VOL. XXVI. No. 2.

THE NAVAL REVIEW

For Private Circulation.

(*Founded in* 1912.)

MAY, 1938.

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HON. EDITOR'S NOTES.

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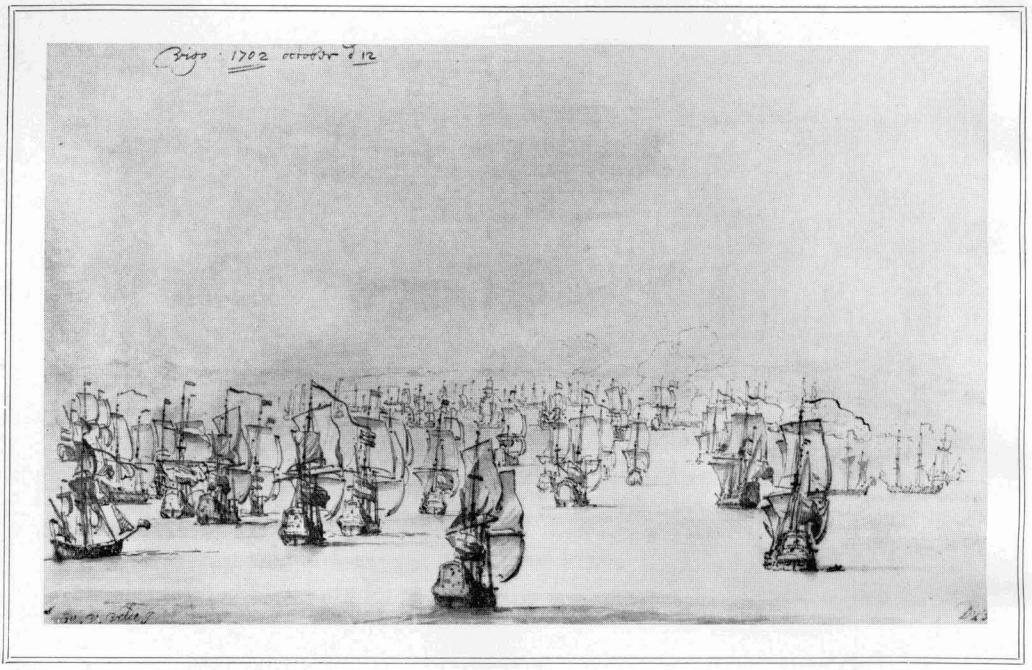
May, 1938.

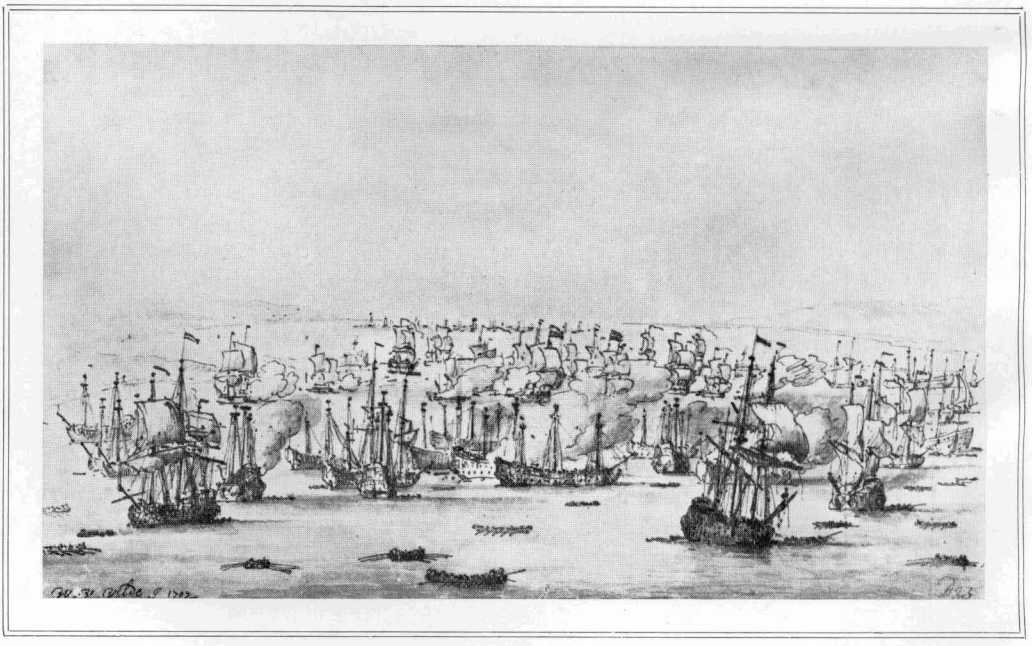
ERRATUM.

In the frontispiece of the February number, the *Imperieuse* there illustrated is stated to have served as a depot ship in Scapa Flow during 1914-18. She was, however, sold out of the Service in 1913, after some years at Portland as a destroyer depot under the name of *Sapphire II*. The depot ship at Scapa was the old battleship *Audacious*, to which the name of *Imperieuse* had been transferred.

ROOKE'S ATTACK ON CHÂTEAU-RENAULT AND THE SPANISH GALLEONS AT VIGO, 12TH OCTOBER, 1702.



FROM THE ANGLO-DUTCH SIDE.



FROM THE FRANCO-SPANISH SIDE.

By Van de Velde, the younger.

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THE NAVAL DEBATE

COMMERCE PROTECTION—AND "MANY THINGS"

"... *the Walrus said* ..."

THE annual debate on the Naval Estimates usually includes some items of special interest from the professional point of view. Occasionally, though infrequently, the subject of one of these items may depart from the usual ones of design, numerical strength, or personnel, to deal with some phase of operations or strategical policy which makes it of uncommon interest and particularly appropriate to these pages, as being concerned with the study of waging war.

