

The stock of complete sets of papers referred to in the notice published with I.A.O.s, dated 18th August 1936, is exhausted, but copies of the papers detailed below may be had at two annas each, postage free.

Item.	*Subject.*	*Serial No.*
Notes for officers attending Course	... ...	1
Lecture ...	Military Writing	2
Lecture ...	Artillery No. 1. Characteristics and Organisation	20
Lecture ...	S. & T. No. 2. Concentrations and Detachments	47
Lecture ...	S. & T. No. 3. Surprise and Security ...	48
Lecture ...	S. & T. No. 4. Communications; Interior and Exterior Lines; Offensive and Defensive Strategy; Fortresses	49
Lecture ...	S. & T. No. 5. Some Thoughts on Morale and Leadership	50
Paper ...	Transportation	60
Solution ...	"	61

Item.	Subject.	Serial No.
Lecture ...	"A"—Peace and War	62
Lecture ...	Medical Organisation and the System of Evacuation of Casualties in War ...	63
Lecture ...	"O" Peace and War	66
Paper ...	Organisation and Administration (Peace) ...	67
Solution ...	„ „ „ „ ...	68
Lecture ...	No. 2 Military Law—Offences and Charges ...	72
Paper ...	No. 1. Military Law	74
Solution ...	Military Law	75
Paper ...	No. 2. Military Law	76
Solution ...	Military Law	77
Paper ...	Essay No. 1	78
Solution ...	„ „	79
Paper ...	„ No. 2	80
Solution ...	„ „	81
Paper ...	„ No. 3	82
Solution ...	„ „	83
Paper ...	„ No. 4	84
Solution ...	„ „	85
Paper ...	„ No. 5	86
Solution ...	„ „	87
Paper ...	„ No. 7	90
Solution ...	„ „	91
Paper ...	„ No. 8	92
Solution ...	„ „	93
Paper ...	„ No. 9	94
Solution ...	„ „	95

IX.—HISTORICAL RESEARCH

The U. S. I. is prepared to supply members and units with typewritten copies of old Indian Army List pages, at the rate of Rs. 2 per typewritten page.

The staff of the Institution is always willing to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

X.—THE MacGREGOR MEMORIAL MEDAL

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June:

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal with Rs. 100 gratuity.

3. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the Fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

7. Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but, in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

8. When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

**N.B.*—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Royal Air Force, Indian Air Force, Royal Indian Navy and the Indian States Forces.

†Replacements of the ribbon may be obtained on payment from the Secretary, U.S.I., Simla.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1937

The Council has chosen the following subjects for the Gold Medal Prize Essay Competition for 1937:

(*i*) "It has been stated that the Defence of India and of Burma is, from the strategic aspect, a single problem. Discuss the truth of this statement, taking as the basis of your argument the threats which exist to the security of both countries in the world conditions of to-day;"

or, as an alternative subject,

(*ii*) "Mr. Baldwin has said that 'The Rhine is our Frontier.' Discuss this."

The following are the conditions of the competition:

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force, Auxiliary Forces and Indian States Forces.

(2) Essays must be typewritten and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1937.

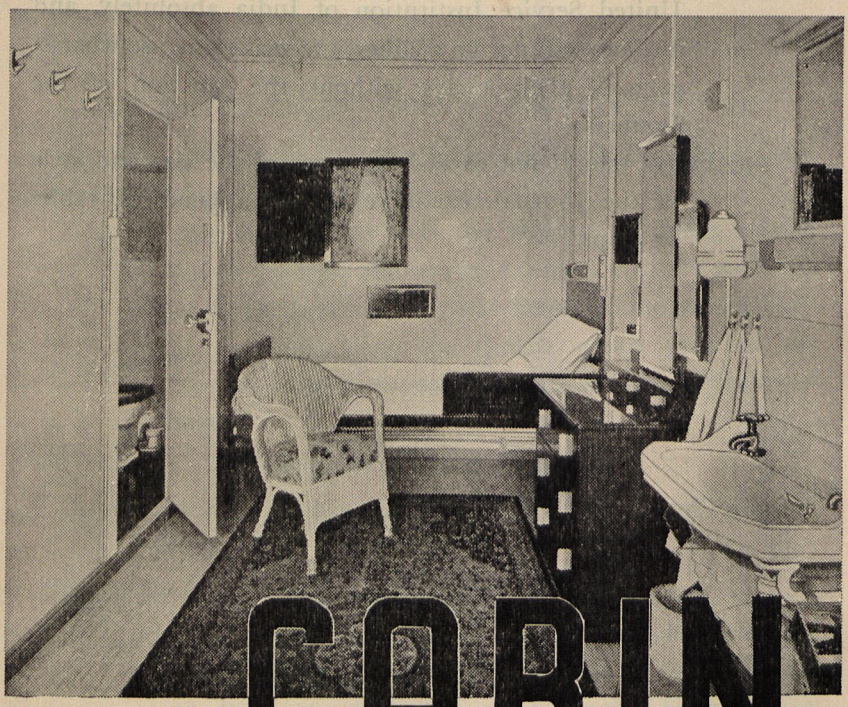
(6) Essays will be submitted for adjudication to three judges chosen by the Council. The judges may recommend a money award, not exceeding Rs. 150, either in addition to, or in substitution for, the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1937.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

THIS IS YOUR



CABIN

ON THE "CIRCASSIA"

By its attractive atmosphere of efficient comfort and brightness, this stateroom, which is typical of those on the new twin-screw motor ships "CIRCASSIA," "CILICIA" and others of the Anchor Line fleet, at once makes you feel happy and at ease.

When next you are going to Europe remember it's more comfortable by Anchor Line.

GRAHAMS TRADING CO. (INDIA) LTD.
BOMBAY KARACHI CALCUTTA

ANCHOR LINE

Sole Official Agents for Advertisements in the British Isles, Gale & Polden Ltd., Ideal House, Argyll Street, Oxford Circus, London, W.1.
Telephone: Whitehall 4922.