An example of this was the Civil Lord's speech in 1935, devoted entirely to the subject of commerce protection with special reference to convoying, which was noticed in the issue of May, 1935. This year's debate again contained a considered pronouncement on the same subject, by the Admiralty spokesman, which is interesting to compare with what was said in 1935.

The main object of this article is to make that comparison; any musings which accompany it need serve only as illustrations of the reaction it has on an interested onlooker who is neither possessed of recent experience nor primed with up-to-date information.

Before making this comparison, brief notice may be given to some of the many other subjects of special interest of which this year's debate was exceptionally prolific.

The full record of "Hansard" on this occasion brings out general insistence and evident desire of Labour members for naval efficiency. They of course made their party points, though rather as if it was a routine duty, and in personnel subjects particularly were inclined to confuse the demands of class and efficiency; but at the back there seemed a full appreciation of the imperative necessity for strength afloat. This readiness to support naval requirements in contrast to their far more critical attitude to military, or even air, provision may prove a real danger to a proper balance between the fighting forces. An example of this feeling, intensified in this case by realism born of experience as First Lord, was given by Mr. Alexander:—

> "In the provision which is made to-day, we have, I think, a better story of foresight and efficiency, and of qualitative provision, than has yet been laid before us in respect of the other services."

Passing notice may be given to a confession by one M.P. that merits attention for its candour and courage :—

> "I deeply regret that I was ever a party to reducing the British Navy. That was because I believed in the League of Nations."[1]

MANY THINGS.

Lower-deck promotion ; Marriage allowances ; Motor torpedo boats.

There are three subjects I can pass over in the interests of space ; though two of them are important as affecting the welfare, and therefore the efficiency, of personnel, while the third has attracted as much notice as anything else in the debate. Lower-deck promotion, because it is a frequent subject in these pages ; marriage allowances for officers, because the modern officer is the best judge both of modern conditions and of what he wants, and also because the desirability of encouraging matrimony in the Service is a fitter subject for discussion in these pages than the adequacy of the encouragement ; contracts for motor torpedo boats, because it is, happily, unsuited to these pages.

F.A.A.

In a comment in the announcement of the grant of marriage allowances that "with this scheme ends a controversy of 19 years", there is a repetition of the similar comment which accompanied the Government's decision on the F.A.A. ; and its implication that with an official decision on a subject of controversy, the causes of that controversy automatically cease to exist. In an article on the latter decision in the February number[2] I pointed out the falsity of this assumption and expressed a hope that a reservation to this effect would be publicly registered when a suitable opportunity occurred. I am glad to see that my wish is fulfilled in Sir Roger Keyes' speech in the debate :—

> " It is simply not fair to press the present Board of Admiralty to accept yet another compromise for, if they did, they would be placing their successors under a most unfair handicap. . . . The decision of last July can never be regarded as final, since it severely affects naval efficiency in peace-time, can only lead to confusion and disaster in war and places a cruel handicap on naval officers."

After I had written that article, I inserted in it, after much consideration, a suggestion which had been sent to me, and with which I agreed, to the effect that a transfer of shore-based units to the Navy at the present

[1] Viscountess Astor, *Hansard*, 17th March, 1938.
N.B.—All extracts are from *Hansard* of 17th or 22nd March, 1938, unless otherwise stated.

[2] " The Navy's Share in Co-operation With the Air." THE NAVAL REVIEW, Feb., 1938.

time " would probably have to be ruled out by the Admiralty on the grounds of expediency " as giving to them " the impossible task of manning and providing this force ". I realized to what I was laying myself open, and " unprofitable " might have been a more accurate and certainly a safer word than " impossible ". As I expected, and hoped, Sir Roger refuses to :—

> " believe in the word ' impossible ' and . . . will not be deflected by such a contention. I am striving for something which I know to be absolutely essential to naval efficiency and the exercise of sea power, and something which, I am convinced, can and should be done."

It is possible still to consider a full transfer at least unprofitable at the moment, and yet agree with Sir Roger Keyes in all other respects ; and holders of either view will appreciate his reminder to the House that " The Times " had described the decision as the judgment of Solomon, and " the right mother got the whole baby in the end ".

The debate contained much of value on naval air matters which calls for a better knowledge than mine for analysis and in any case would have to be excluded on account of space. There were many expressions of uneasiness at the delay in commencing the transfer to the Navy, to which Mr. Shakespeare replied that :—

> " Had the estimates fallen a month or two ahead I could have made a very much more satisfactory statement. . . . If Hon. Members will wait, I think that within the next two months they will see much more substantial progress than before."

The first glimmer, at least, of this promised dawn ought to be visible by the time this article appears.

Now that co-ordination and co-operation are more than empty words, the debates on the other Service Estimates may include items which directly concern the Navy, and before leaving the "Air " we may notice the Air Estimates. A very critical discussion was however devoted in the main to personnel, design of material, and administration. Any references to operations or strategic policy were mostly confined to fixed anti-aircraft defences or the technical capacity of our machines for reaching and bombing enemy's cities.

But one statement of the Under-Secretary of State for Air deserves attention. In summarizing the strength of the Air Force he said :—

> " The Metropolitan Air Force at present contains 123 squadrons. There are in addition 26 squadrons overseas and the Fleet Air Arm represents the equivalent of another 20 squadrons."[3]

This certainly reads as if the Air Ministry still look on naval aircraft as Air power—perhaps on the old false principle that the nature of an operation depends upon the element in which the units move. The Fleet

[3] Lieut.-Colonel Muirhead, *Hansard*, 15th March, 1938.

Air Arm is nothing of the sort ; it is Sea power. The F.A.A. is the Air arm of the Fleet, not the Fleet arm of the Air. If the reverse was intended, Sir Roger Keyes has still much to do before the truth behind the naval contentions is understood, and if this heresy still exists a complete and immediate divorce of all naval air matters from the Air Ministry, at whatever may be the inconvenience, may indeed be the only way of scotching if.

Destroyers.

A consensus of opinion stronger even than that on the question of marriage allowances was evident against the omission of destroyers from this year's programme of new building. The fact that most of these protests came from lay members (if Mr. Churchill can be classed with such), showed that the feeling was not a mere evidence of Service greed which nothing can assuage. The Service members, though they all with one exception supported the objections, were in fact devoting most of their speeches to other matters which they were making their special concern. The one exception was definitely confining himself to one subject, the Fleet Air Arm, to leave time for other speakers in the debate.

The grounds of objection were twofold. One, the departure from a policy of steady replacement ; the other an insufficiency in destroyers :—

> " It is entirely contrary to the doctrine and policy of the Admiralty, which was established in 1927, and was a policy of continuity of replacement," (Sir R. Ross.) ;
>
> " Our destroyer position is considerably worse than it was in 1917. . . . Our destroyer programme at present bears no real relation to the situation we should have to face[4]. . . . Destroyers are much more easily built and will not interfere to any great extent with the work that is going on," (Major Lloyd George) ;
>
> " Destroyers were a commodity of which you never could have enough if war began. When we consider that we may find Germany or Italy in possession of submarines numbered . . . by the hundred, the number of destroyers we possess is far below the demands that will be made upon us. . . . The fact that 40 destroyers are being built is not a satisfactory answer. I should be glad to see the number doubled. . . . Exceptional priorities . . . and the continuous shift or double shift method of construction should be applied to all vessels which can be brought into the water in six months, 12 months or 18 months. . . . An increase of stength as soon as possible . . . would increase our margin and increase the deterrents against attack, and would enable the execution of the rest of our programme to take place behind the cover of an ample margin of security." (Mr. Churchill.)
>
> N.B. — Mr. Churchill's proposal extended to the reconstructed battleships.

[4] This sentence, however, was associated with an unsound deduction from the strength of " anti-piracy " patrols.

The break in continuity in particular is difficult to justify. A later spate of obsolescence which must be the outcome of suspension can be nothing but harmful. If it was the result of a rapid addition to our destroyer strength as asked for by Mr. Churchill it would be a different matter; for if the addition fulfilled its purpose of quieting existing tendencies to aggressiveness the need for heavy replacements when the obsolescence arrives would have been removed. Nor does a suspension seem called for by a lack of building facilities in the case of destroyers.

On the question of sufficiency, an Admiralty with some certainty of the systems of protection to be adopted, and knowing the quantity of sea-borne trade and other things to be protected, the rate at which it must flow, and from that, the number and frequency of convoys, should be able to calculate the number of destroyers required for their protection with some exactitude. An even greater exactitude is possible for the destroyer requirements of the battle fleets, with the experience of the war and twenty subsequent years of tactical investigation and exercise. For those without that advantage the door is open to fantasy. But we have certain figures to guide us to an approximation. 189 destroyers built or building against 286 in June, 1917 (or 398 including P-boats and old destroyers, with 100 or more to come by the end of 1918).[5] We have 165 German and Italian submarines against the 178 of 1917 to be dealt with. Of the destroyers in 1917, 109 were required for the Grand Fleet. The liberal allowance of a proportionate basis for the smaller number of capital ships (15 to 38) gives at least 40 for to-day's requirements, even if we ignore that many of the 109 in 1917 combined this work with trade protection and that 40 may be insufficient to cover this duty. After the main fleet is supplied, we seem to be left with 149 to do what took anything from 177 to over 289 in 1917. With an apparent shortage between 48 and 16 per cent., and nearer the former than the latter, it certainly seems justifiable to consider our present strength insufficient, if we may assume that the conditions will be at all similar.

Against this assumption there is the claim that with vastly improved means of detection and destruction we require fewer destroyers per convoy; but the improvement should apparently lie in a quicker discovery and quicker death from each sentry rather than in an increase in the beat he can watch and control. It may also be claimed that with larger merchant ships and fewer of them, there will be less to guard; but the required rate of flow of trade will be unaltered, and the frequency of convoys which is the governing factor, and not their size, will not be less. It has also

[5] "The Submarine Peril," Earl Jellicoe, p. 115.

to be recognized that even when our destroyer strength was at its maximum it was being worked to dangerously near breaking point, and its employment in commerce protection was almost wholly defensive. The initiative was with the enemy to come and be killed. If he decided it was futile to do so, he still remained as a threat. As in every sphere of war, there must, in the end, be attack if real mastery is to be achieved. There was, and seemingly is, little surplus for this.

If I could be sure of the soundness of my reasoning, or rather of the soundness of its basis, I could find no reason for doubting that the general uneasiness is fully justified. But not only have I little faith in these home-made approximations, but there is one argument, and that a very powerful one, which forbids such faith. It is inconceivable that the Admiralty have not given the subject the fullest study, nor that with far the best means for doing so, and especially with such a Board as the present one, they are not competent to arrive at a correct conclusion. Yet one explanation is possible. Even Admiralties, in spite of their reputation for getting the better even of the devil[6], never get all that is necessary, and if they do not they have to put as good a face on the enforced deficiency as they can. If this is not the explanation, it is to be hoped that they will find that they can with safety explain more fully the grounds for their decision, in order to allay a very justifiable uneasiness.