United Service Institution of India

JULY, 1937

CONTENTS

I.—NEW MEMBERS

The following new members joined the Institution from 1st March to 31st May 1937:

Ordinary Members:

Sir Charles C. Chitham, KT., C.I.E.
The Hon'ble Mr. R.M. Maxwell, C.S.I., C.I.E., I.C.S.
C.McI.G. Ogilvie, Esq., C.B.E., I.C.S.
G.W. Benton, Esq., Indian Police.
Major-General D.S. Skelton, C.B., D.S.O.
Brigadier W.H. McN. Verschoyle-Campbell, O.B.E., M.C.
Colonel J.A. Manifold, D.S.O., M.B.
Squadron Leader A.J. Cox, M.B.E.
Major F.I.de la P. Garforth.
Major D.A.L. Wade, M.C.
Captain D. Ross.
Captain D.M. Shean.
Captain S.T.St. John Parry.
Lieut. I.R. McIntosh.
Lieut. Mohd. Moinuddin Ahmad.
Lieut. Prithvi Jeet Singh.
Lieut C.E. Watson-Smyth.
2/Lieut. C.K. Freer.
2/Lieut. Ranbir Singh Sidhu.

II.—THE JOURNAL

The Institution publishes a quarterly Journal in the months of January, April, July and October, which is issued postage-free to members in any part of the world. Non-members may obtain the Journal at Rs. 2-8 per copy, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—CONTRIBUTIONS TO THE JOURNAL

Articles may vary in length from two thousand to ten thousand words. They should be submitted in duplicate and typewritten on one side of the paper. Manuscript articles cannot be considered. Payment is made on publication at from Rs. 40 to Rs. 150 in accordance with the value and length of the contribution.

With reference to Regulations for the Army in India, paragraph 204 and King's Regulations, paragraph 535, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

The Committee reserve to themselves the right to omit any matter which they consider objectionable.

Articles are only accepted on these conditions.

IV.—READING ROOM AND LIBRARY

The United Service Institution of India is situated on the Mall, Simla, and is open all the year round—including Sundays—from 9 a.m. until sunset. The Reading Room of the Institution

is provided with most of the leading illustrated papers, newspapers, magazines and journals of military, naval and service interest.

There is a well-stocked library in the Institution from which members can obtain books on loan free in accordance with the following rules—

(1) The library is only open to members and honorary members, who are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) A member shall not be allowed, at one time, more than three books or sets of books.

(4) No particular limit is set as to the number of days for which a member may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member, it will be recalled.

(5) Applications for books from members at outstations are dealt with as early as possible and books are despatched post free per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of the date of issue.

(6) If a book is not returned at the end of one month, it must be paid for if so required by the Executive Committee. Lost and defaced books shall be replaced at the cost of the member to whom they were issued. In the case of lost books which are out of print, the value shall be fixed by the Executive Committee and the amount, when received, spent in the purchase of a new book.

(7) The issue of a book under these rules to any member implies the latter's compliance with the rules and the willingness to have them enforced, if necessary, against him.

(8) The catalogue of the Library is available for sale at Rs. 2-8 per copy plus postage. The Library has been completely overhauled and all books re-classified, hence the catalogue meets the general demand for an up-to-date production containing all military classics and other works likely to be of use to members of the Institution. Members who have not yet ordered their copies are advised to send a post card to the Librarian of the Institution, Simla.

V.—LIBRARY BOOKS

A list of the books received during the preceding quarter is enclosed in loose leaf form suitable for cutting into strips for pasting in the Library catalogue.

The Institution is in possession of a collection of old and rare books presented by members from time to time and, while such books are not available for circulation, they can be seen by members visiting Simla.

The Secretary will be glad to acknowledge the gift of old books, trophies, medals, etc., presented to the Institution.

VI.—PROMOTION EXAMINATIONS

(*a*) *Military History*—(Reference I. A. O. 257 of 1935).

The following table shows the campaigns on which military history papers will be set for Lieutenants for promotion to Captain in sub-head *b* (*iii*), and for Captains for promotion to Major in sub-head *d* (*iii*), with a list of books recommended for the study of each—

1 Serial No.	2 Date of Examination.	3 Campaign set for first time.	4 Campaign set for second time.	5 Campaign set for last time.
1	October 1937.	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).	..
2	March 1938.	..	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).
3	October 1938.	..	..	Mesopotamia, from 12th March 1917 to the Armistice.

The following books are recommended for the study of the campaigns—

Campaign.	Book.
Mesopotamia— *October 1937 to October 1938.* ..	History of the Great War—Military Operations—Mesopotamia, Vols. III (Chapters XXXIV *et seq*) and IV. A Brief Outline of the Campaign in Mesopotamia, 1914—1918. Major R. Evans, M.C. (*Sifton Praed*).
The Russo-Japanese War ..	Official History of the Russo-Japanese War, Parts I (second edition) and II (*British Military*), or Official History of the Russo-Japanese War, (Naval and Military), Vol. I, Chapters 1—17 (less 4, 7, 9 and 10).

The campaigns set for Majors, R.A.M.C. and R.A.V.C., up to and including 1937, are published in I.A.O.s 72 of 1935 and 49 of 1936.

(*b*) *Other Subjects.*

In addition to the manuals and regulations mentioned in K.R. and R.A.I., the following books are recommended—

"Modern Military Administration, Organisation and Transportation" (Harding-Newman), 1933.

"Military Organisation and Administration" (Lindsell), 1937.

"A. and Q. or Military Administration in War" (Lindsell), 1933.

"Military Law" (Banning), 1936.

"The Defence of Duffers' Drift" (Swinton), 1929.

"Tactical Schemes, with solutions, Series I and II" (Kirby and Kennedy), 1931.

"Elementary Tactics or the Art of War, British School," Vol. I (Pakenham Walsh), 1926.

"Imperial Military Geography" (Cole). 1935.

"Elements of Imperial Defence" (Boycott), 1936.

"A Practical Digest of Military Law" (Townsend-Stephens. Pub. Sifton Praed), 1933.

VII.—STAFF COLLEGE EXAMINATION.—[See Staff College, Quetta, Regulations, 1930, obtainable from the Manager of Publications, Delhi or Calcutta.]

(*a*) Campaigns.

The following campaigns have been set for the Staff College Entrance Examination—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign, up to and including the Battle of Salamanca.