In either case, it is therefore satisfactory that the Parliamentary Secretary acknowledged that :—

> " There does seem to be a good deal of unanimity, both behind me and opposite me, on this question, and when I report the result of these discussions to the First Lord I shall point out to him that it is the considered opinion of the House that we should press on with this smaller type of craft."

Commerce Protection.

The remaining items of note are all connected with Commerce Protection, and may be gathered under that heading with the consideration of the statement on the subject in Mr. Shakespeare's speech which is the main object of this article. The following copy of that statement is taken from " Hansard " for the 17th of March :—

> " I should like to make clear the attitude of the Admiralty on the question of convoy, about which there seems to have been considerable misunderstanding. What is the problem with which we should be faced in war? The danger to our shipping on trade routes may arise anywhere, but the nature of the attack will vary according to whether the enemy is relying on bases and according to the distance of these bases from our trade routes. Throughout the long ocean passages the danger is likely to come from fast raiders, but when our merchant ships are confined in narrow

[6] " He asked me where I was, and when I replied, ' At the Admiralty ' he said ' I have long experience of the Admiralty, and if you can get the better of them you can get the better of the devil '." (Mr. Shakespeare.)

waters they may well be open to attacks from submarines or aircraft. It is impossible to construct a single vessel combining all the characteristics required to meet such diverse forms of attack.

"Two conclusions arise from the consideration of the danger and the means of meeting it. Firstly, the protection of merchant ships sailing individually against a full-scale attack is clearly impracticable, although some measure of safety can be obtained by a system of routeing. Secondly, adequately escorted convoys will be the surest means of protection against intensive and persistent attacks by submarines, aircraft, or surface vessels.

"As regards submarine attack, that is borne out by our experiences in the War. As regards air attack, it may be argued that aircraft will find it easier to locate convoys than individual ships. That may be true ; but it is less easy to attack ships in convoy than isolated ships. The ratio of ship to water in a properly organised convoy is 1 to 99, and attacking craft will come under intensive fire not only from escort vessels but probably from any of the merchant ships that may be defensively armed.

"To deal with attack in narrow waters from aircraft or submarine, the escort ships must be of moderate speed, equipped with strong anti-aircraft armament, and able to detect, hunt, and kill submarines. These characteristics are being combined in a small escort vessel of which we have a number and of which earlier ones are being rearmed for this purpose. We are also converting older destroyers for escort purposes. To strengthen the anti-aircraft power of the convoy, we propose a steady programme of conversion to A/A vessels of the old cruisers of C and D classes. It may be that as convoys approach our shores they will be subjected to intensive attacks by aircraft, and this brings the answer that co-operation may be desirable to provide for counter attack ; I can assure the House that plans in this respect have been co-ordinated with the Air Ministry.

. . . . .

"On ocean routes, the danger may arise from raiding cruisers, and the defence against this form of attack will be provided by cruisers, augmented if necessary by armed merchant cruisers. We must be prepared to meet this kind of threat, although experience shows that a raider of this type ultimately goes to her doom. I sum up the Admiralty policy as follows: Different areas of the world will require different treatment according to the scale and nature of the attack to which they may be subjected and the density and importance of our trade in those areas. When trade is of great importance or density and is liable to be attacked by surface vessels, submarines or aircraft, the Admiralty view is that suitably escorted convoy would provide the best means of defence. Where trade is sparse or scattered or is unlikely to be attacked by the enemy, its safety will be sought by diversion combined with such patrols as the circumstances warrant. The Admiralty recognise that convoy may be necessary as early as the outbreak of war, and they are ready to put it into operation, when and where required."

The corresponding statement, by the then Civil Lord, of three years ago was reproduced in the May, 1935, number. Fairly satisfactory as it was it contained many ambiguities, uncertainties, and reservations to cause uneasiness, which the new statement does much to remove.

There is actually little difference between the two statements in the methods to be used, but there is a very decided difference in their spirit. The old one was at pains to notice the chances that the worst might not happen, and tended to hope for the best—" We should never assume that indiscriminate attacks on merchant ships are inevitable or even likely " [n.b. submarine or aircraft]. " Convoy will not be needed immediately on the outbreak of war." " Time to improvise protection . . . whilst orders are given to build." " Convoy system would not be introduced at once on the outbreak of war "; and so on. The new one notices the possibilities that the worst may happen, and prepares for the worst.

It is not likely that this is due to any real change of doctrine on the part of the Admiralty, or of the Naval Staff in particular, under the same leadership, but rather that a change in conditions now admits of a more candid expression of their views and a closer adherence to them. In 1935 the Navy still had to try to cover its nakedness with a scanty garment. One may read into the 1935 statement a recognition of the necessity for convoy, an intention to use it if possible, a forced reliance on the hope that an enemy would, as in the last war, commence with half measures and so give time to provide the means to make it possible, and the Admiralty's intention to press on such provision directly its hands were freed by a declaration of war. The many arguments it contained to prove that convoy might after all well prove to be uncalled for may be taken as the necessary eye-wash to impose on foreigners and to hearten our own people. The new statement suggests that the Admiralty now feel, or see that they soon will be, in a position to use adequate convoy, that it will be wanted sooner rather than later, and that they intend to adopt it.

It is highly satisfactory. The only point to which exception might be taken is the lingering trace of something provisional in the time when convoy will be put in force contained in its final sentence. I would have preferred to hear that, since convoy may be necessary as early as the outbreak of war, it would be put in force from the beginning so that it would be ready if it proved to be required. I doubt the soundness of a policy of waiting till convoy is proved necessary, however ready to adopt it we may be. It must entail some delay at a time when losses must already have become serious to prove the necessity; while a policy of waiting for an offensive to develop is an encouragement for that offensive to be commenced and an opportunity for the attacker to " get his hand in "—it surrenders the initiative. A sounder, and probably, in the end, a more economical, policy is to start with the complete system of protection appropriate to the worst conditions, and thus provide a deterrent by showing that any attack must prove useless. Then, if the

deterrent proves effective, to relax the precautions as far as can be done without sacrificing instant readiness to resume them. The suggestion of a progressive mastery which it would give would have a moral benefit, while the salutary shock of the original precautions might impress on masters at sea and business leaders on shore that there is no room in war for the half-hearted precautions or half-hearted efforts which were so evident in the early years of the last struggle.

The old argument of dislocation of commerce caused by convoying and that commerce can neither stand, or commercial interests tolerate, it, may be raised as it was in 1914. It was then a very weighty argument ; shipping interests undoubtedly professed to believe it—though they were among the first to blame the Admiralty for the delay and losses caused by accepting it—and naval opinion, ignorant as it must be of the intricacies of business, was right in bowing to that opinion. But the experience of the war has proved it to be false. Dislocation of commerce was proved less serious than suggested, and largely a question of proper control. The advantages of unconvoyed trade, when not imaginary, were only temporary. Though the rate of flow of trade under controlled independent routeing showed an initial advantage, it was a wasting one, which vanished with an accumulation of losses. The complete independence or lightly imposed control under which it ran in the early stages, which was unpreventable in the state of opinion existing at the time, could not now be tolerated, and more stringent precautions will further reduce any advantages might which still accrue to unconvoyed trade.

Escort Vessels.

Proceeding from the promise of convoy to the means of performing it, the reference to escort vessels induces an alluring picture of a flow of convoys into the country from the outbreak of war, well guarded by vessels bristling with guns under whose fire submarines and aeroplanes would dive to their doom in all directions. But a search for detailed particulars in the Navy Estimates and in " Fleets " (Cmd. 5666), only produced the *Bittern* and five others still building with a " strong " A/A armament of 6 to 8 guns. No strengthening of older escort-vessels is shown in the lists of ships undergoing alterations or large repairs. There seem only two others in Home Waters, or three if surveying vessels of the same class are counted, with as many as four guns. By the February Navy List 22 of the 30 existing escort vessels are on foreign stations ; some of these may be intended to be brought home—or to wherever the sphere of anti-submarine or A/A convoying may be—in case of war, but it must take time ; and many—the Dominion contingents in particular—will be required where they are.

The plan may be no more than that in the 1935 announcement: to have a few "type" ships and rely on rapid building when war comes, though this is rather straining a readiness to impose convoy whenever wanted.

The flotilla-leader and 12 destroyers shown for large alterations in the Navy Estimates may be destined to form part of the picture. But the negative reward for my search suggests that the good news is based more on future intentions than on present actualities, and that I must wait a bit for the dream to come true.

A/A Cruisers.

One important development in the A/A work of convoys is the steady conversion of old cruisers to A/A vessels: shown by the Navy Estimates to be begun at once. But they will still retain the draught and size of cruisers and, therefore, their vulnerability to the torpedo. The area of submarine attack will probably merge with that of aircraft attack and they will be liable to removal from the board before or while they are performing their A/A duties. The question of their anti-submarine protection and their disposition in the convoy must be providing an interesting tactical problem.

Air.

On the question of naval "Air" in general it will be seen that the Parliamentary Secretary gave an assurance that plans for co-operation in counter attack against intensive air attack in narrow waters have been co-ordinated with the Air Ministry.

Full value will be given to this assurance; but whether one assumes that the naval members of the Board are satisfied that these plans fulfil all requirements will depend on the extent of one's confidence in last year's decision for the working of shore-based aircraft in naval work.

If it proves satisfactory against such attacks, as may well be the case, there is still much other work in our narrow waters and in distant waters where it still remains to be proved that shore-based aircraft or flying-boats not under naval direction and naval handling are capable of meeting all requirements, or of evolving, exploring and developing their further possibilities for naval use. While such combined exercises as have been held may not have proved the contrary, they have so far hardly provided the proof in the affirmative which may be thought due by now. There is a wide field for research open in regard to the protection of some portions of ocean routes, where success might allow of an abandonment or reduction of deviation from normal courses with a consequent easing of strain on our shipping resources.

One point may be made here in connection with Mr. Shakespeare's sound contention that, though convoys might be more easily located by aircraft, they are easier to defend. Collection in convoys removes any doubt of nationality which might otherwise embarrass the prosecution of an air campaign on shipping.

Cruisers.

The main defence against attacks from surface craft must continue to rest with surface craft. A certain satisfaction that a 70-cruiser standard is now accepted and will, though with an appreciable delay, be attained is understandable; while the fact that this standard was determined by the most authoritative professional opinion justifies that satisfaction. It must be remembered, however, that the number was put forward as the irreducible minimum, and presumably allows little margin for bad luck. Whether this standard is high enough may be doubted; much depends upon the opponents or possible combination of opponents on which it was based. Though it is far below what proved necessary against Germany in the war, the cruiser requirements for the battle fleets are now less; and, though the requirements for convoy must continue to be based on the number of convoys rather than on the number of potential attackers, there is the further argument that "experience shows that the raider of this type ultimately goes to its doom". Of possible opponents, German strength is far less; for Italy, her solitary and narrow exit from the Straits tells against intensive cruiser attacks on the high seas; her still more difficult exits tell against Russia, apart from any question of inefficiency; but with Japan, cruiser attacks in all oceans outside the Atlantic, or even inside it in combination with their fast oil-tankers, could be serious, and might well take the place of the last war's submarine campaign as the main performance. Although Germany's neglect of her opportunities in this respect made the results negligible, except for an excessive demand on our cruisers for the moment, the accumulated results of a whole-hearted effort could be quite different.