The Strategy and Broad Tactical Lessons of—

The American Civil War.

Russo-Japanese War, up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The Strategy and Tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The Action of the British Expeditionary Force in France and Belgium up to and including the first battle of Ypres.

The 3rd Afghan War, 1919.

(*b*) In addition to his official books every student is recommended to provide himself with a copy of—

(*i*) Military Organisation and Administration (Lindsell), 1937.

Military Law (Banning), 1936.

British Strategy (Maurice), 1929.

Notes on the Land and Air Forces of British Overseas Dominions, Colonies and Protectorates (Official), 1934.

Outline of the Development of the British Army up to 1914 (Hastings Anderson), 1931.

Imperial Military Geography (Cole), 1935.

An Atlas.

(*ii*) The following pamphlets, etc., can be borrowed from the Orderly Room, and should be studied—

Examination papers for admission to the Staff College.

Training Memoranda—War Office.

Training Memoranda—A.H.Q. India.

Notes on certain Lessons of the Great War.

Passing it on (Skeen).

(*iii*) Periodicals, etc., to which students should subscribe—
"The Times."
"U. S. I. (India) Journal."

(*iv*) Books which can be obtained from libraries—
(*Note.*—Those marked with an asterisk should be used only as books of reference.)
R. U. S. I. Journal.
Army Quarterly.
Round Table.
Journal of the Institute of International Affairs.
Science of War (Henderson), 1905.
Transformation of War (Colin), 1912.
The War of Lost Opportunities (Hoffman), 1924.
*The Principles of War (Foch), 1918.
*The Direction of War (Bird), 1925.
Soldiers and Statesmen (Robertson), 1926.
*Historical Illustrations to F. S. R. II (Eady), 1926.
*The British Way in Warfare (Liddell Hart), 1932.
*Napoleon's Campaign in 1796 in Italy (Burton), 1912.
*Waterloo Campaign (Robinson).
*Outline History of Russo-Japanese War, 1904, up to the Battle of Liao-Yang (Pakenham Walsh), 1935.
*The World Crisis (Churchill), 1931 (abridged and revised edition).
*A History of the Great War (Cruttwell), 1936.
The Palestine Campaign (Wavell), 1931.
A Brief Outline of the Campaign in Mesopotamia (Evans), 1926.
*Official Histories of the War—France, Egypt, Palestine, Mesopotamia, Gallipoli.
*Waziristan, 1919-20 (Watteville).
*The Third Afghan War (Official), 1926.
A. & Q. (Lindsell), 1933.
*The Government of the British Empire (Jenks).
*A Short History of British Expansion (Williamson), 1930.

(*v*) Books and Articles on Transportation—
Railways in War. Lieutenant-Colonel E. St. G. Kirke, D.S.O., R.E., Army Quarterly, January 1930.
Strategic Moves by Rail, 1914. Journal R. U. S. I., February and May 1935.
The Lines of Communication in the Dardanelles. Lieutenant-General Sir G. MacMunn. Army Quarterly, April 1930.
The Lines of Communication in Mesopotamia. Lieutenant-General Sir G. MacMunn. Army Quarterly, October 1927.
History of the R.A.S.C., Vol. II (all campaigns).
The Supply and Transportation Problem of Future Armies. Major B. C. Dening, M.C., R.E., Journal U. S. I. India, April 1932.
The Supply of Mechanised Forces in the Field. Journal R. U. S. I., 1929.
The Board of Trade and the Fighting Services. Journal R. U. S. I., 1929.

Railway Organisation of an Army in War. Lieutenant-Colonel Anderson, D.S.O., R.E., Journal R. U. S. I., 1927.

What is Required of a Railway in a Theatre of Operations. Major-General Taylor, R.E., Journal, September 1932.

F. S. P. B. War Office, 1932. Read Sections 36 to 38. Do not memorise detail. Know where to find it.

F. S. P. B. India.

A.H.Q. STAFF COLLEGE COURSE, 1936

The stock of complete sets of papers referred to in the notice published with I.A.O.s, dated 18th August 1936, is exhausted, but copies of the papers detailed below may be had at two annas each, postage free.

Item.	*Subject.*	*Serial No.*
Notes for officers attending Course	... ...	1
Lecture ...	S. & T. No. 2. Concentrations and Detachments	47
Lecture ...	S. & T. No. 3. Surprise and Security ...	48
Lecture ...	S. & T. No 4. Communications; Interior and Exterior Lines; Offensive and Defensive Strategy; Fortresses ...	49
Lecture ...	S. & T. No. 5. Some Thoughts on Morale and Leadership	50
Paper ...	Transportation	60
Solution ...	„	61
Lecture ...	"A"—Peace and War	62
Lecture ...	Medical Organisation and the System of Evacuation of Casualties in War ...	63
Lecture ...	"O" Peace and War	66
Paper ...	Organisation and Administration (Peace)	67
Solution ...	„ „ „ „ ...	68
Paper ...	No. 1. Military Law	74
Paper ...	No. 2. Military Law	76
Solution ...	Military Law	77
Paper ...	Essay No. 1	78
Solution ...	„ „	79
Paper ...	„ No. 2	80
Solution ...	„ „	81
Paper ...	„ No. 3	82
Solution ...	„ „	83
Paper ...	„ No. 4	84
Solution ...	„ „	85
Paper ...	„ No. 5	86
Solution ...	„ „	87
Paper ...	„ No. 7	90
Solution ...	„ „	91
Paper ...	„ No. 8	92
Solution ...	„ „	93
Paper ...	„ No. 9	94
Solution ...	„ „	95

IX.—HISTORICAL RESEARCH

The U. S. I. is prepared to supply members and units with typewritten copies of old Indian Army List pages, at the rate of Rs. 2 per typewritten page.

The staff of the Institution is always willing to assist units, authors of regimental histories and members by searching the many old military records in the Library on their behalf.

X.—THE MacGREGOR MEMORIAL MEDAL

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June:

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal with Rs. 100 gratuity.

3. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the Fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. Only officers and soldiers belonging to the Army in India (including those in civil employ) are eligible for the award of the medal.*

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.†

7. Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but, in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

8. When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

**N.B.*—The terms "officer" and "soldier" include those serving in the British and Indian armies and their reserves, also those serving in Auxiliary Forces, such as the Indian Auxiliary and Territorial Forces and Corps under Local Governments, Frontier Militia, Levies and Military Police, also all ranks serving in the Royal Air Force, Indian Air Force, Royal Indian Navy and the Indian States Forces.

†Replacements of the ribbon may be obtained on payment from the Secretary, U.S.I., Simla.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1938

The Council has chosen the following subjects for the Gold Medal Prize Essay Competition for 1938:

(*i*) "Discuss the dictum that the size of modern armies has rendered strategy wholly subordinate to tactics"

or, as an alternative subject,

(*ii*) "A nation's fighting power is not now merely gauged by its armed fighting strength, but also by its productive strength."
Discuss this.

The following are the conditions of the competition:

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force, Auxiliary Forces and Indian States Forces.

(2) Essays must be typewritten and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

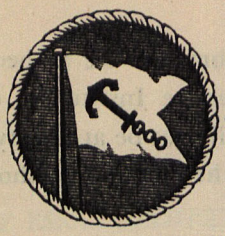
(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1938.

(6) Essays will be submitted for adjudication to three judges chosen by the Council. The judges may recommend a money award, not exceeding Rs. 500, either in addition to, or in substitution for, the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1938.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.



LUXURY TRAVEL

A NEW STANDARD of luxury has come to ocean travel. Anchor Line have achieved it with the twin screw motor ships "CIRCASSIA" and "CILICIA" soon to be in service between India and Europe.

They have been designed to provide a degree of comfort rarely found on this route. The furnishings and decorations are carried out in excellent taste. The cabin accommodation is supremely comfortable. The service and cooking of the highly skilled staff compares favourably with that offered in Europe's finest hotels.

The same high standard of service is found on all ships in the Anchor Line fleet. In each one you will find a spirit of courtesy and solicitude for passengers' comfort.

When travelling between India and Europe it pays to go Anchor Line. Ask your travel agents about it.

ANCHOR LINE LTD.

P. Box No. 383, BOMBAY

P. Box No. 548, KARACHI

ANCHOR LINE

Sole Official Agents for Advertisements in the British Isles, Gale & Polden Ltd., Ideal House, Argyll Street, Oxford Circus, London, W.1.
Telephone: Whitehall 4922.

United Service Institution of India

OCTOBER, 1937

CONTENTS

I.—NEW MEMBERS

The following new members joined the Institution from 1st June to 31st August 1937:

Life Members:

2/Lieut. S. Abdullah Jan.
„ Amrik Singh.
„ R. M. Arshad.
„ Shaukat Hyat-Khan.
„ S. J. Sathe.
„ Viswanatha Panch.

Ordinary Members:

Sir Charles C. Chitham, KT., C.I.E.
Dr. W. A. K. Christie.
G. Ahmed, Esq.
P. E. Barker, Esq.
R. Bowen, Esq.
D. Pilditch, Esq.
A. J. Raisman, Esq., C.I.E., I.C.S.
C. W. Scott, Esq., O.B.E., D.F.C.
J. S. H. Shattock, Esq., I.C.S.
Lt.-Commander H. E. Felser Paine, R.I.N.
Flying Officer W. Masey, R.A.F.
Major-General A. H. Eustace, C.B., C.B.E., D.S.O.
Colonel K. J. Gabbett.
Colonel E. L. Farley, M.C.
Colonel F. Morris, O.B.E., M.C.
Major C. H. B. Rodham, O.B.E., M.C.
Captain F. T. Chamier.
Captain J. W. H. K. Greenway.
Captain J. H. Randall.
Captain J. T. Rivett-Carnac.
Captain B. H. Tatchell.
Captain C. H. K. Willans.
Lieut. L. B. H. von D. Hardinge.
Lieut. H. C. R. Hose.
Lieut. D. G. Jebb.
Lieut. Wali Mohd.
Lieut. W. E. J. Waters.
2/Lieut. M. S. Bahadur.
„ B. S. Bajwa.
„ G. G. Bewoor.
„ B. S. Bhagat.
„ M. S. Dhillon.
„ M. W. Mountain.
„ Rajinder Singh Paintal.
„ N. A. Rashid.
„ Rawind Singh.
„ Saifurehman.
„ R. Sarin
„ C. J. Stracey.
„ S. S. Tur.

Honorary Member:

A. H. Byrt, Esq.

II.—THE JOURNAL

The Institution publishes a quarterly Journal in the months of January, April, July and October, which is issued postage-free to members in any part of the world. Non-members may obtain the Journal at Rs. 2-8 per copy, or Rs. 10 per annum. Advertisement rates may be obtained on application to the Secretary.

III.—CONTRIBUTIONS TO THE JOURNAL

Articles may vary in length from two thousand to ten thousand words. They should be submitted in duplicate and typewritten on one side of the paper. Manuscript articles cannot be considered. Payment is made on publication at from Rs. 40 to Rs. 150 in accordance with the value and length of the contribution.

With reference to Regulations for the Army in India, rule 333 and King's Regulations, paragraph 535, action to obtain the sanction of His Excellency the Commander-in-Chief to the publication of any article in the Journal of the United Service Institution of India will be taken by the Executive Committee of the Institution.

The Committee reserve to themselves the right to omit any matter which they consider objectionable.

Articles are only accepted on these conditions.

IV.—READING ROOM AND LIBRARY

The United Service Institution of India is situated on the Mall, Simla, and is open all the year round—including Sundays—from 9 a.m. until sunset. The Reading Room of the Institution is provided with most of the leading illustrated papers, newspapers, magazines and journals of military, naval and service interest.

There is a well-stocked library in the Institution from which members can obtain books on loan free in accordance with the following rules—

(1) The library is only open to members and honorary members, who are requested to look upon books as not transferable to their friends.

(2) No book shall be taken from the Library without making the necessary entry in the register. Members residing permanently or temporarily in Simla are requested to enter their addresses.

(3) A member shall not be allowed, at one time, more than three books or sets of books.

(4) No particular limit is set as to the number of days for which a member may keep a book, the Council being desirous of making the Library as useful as possible to members; but if after the expiration of a fortnight from date of issue it is required by any other member, it will be recalled.