The possibility of attacks by heavy cruisers has also to be considered:—

> "There is one particular danger . . . [in the] gap between the 10,000-ton limit of large cruisers and the 25,000-tons where the battleship or battle cruiser begins. It is in this limit that the danger from Japan is most likely to cause inconvenience, because by the construction of 15,000-ton vessels with 12-inch guns a whole series of British and American cruisers would be rendered comparatively obsolete, and no remedy would be open . . . except to despatch battle cruisers for the purpose of meeting with those vessels," (Mr. Churchill), and
>
> "There is something even more serious than that in the existence of the two German pocket battleships . . . we have only three ships in the Navy which could run them down, and sink them." (Commander Marsden.)

A combination of a Western Power and Japan with torpedo attacks in European waters and simultaneous heavy attacks from cruisers in more distant waters would be a difficult one to deal with. It is of course easy to dismiss all such speculations as nightmares. But Sir Roger Keyes, in his speech on the 17th of March, noticed that :—

> " About two years ago [Mr. Alexander] said that I wanted a supreme Navy, and I ventured to say, ' Yes,' having in mind our immense responsibilities all over the world."

It is not a question of wanting to take on most of the world, but a realization of the very real possibility that we may find it fighting us, and a desire to be prepared accordingly.

Army.

The oversea commitments of our Army have a very real bearing on the question of trade protection in the demands they make on merchant shipping and on naval protection. The speech introducing the Army Estimates contained a statement of some importance in this respect, though it was more of the nature of an explanation than an authoritative and clear-cut pronouncement like the once ruling " Stanhope memorandum ".

> After a suggestion of an " aim at holding a strategic reserve in a zone whence it could be directed most rapidly to those alternative places where security was most likely to be threatened ", there followed a statement of the Army's role.
>
> " The role of the Army is known to comprise a number of different purposes. But in the views of the Government it is now possible to classify them in order of importance. . . . The first purpose of our Army is home defence . . . the menace of air attack is a primary consideration ; . . . in this major respect home defence is in the first category of importance and in a form unknown in 1914. . . . Second . . . the discharge of British commitments overseas, including defended ports on the trade routes ; the size and type of garrisons . . . where communications could be interrupted should be maintained in peace at a strength adequate for its responsibilities of defence at the outbreak of war. . . . The final head . . . concerned the uses to which the strategic reserve could be applied ; . . . those uses were a reinforcement, wherever required, of internal security, defence from external attack of territories for which we might be responsible overseas ; and, next, co-operation in the defence of territories of any allies we might have in case of war ; . . . the assumptions of an unforgettable past were not always the surest guide to an unpredictable future ; . . . it must be remembered that support on land was not the only support we could offer."[7]

The role with which this deals is that of our standing Army, now the Regulars and the Territorials. It does not preclude the raising of a

[7] Mr. Hore-Belisha, Debate on Army Estimates, *Hansard*, 10th March, 1938.

temporary army, though the last of the quoted sentences does suggest a possibility that we shall not embark on a military enterprise on the scale of that of the last war. But even then, it was not the transport of the personnel of our army in France that made a severe call on ocean shipping so much as that of its munitions and supplies, for which any allies will probably rely upon us, and the transport of our "side show" expeditions. The strategic reserve, wherever it is, will still require transportation when it has to be used, though a more favourable strategical location may reduce the total of its call on tonnage.

In spite of some possible reduction from these causes, the overriding factor will still be to keep our military enterprise in keeping with our general capacity. If the demands made by Army commitments become too onerous and jeopardize the requisite flow of national trade and supplies there are three courses which may be taken :—

(1) Reduce those demands ;
(2) Increase our merchant shipping to withstand that strain ;
(3) Still further increase our Navy to obtain a far higher degree of safety for shipping by greatly intensified protection.

In view of the weakness of our Merchant Service, it may well be that one, or a combination, of these courses is already necessary.

Shipping.

Whatever else may be done for the protection of trade, there still remains one, the most important, factor, the shipping itself to carry that trade ; without it there is nothing to protect, and all naval or other efforts are nugatory. A tribute in Mr. Shakespeare's speech to the co-operation of the shipping industry in the work of the Shipping Defence Advisory Committee suggests that shipping interests, as a body, have assimilated the lessons of the war. If not, it might prove a congenial task for the Labour party, giving indulgence to any anti-capitalistic prejudices they may have, to press that shipping interests in war must not be allowed, any more than other commercial interests, to pursue their private advantages at the expense of the general welfare. Shipowners in truth have less excuse than others if they do so since they are responsible for the control of the fourth great Defence Force of the State.

Those matters connected with the Merchant Navy in which the Royal Navy can show concern or exercise influence received full attention in the debate and estimates, notably the reference to the most desirable courses for its officers. But the White Paper on Defence[8]—of all things !—ignores its existence, except in one paragraph, 39, where it is mentioned that " schemes are being *prepared* to ensure . . . the flexibility of the transport system to enable sea-borne traffic to be diverted as required

[8] " Statement Relating to Defence—March, 1938," Cmd. 5682.

to alternative ports ". [My italics.] Twenty-two years ago, when air attack was in its infancy, Liverpool was often at bursting point. Now, London and Southampton are still being developed as the leading ports in seeming disregard of any of the possibilities of war. Until the question of our merchant service, its sufficiency, the security of its ports, and the secure warehousing and disposal of its cargoes, is thoroughly tackled our naval position cannot be considered satisfactory.

Conclusion.