(5) Applications for books from members at outstations are dealt with as early as possible and books are despatched post free per Registered Parcel Post. They must be returned carefully packed per Registered Parcel Post within one month of the date of issue.

(6) If a book is not returned at the end of one month, it must be paid for if so required by the Executive Committee. Lost and defaced books shall be replaced at the cost of the member to whom

they were issued. In the case of lost books which are out of print, the value shall be fixed by the Executive Committee and the amount, when received, spent in the purchase of a new book.

(7) The issue of a book under these rules to any member implies the latter's compliance with the rules and the willingness to have them enforced, if necessary, against him.

(8) The catalogue of the Library is available for sale at Rs. 2-8 per copy plus postage. The Library has been completely overhauled and all books re-classified, hence the catalogue meets the general demand for an up-to-date production containing all military classics and other works likely to be of use to members of the Institution. Members who have not yet ordered their copies are advised to send a post card to the Librarian of the Institution, Simla.

V.—LIBRARY BOOKS

A list of the books received during the preceding quarter is enclosed in loose leaf form suitable for cutting into strips for pasting in the Library catalogue.

The Institution is in possession of a collection of old and rare books presented by members from time to time and, while such books are not available for circulation, they can be seen by members visiting Simla.

The Secretary will be glad to acknowledge the gift of old books, trophies, medals, etc., presented to the Institution.

VI.—PROMOTION EXAMINATIONS

(*a*) *Military History*—(Reference I. A. O. 257 of 1935).

The following table shows the campaigns on which military history papers will be set for Lieutenants for promotion to Captain in sub-head *b* (*iii*), and for Captains for promotion to Major in sub-head *d* (*iii*), with a list of books recommended for the study of each—

1 Serial No.	2 Date of Examination.	3 Campaign set for second time.	4 Campaign set for last time.
1	March 1938.	Mesopotamia, from 12th March 1917 to the Armistice.	The Russo-Japanese War, previous to the Battle of Liao-Yang until the 24th August 1904 (excluding the actual siege operations at Port Arthur).
2	October 1938.	..	Mesopotamia, from 12th March 1917 to the Armistice.

The following books are recommended for the study of the campaigns—

Campaign.	Book.
Mesopotamia— *March and October 1938* ..	History of the Great War—Military Operations—Mesopotamia, Vols. III (Chapters XXXIV *et seq*) and IV.
	A Brief Outline of the Campaign in Mesopotamia, 1914—1918. Major R. Evans, M.C. (*Sifton Praed*).
	Mesopotamia, the last Phase, by Lt.-Col. A. H. Burne, D.S.O. (Gale and Polden.)
The Russo-Japanese War ..	Official History of the Russo-Japanese War, Parts I (second edition) and II (*British Military*), or
	Official History of the Russo-Japanese War (Naval and Military), Vol. I, Chapters 1—17 (less 4, 7, 9 and 10).
	The Liao-Yang Campaign, by Lt.-Col. A. H. Burne, D.S.O. (Wm. Clowes.)

(*b*) *Other Subjects.*

In addition to the manuals and regulations mentioned in K.R. and R.A.I., the following books are recommended—

"Modern Military Administration, Organisation and Transportation" (Harding-Newman), 1933.

"Military Organisation and Administration" (Lindsell), 1937.

"A. and Q. or Military Administration in War" (Lindsell), 1933.

"Military Law" (Banning), 1936.

"The Defence of Duffers' Drift" (Swinton), 1929.

"Tactical Schemes, with solutions, Series I and II" (Kirby and Kennedy), 1931.

"Elementary Tactics or the Art of War, British School," Vol. I (Pakenham Walsh), 1926.

"Imperial Military Geography" (Cole). 1935.

"Elements of Imperial Defence" (Boycott), 1936.

"A Practical Digest of Military Law" (Townsend-Stephens. Pub. Sifton Praed), 1933.

VII.—STAFF COLLEGE EXAMINATION.—[See Staff College, Quetta, Regulations, 1930, obtainable from the Manager of Publications, Delhi or Calcutta.]

(*a*) Campaigns.

The following campaigns have been set for the Staff College Entrance Examination—

Strategy of—

Napoleon's Campaign of 1796 in Italy.

Waterloo Campaign.

Peninsula Campaign, up to and including the Battle of Salamanca.

The Strategy and Broad Tactical Lessons of—

The American Civil War.

Russo-Japanese War, up to and including the Battle of Liao-Yang.

The Great War in France, Belgium, Mesopotamia, the Dardanelles and Palestine, including a knowledge of the influence on the strategy in these areas of the events in other theatres of the War.

The East Prussian Campaign, 1914.

The Strategy and Tactics of—

The Palestine Campaign from 9th November 1917 to the end of the War.

The Action of the British Expeditionary Force in France and Belgium up to and including the first battle of Ypres.

The 3rd Afghan War, 1919.

(*b*) In addition to his official books every student is recommended to provide himself with a copy of—

(*i*) Military Organisation and Administration (Lindsell), 1937.

Military Law (Banning), 1936.

British Strategy (Maurice), 1929.

Notes on the Land and Air Forces of British Overseas Dominions, Colonies and Protectorates (Official),

Outline of the Development of the British Army up to 1914 (Hastings Anderson), 1931.

Imperial Military Geography (Cole).

An Atlas.

(*ii*) The following pamphlets, etc., can be borrowed from the Orderly Room, and should be studied—

Examination papers for admission to the Staff College.

Training Memoranda—War Office.

Training Memoranda—A.H.Q. India.

Notes on certain Lessons of the Great War.

Passing it on (Skeen).

(*iii*) Periodicals, etc., to which students should subscribe—
"The Times."
"U. S. I. (India) Journal."

(*iv*) Books which can be obtained from libraries—

(*Note.*—Those marked with an asterisk should be used only as books of reference.)

R. U. S. I. Journal.
Army Quarterly.
Round Table.
Journal of the Institute of International Affairs.
Science of War (Henderson), 1905.
Transformation of War (Colin), 1912.
The War of Lost Opportunities (Hoffman), 1924.
*The Principles of War (Foch), 1918.
*The Direction of War (Bird), 1925.
Soldiers and Statesmen (Robertson), 1926.
*Historical Illustrations to F. S. R. II (Eady), 1926.
*The British Way in Warfare (Liddell Hart), 1932.
*Napoleon's Campaign in 1796 in Italy (Burton), 1912.
*Waterloo Campaign (Robinson).
*Outline History of Russo-Japanese War, 1904, up to the Battle of Liao-Yang (Pakenham Walsh), 1935.
*The World Crisis (Churchill), 1931 (abridged and revised edition).
*A History of the Great War (Cruttwell), 1936.
The Palestine Campaign (Wavell), 1931.
A Brief Outline of the Campaign in Mesopotamia (Evans), 1926.
*Official Histories of the War—France, Egypt, Palestine, Mesopotamia, Gallipoli.
*Waziristan, 1919-20 (Watteville).
*The Third Afghan War (Official), 1926.
A. & Q. (Lindsell), 1933.
*The Government of the British Empire (Jenks).
*A Short History of British Expansion (Williamson), 1930.

(*v*) Books and Articles on Transportation—

Railways in War. Lieutenant-Colonel E. St. G. Kirke, D.S.O., R.E., Army Quarterly, January 1930.

Strategic Moves by Rail, 1914. Journal R. U. S. I., February and May 1935.

The Lines of Communication in the Dardanelles. Lieutenant-General Sir G. MacMunn. Army Quarterly, April 1930.

The Lines of Communication in Mesopotamia. Lieutenant-General Sir G. MacMunn. Army Quarterly, October 1927.

History of the R.A.S.C., Vol. II (all campaigns).

The Supply and Transportation Problem of Future Armies. Major B. C. Dening, M.C., R.E., Journal U. S. I. India, April 1932.

The Supply of Mechanised Forces in the Field. Journal R. U. S. I., 1929.

The Board of Trade and the Fighting Services. Journal R. U. S. I., 1929.

Railway Organisation of an Army in War. Lieutenant-Colonel Anderson, D.S.O., R.E., Journal R. U. S. I., 1927.

What is Required of a Railway in a Theatre of Operations. Major-General Taylor, R.E., Journal, September 1932.

F. S. P. B. War Office, 1932. Read Sections 36 to 38. Do not memorise detail. Know where to find it.

F. S. P. B. India.

VIII.—A. H. Q. STAFF COLLEGE COURSE SERIES, 1937

A limited number of sets of papers of the abovementioned series, complete with maps, are available for sale at Rs. 9 per set. Full payment should accompany all applications.

IX.—HISTORICAL RESEARCH

The U. S. I. is prepared to supply members and units with typewritten copies of old Indian Army List pages, at the rate of Rs. 2 per typewritten page.

X.—THE MacGREGOR MEMORIAL MEDAL

1. The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor. The medals are awarded for the best military reconnaissances or journeys of exploration of the year.

2. The following awards are made annually in the month of June:

(*a*) For officers—British or Indian—silver medal.

(*b*) For soldiers—British or Indian—silver medal with Rs. 100 gratuity.

3. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, or in addition to the silver medals, whenever the administrators of the Fund deem it desirable. Also the Council may award a special additional silver medal, without gratuity, to a soldier, for especially good work.

4. The award of medals is made by His Excellency the Commander-in-Chief, as Vice-Patron, and the Council of the United Service Institution, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

5. The following are eligible for the award, whether at the time of the reconnaissance they were in military or civil employ:

(*a*) Officers and other ranks of the Royal Navy, Army, Royal Air Force and of the Dominion Forces, while serving on the Indian establishment.

(*b*) Officers and other ranks of the Royal Indian Navy, Indian Army, Indian Air Force and of the Indian States Forces, wherever serving.

NOTE:—The term "Indian Army" includes the Indian Auxiliary and Territorial Forces, Frontier Militia, Levies, Military Police and Military Corps under local governments.

6. The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal.*

7. Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but, in the event of two journeys being of equal value, the man who has run the greater risk will be considered to have the greater claim to the reward.

8. When the work of the year has either not been of sufficient value or has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief to deserve it.

MACGREGOR MEMORIAL MEDALISTS

(*With rank of officers and soldiers at the date of the award.*)

1889 ... BELL, Colonel M. S., V.C., R.E. (specially awarded a gold medal).

1890 ... YOUNGHUSBAND, Captain F. E., King's Dragoon Guards.

1891 ... SAWYER, Major H. A., 45th Sikhs.
RAMZAN KHAN, Havildar, 3rd Sikhs.

1892 ... VAUGHAN, Captain H. B., 7th Bengal Infantry.
JAGGAT SINGH, Havildar, 19th Punjab Infantry.

1893 ... BOWER, Captain H., 17th Bengal Cavalry (specially awarded a gold medal).
FAZAL DAD KHAN, Dafadar, 17th Bengal Cavalry.

1894 ... O'SULLIVAN, Major G. H. W., R.E.
MULL SINGH, Sowar, 6th Bengal Cavalry.

1895 ... DAVIES, Captain H. R., Oxfordshire Light Infantry.
GANGA DYAL SINGH, Havildar, 2nd Rajputs.

1896 ... COCKERILL, Lieutenant G. K., 28th Punjab Infantry.
GHULAM NABI, Sepoy, Q. V. O. Corps of Guides.

1897 ... SWAYNE, Captain E. J. F., 10th Rajput Infantry.
SHAHZAD MIR, Dafadar, 11th Bengal Lancers.

1898 ... WALKER, Captain H. B., Duke of Cornwall's Light Infantry.
ADAM KHAN, Havildar, Q. V. O. Corps of Guides.

1899 ... DOUGLAS, Captain J. A., 2nd Bengal Lancers.
MIHR DIN, Naik, Bengal Sappers and Miners.

1900 ... WINGATE, Captain A. W. S., 14th Bengal Lancers.
GURDIT SINGH, Havildar, 45th Sikhs.

*Replacements of the ribbon may be obtained on payment from the Secretary, U.S.I., Simla.