So far as the Royal Navy itself is concerned, those who can only look on and who, while having the fullest faith in our present Board of Admiralty, yet remember the unavoidable limitations and reservations of official utterances, may sum up its present situation as generally satisfactory and far superior to that of the other Fighting Services or of the several Defence organizations. That it is so far superior to anything of post-war years at least, is due to those who, serving in those years, kept efficiency alive and refused to succumb to the enervating effects of the pacificism and neglect of that period.

But good as it is, it is one in which much still remains to be done.

TEEOH.

RECENT NAVAL WAR EXPERIENCE.

I.

IN a recent article drawing attention to the desirability of studying modern war conditions, Alpha invited information from those who are in a position to supply it at first hand regarding the two wars now in progress. For the last two years I have been serving in a ship that has been constantly in Spanish waters, and I would like to add a few remarks, not solely in connection with naval warfare, to the deductions drawn from press and other reports by Alpha.

First, I would draw attention to the complete ineffectiveness of all forms of air defence in Spain. In the many cases reported of bombing raids, the attacking aircraft have been able to carry out the entire operation untroubled by the anti-aircraft fire from the ground, and whenever any of the raiders has been shot down it has been almost invariably as the result of a counter attack by defending fighters.

As a case in point, I quote the instance of a raid on Cartagena, which, as the Government's principal naval base, one would expect to be amongst the best defended of places. My ship was anchored some six or seven miles to the westward of the town on the night of the raid, and we found ourselves in the front row of the stalls, as it were, throughout a performance which lasted some four hours. Batteries had been established on the many hill-tops surrounding Cartagena, and as soon as the raiders had been heard these opened fire in a most haphazard fashion, unaided by searchlights or any other form of illumination. Consequently it was quite impossible for the gunners to see their targets, and as the guns were not even provided with tracer ammunition the result was, of course, a complete waste both of shell and of such protection as was afforded by the "blacking-out" of the town. Had the barrage been sufficient to deter the bombing aircraft there might have been some excuse for such a gross expenditure of ammunition. As it was, however, the raiders, secure in their cloak of invisibility, paid no attention to the fire and completed their operations with the utmost deliberation.

The lessons to be drawn from this account are, of course, elementary and, in view of our own rapidly-developing ground defence organiza-

tion, unnecessary; but it is interesting to consider the mentality of the Government forces which could countenance such a wasteful display. Indeed, it was reported afterwards that the complete stock of H.A. ammunition had been exhausted after a couple of hours of indiscriminate firing, and that thereafter fire was continued with guns of larger calibre which, not having the necessary elevation, merely bombarded the town even more effectively than the hostile bombers!

If effective resistance to air attack is weak, there at any rate appears to be an efficient organization for passive resistance in all the larger towns, including the provision of bombproof shelters for the civilian population, an elaborate system of warning syrens, and other arrangements designed to reduce loss of life among non-combatants. In Barcelona, all the shop windows are plastered with strips of paper, gummed criss-cross fashion, in order to reduce the number of casualties due to flying splinters of glass during an air raid; and this is typical of the attention to detail which is a characteristic of the Government's "air raid precautions" schemes. But all this is a negative form of defence: and it is, I think, largely due to the ineffectiveness of aggressive methods to counter air attack that passive resistance has been so highly developed.

With regard to air attack on ships, I am in agreement with Alpha when he says that the Spanish war has, in general, shown this to be ineffective. H.M.S. *Griffin,* whilst on patrol off Malaga, was, on one occasion at least, the direct object of attack, yet a few alterations of course and speed were sufficient to avoid being hit; and the *Grenade,* which arrived shortly afterwards to relieve her, found her motor boat lowered and busily engaged in collecting the fish which had been brought to the surface by the concussion of the bombs!

The effect of various forms of attack on morale is still a factor of extreme importance, and one which must always be taken into account when planning almost any operation. In regard to this question, I feel that Alpha's veiled inference of the small moral effect of air attack on surface vessels is based too much on the unfamiliarity of the present generation of sailors with the destructive effects of modern high explosive.

I agree that during the present conflict in Spain many of H.M. ships have been subjected to attack, either directly or indirectly, and that in every case the attitude of the men has been one of contemptuous tolerance, coupled with a firm conviction that "those blooming dagoes couldn't hit a haystack anyway!" This attitude, it is true, varies with the nationality of the subject, and perhaps our sailors treat the threat of disaster more lightly than most—at all events outwardly. I was told

of a raid at Palma, when a number of foreign warships were present, which shows the truth of this. As the first bombs were dropped, the Italians rushed for their boats and started to abandon ship: the French made for their guns and began to open fire: while our own lads made a bee-line for the guard rails and cheered as heartily as if they were watching a football match!

If, however, the efforts of Spanish (or other) airmen leave little impression on the minds of British sailors, it is largely due, as I have stated, to the fact that comparatively few of those now serving afloat have witnessed the shambles which may be caused by a direct hit: and I consider that, were this country to become engaged in a war, a little experience would suffice to render the moral effect of air attack greater than is at present apparent.

SPECTATOR.

II.

THIS article has been written because the writer thinks that he has been in a particularly interesting position to see a war from behind the scenes, as his ship has been stationed during the winter in an outport which is also one of the main supply depôts for the Chinese forces, and which, should the war come any closer, will become more and more important. He has also, largely thanks to the local manager of a big British firm, had almost unequalled opportunities of meeting important Chinese business men of the type who are very largely responsible for the modern China as it exists to-day.