MacGregor Memorial Medalists—(*contd.*)

1901 ... Burton, Major E. B., 17th Bengal Lancers.
Sundar Singh, Colour Havildar, 31st Burmah Infantry.
1902 ... Ray, Captain M. R. E., 7th Rajput Infantry.
Tilbir Bhandari, Havildar, 9th Gurkha Rifles.
1903 ... Maniford, Lieut.-Colonel C. C., I.M.S.
Ghulam Hussain, Lance-Dafadar, Q. V. I. Corps of Guides.
1904 ... Fraser, Captain L. D., R.G.A.
Moghal Baz, Dafadar, Q. V. O. Corps of Guides.
1905 ... Rennick, Major F., 40th Pathans (specially awarded a gold medal).
Madho Ram, Havildar, 8th Gurkha Rifles.
1906 ... Shahzada Ahmad Mir, Risaldar, 36th Jacob's Horse.
Ghafur Shah, Lance-Naik, Q. V. O. Corps of Guides.
1907 ... Nangle, Captain M. C., 92nd Punjabis.
Sheikh Usman, Havildar, 103rd Mahratta Light Infantry.
1908 ... Gibbon, Captain C. M., Royal Irish Fusiliers.
Malang, Havildar, 56th Punjab Rifles.
1909 ... Muhammad Raza, Havildar, 106th Pioneers.
1910 ... Sykes, Major P. M., C.M.G., late 2nd Dragoon Guards (specially awarded a gold medal).
Turner, Captain F. G., R.E.
Khan Bahadur Sher Jung, Survey of India.
1911 ... Leachman, Captain G. E., The Royal Sussex Regiment.
Gurmukh Singh, Jemadar, 93rd Burmah Infantry.
1912 ... Pritchard, Captain B. E. A., 83rd Wallajahabad Light Infantry (specially awarded a gold medal).
Wilson, Lieutenant A. T., C.M.G., 32nd Sikh Pioneers.
Mohibulla, Lance-Dafadar, Q. V. O. Corps of Guides.
1913 ... Abbay, Captain B. N., 27th Light Cavalry.
Sirdar Khan, Sowar, 39th (K.G.O.) Central India Horse.
Waratong, Havildar, Burmah Military Police (specially awarded a silver medal).
1914 ... Bailey, Captain F. M., I.A. (Political Department).
Morshead, Captain H. T., R.E.
Haidar Ali, Naik, 106th Hazara Pioneers.
1915 ... Waterfield, Captain F. C., 45th Rattray's Sikhs.
Ali Juma, Havildar, 106th Hazara Pioneers.
1916 ... Abdur Rahman, Naik, 21st Punjabis.
Zarghun Shah, Havildar, 58th Rifles (F.F.) (specially awarded a silver medal).
1917 ... Mian Afraz Gul, Sepoy, Khyber Rifles.
1918 ... Noel, Captain E. W. C. (Political Department).
1919 ... Keeling, Lieut.-Colonel E. H., M.C., R.E.
Alla Sa, Jemadar, N.-W. Frontier Corps.
1920 ... Blacker, Captain L. V. S., Q. V. O. Corps of Guides.
Awal Nur, C. Q. M. Havildar, 2nd Bn., Q. V. O. Corps of Guides. (Special gratuity of Rs. 200).
1921 ... Holt, Major A. L., Royal Engineers.
Sher Ali, Sepoy, No. 4952, 106th Hazara Pioneers.
1922 ... Abdul Samad Shah, Captain, O.B.E., 31st D. C. O. Lancers.

MacGregor Memorial Medalists—(*concld.*)

		Nur Muhammad, Lance-Naik, 1st Guides Infantry, F.F.
1923		Bruce, Captain J. G., 2/6th Gurkha Rifles.
		Sohbat, Head Constable, N.-W. F. Police.
		Hari Singh Thapa, Survey Department (specially awarded a silver medal).
1924	...	Rahmat Shah, Havildar, I.D.S.M., N.-W. F. Corps.
		Ghulam Hussain, Naik, N.-W. F. Corps.
1925		Spear, Captain C. R., 5/13th Frontier Force Rifles.
		Jabbar Khan, Naik, 5/13th Frontier Force Rifles.
1926	...	Harvey-Kelly, Major C. H. G. H., D.S.O., 4/10th Baluch Regiment.
1927	...	Lake, Major M. C., 4/4th Bombay Grenadiers.
1928	...	Bowerman, Captain J. F., 4/10th D. C. O. Baluch Regiment.
		Muhammad Khan, Havildar, Zhob Levy Corps.
1929	...	Abdul Hanan, Naik, N.-W. F. Corps.
		Ghulam Ali, Dafadar, Guides Cavalry (specially awarded a silver medal).
1930	...	Green, Captain J. H., 3/20th Burmah Rifles.
1931	...	O'Connor, Captain R. L., 1/9th Jat Regiment.
		Khial Badshah, Naik, 1/13th Frontier Force Rifles.
1932	...	Birnie, Captain E. St. J., Sam Browne's Cavalry.
		Shib Singh Negi, No. 4013, Rifleman, 10/18th Royal Garhwal Rifles.
1933	...	Abdul Ghafur, Havildar, K. G. O. Bengal Sappers and Miners.
1934	...	No award.
1935	...	Fergusson, Lieutenant K. A. P., R.A.
		Bostock, Lieutenant T. M. T., R.E.
1936	...	Angwin, Captain J. B. P., R.E.
		Muhammad Ishaq, No. 8372, Lance-Naik, 2/15th Punjab Regiment.
1937	...	Goadby, Major F. R. L., M.B.E., 1/6th Rajputana Rifles.

UNITED SERVICE INSTITUTION OF INDIA

Prize Essay Gold Medalists

(*With Rank of Officers at the date of the Essay.*)

1872	...	Roberts, Lieut.-Colonel F. S., V.C., C.B., R.A.
1873	...	Colquhoun, Captain J. S., R.A.
1874	...	Colquhoun, Captain J. S., R.A.
1879	...	St. John, Major O. B. C., R.E.
1880	...	Barrow, Lieutenant E. G., 7th Bengal Infantry.
1882	...	Mason, Lieutenant A. H., R.E.
1883	...	Collen, Major E. H. H., S.C.
1884	...	Barrow, Captain E. G., 7th Bengal Infantry.
1887	...	Yate, Lieutenant A. C., 27th Baluch Infantry.
1888	...	Maude, Captain F. N., R.E.
		Young, Major G. F., 24th Punjab Infantry (specially awarded a silver medal).
1889	...	Duff, Captain B., 9th Bengal Infantry.
1890	...	Maguire, Captain C. M., 2nd Cavy. Hyderabad Contingent.

PRIZE ESSAY GOLD MEDALISTS—(*concld.*)

1891 ... CARDEW, Lieutenant F. G., 10th Bengal Lancers.
1893 ... BULLOCK, Major G. M., Devonshire Regiment.
1894 ... CARTER, Captain F. C., Northumberland Fusiliers.
1895 ... NEVILLE, Lieut.-Colonel J. P C., 14th Bengal Lancers.
1896 ... BINGLEY, Captain A. H., 7th Bengal Infantry.
1897 ... NAPIER, Captain G. S. F., Oxfordshire Light Infantry.
1898 ... MULLALY, Major H., R.E.
CLAY, Captain C. H., 43rd Gurkha Rifles (specially awarded a silver medal).
1899 ... NEVILLE, Colonel J. P. C., S.E.
1900 ... THULLIER, Captain H. F., R.E.
LUBBOCK, Captain G., R.E. (specially awarded a silver medal).
1901 ... RANKEN, Lieut.-Colonel G. P. P., 46th Punjab Infantry.
1902 ... TURNER, Captain H. H. F., 2nd Bengal Lancers.
1903 ... HAMILTON, Major W. G., D.S.O., Norfolk Regiment.
BOND, Captain R. F. G., R.E. (specially awarded silver medal).
1904 ... MACMUNN, Major G. F., D.S.O., R.F.A.
1905 ... COCKERILL, Major G. K., Royal Warwickshire Regiment.
1907 ... WOOD, Major E. J. M., 99th Deccan Infantry.
1908 ... JEUDWINE, Major H. S., R.A.
1909 ... MOLYNEUX, Major E. M. J., D.S.O., 12th Cavalry.
ELSMIE, Major A. M. S., 56th Rifles F. F. (specially awarded a silver medal).
1911 ... PETRIE, Mr. D., M.A., Punjab Police.
1912 ... CARTER, Major B. C., The King's Regiment.
1913 ... THOMSON, Major A. G., 58th Vaughan's Rifles (F.F.).
1914 ... BAINBRIDGE, Colonel W. F., D.S.O., 31st Sikhs (F.F.).
NORMAN, Major C. L., M.V.O., Q. V. O. Corps of Guides (specially awarded a silver medal).
1916 ... CRUM, Major W. E., V.D., Calcutta Light Horse.
1917 ... BLAKER, Major W. F., R.F.A.
1918 ... GOMPERTZ, Captain A. B., M.C., R.E.
1919 ... GOMPERTZ, Captain M. L. A., 108th Infantry.
1920 ... KEEN, Lieut.-Colonel F. S., D.S.O., 2/15th Sikhs.
1922 ... MARTIN, Major H. G., D.S.O., O.B.E., R.F.A.
1923 ... KEEN, Colonel F. S., D.S.O., I.A.
1926 ... DENNYS, Major L. E., M.C., 4/12th Frontier Force Regiment.
1927 ... HOGG, Major D. McA., M.C., R.E.
1928 ... FRANKS, Major K. F., D.S.O., 5th Royal Mahrattas.
1929 ... DENNYS, Major L. E., M.C., 4/12th Frontier Force Regiment.
1930 ... DURNFORD, Major C. M. P., 4/6th Rajputana Rifles.
1931 ... FORD, Lieut.-Colonel G. N., 2/5th Mahratta Light Infantry.
1932 ... THURBURN, Lieutenant R. G., The Cameronians (Scottish Rifles).
1933 ... No award.
1934 ... DURNFORD, Major C. M. P., 4/6th Rajputana Rifles.
1935 ... No award.
1936 ... No award.

GOLD MEDAL PRIZE ESSAY COMPETITION, 1938

The Council has chosen the following subjects for the Gold Medal Prize Essay Competition for 1938:

(*i*) "Discuss the dictum that the size of modern armies has rendered strategy wholly subordinate to tactics".

or, as an alternative subject,

(*ii*) "A nation's fighting power is not now merely gauged by its armed fighting strength, but also by its productive strength."

Discuss this.

The following are the conditions of the competition:

(1) The competition is open to all gazetted officers of the Civil Administration, the Royal Navy, Army, Royal Air Force, Auxiliary Forces and Indian States Forces.

(2) Essays must be typewritten and submitted in triplicate.

(3) When reference is made to any work, the title of such work is to be quoted.

(4) Essays are to be strictly anonymous. Each must have a motto, and, enclosed with the essay, there should be sent a sealed envelope with the motto written on the outside and the name of the competitor inside.

(5) Essays will not be accepted unless received by the Secretary on or before the 30th June 1938.

(6) Essays will be submitted for adjudication to three judges chosen by the Council. The judges may recommend a money award, not exceeding Rs. 500, either in addition to, or in substitution for, the medal. The decision of the three judges will be submitted to the Council, who will decide whether the medal is to be awarded and whether the essay is to be published.

(7) The name of the successful candidate will be announced at a Council Meeting to be held in September or October 1938.

(8) All essays submitted are to become the property of the United Service Institution of India absolutely, and authors will not be at liberty to make any use whatsoever of their essays without the sanction of the Council.

(9) Essays should not exceed 15 pages of the size and style of the Journal, exclusive of any appendices, tables or maps.

Comfort and Service — two flags not mentioned in shipping codes, yet they are inseparable from the flag which denotes an Anchor Line vessel. Anchor Line gives comfort—good cooking and attentive service at moderate fares.

The "M. V. CIRCASSIA"—the most recent addition to the fleet—sails for Europe on December 3rd, 1937. Ask for further details direct from :

ANCHOR LINE, LTD.

P. Box No. 383, BOMBAY

P. Box No. 548, KARACHI

ANCHOR LINE

Date of Issue.	Return.	Date of Issue.	Return.
23/8/13	9/9/13		
11/6/21	11/6/21		
7/4/22			

14
2