When the original incident occurred in the first week of July, 1937, at the Marco Polo Bridge the ship was at Kiukiang, on the Lower Yangtze River. General Chiang Kai-Shek and the Chinese Government were at Kuling, the summer resort a few miles away. For the remaining fortnight that the ship was there a constant stream of Chinese generals and high officials kept passing through for conferences with the Generalissimo. It was very soon obvious that the decision being made was whether China should fight or allow a further large slice of her territory to be taken by Japan. The decision to fight was to a large extent decided by a reported threat of the Southern Provinces to overthrow the Central Government if no resistance was put up. In this case civil war on a large scale would have broken out immediately, the southern Provinces being supported by the Communists, thus causing the complete breakdown of the modern China that Chiang Kai-Shek has so laboriously built up. After the decision had been made pledges of loyalty

to the Central Government were given by Chang-Chuan, Yen-Hsi-Shan and Han-Fu-Chu, the Governors of Szechwan, Shansi and Shantung respectively, and by Chu-Dai and Pang-Dai-Huia the Communist leaders.

The only other interest at Kiukiang was the presence of a Chinese and a Japanese gunboat lying some quarter of a mile apart, both half cleared for action and both waiting to open fire. The Chinaman had the armament of approximately a *Sandwich* class sloop, while the Japanese had only one twelve-pounder gun, which in any case would not bear from the position in which she was berthed.

At the end of July the writer's ship proceeded to Hankow, where the foreign business community was quite certain that if hostilities did break out they would merely be a repetition of 1931-32, with Japan taking all the area north and east of the Yellow River and setting up a puppet State similar to Manchukuo. However, there was a considerable amount of tension over the Japanese Concession, which was only prevented from turning into a possible incident by the Japanese evacuation of all the Yangtze ports. The ship sailed for Ichang two days after the outbreak of hostilities in Shanghai.

Ichang was too far from the scene of fighting for anybody except the magistrate and a few senior officials to be really very interested, but there was a general feeling of nerves. An illustration of this was the arrest of the writer as a Japanese suspect barely a mile from where the ship was lying. However, it ended by the prisoner dragging his prosecutor on board, where the rather delightful scene occurred of a Chinese sergeant being seen as a defaulter by the captain of one of his Majesty's ships.

Towards the end of September the ship went to Changsha, to stay there for the winter. This city is one of the principal places on the Kowloon-Hankow railway and is of enormous strategical importance to China, as large supply depôts are situated there, while some big munition factories and arsenals are only a few miles to the southward and big aircraft assembly plants and ammunition dumps some 40 miles to the north-west. There is also an important military and commercial aerodrome just outside the city walls, while the Siang River itself is one of the principal trade routes from south China northwards. The general expectation was that this railway would have been broken by the end of August, 1937, either by aerial bombing or by sabotage on some of the bridges. However, at the end of January of this year, in spite of attacks by both methods, no section has been out of action for more than twenty-four hours at a time. Huge armies of coolies are stationed

all the way along it as repair gangs, while large quantities of repair material are placed close to every bridge. In addition, a further line is being built from Henyang, 100 miles south of here, to Nanning in order to link up Hanoi in Indo-China with the Yangtze and Siang valleys. 800,000 coolies are being employed on this railway alone.

The accuracy of the bombing has been nothing short of deplorable, very largely due to the very great height from which it is done, even when there is no possibility of resistance. In the only raid that has occurred here so far (26th January), the bombers arrived before any warning had been given. There were no anti-aircraft guns of any sort and the few fighters that were here were on the ground with their engines cold. Yet the bombers dropped their bombs from some 10,000 feet and missed their target, the railway station, by at the very least 150 yards with their closest bomb. As a result the only damage done was to destroy two hotels, both of which were crowded for wedding feasts, thus killing about 200 people, mostly by falling masonry. A town on the line 100 miles south of here, Henyang, has been bombed on several occasions and the same high bombing carried out, with absolutely no useful results at all.

In addition to the very large quantities of war material coming in through Hong Kong and up the railway through here, enormous numbers of troops have also been passing through. These have varied from very good in the case of the Yunnanese to decidedly poor in the case of the Szechwanese, though these were not so bad as some from the same province that passed us going down river at Ichang. The Yunnan troops had marched all the way here, in some cases 1,500 miles from the Burmese border, and were by no means pleased when some of them were sent on by train. Their average rate of marching was about 20 miles a day for the whole journey. They had new Belgian equipment, including mountain artillery carried on mules, all of which appeared to be properly looked after.

At the beginning of December a new Governor was appointed to Hunan, one General Chang-Chih-Chung, who was the defender of Shanghai in the early stages of the war. With him came some of the German advisers, whose remarks on the war were very interesting. They had prepared a plan whereby the Chinese armies would fall back as far as Nanchang from Shanghai, so as to draw the Japanese armies as far into the country as possible. The Chinese would have none of this for two reasons; firstly in the hope that the Japanese would demand the use of the International Settlement south of Soochow Creek, and so raise strong anti-Japanese feeling in Great Britain and the

United States, possibly even bringing these two countries into the war, and secondly to prove to the world that the Chinese Army had improved from the joke that it has been held to be by the world in the past few years. It is also reasonable to suppose that they did not want any more of their country overrun than was absolutely necessary. In addition to the Germans there is also a tank school here, with two British army officers and a former employé of Vickers-Armstrong Ltd. as instructors.

Probably the greatest improvement over 1931-32 has been in what might be called the " war time morals " of the Chinese. In the Manchurian affair practically any general could be bought, and many of the junior officers as well, and so the war was very largely won by means of " silver bullets " scattered more or less wholesale by the Japanese. This time there has been very little of this so far as one can gather, the two outstanding partial exceptions being Yen-Hsi-Shan, Governor of Shansi, who has been very severely criticized and rebuked for the poor resistance shown by his troops, due it is believed to jealousy of the Central Government, and the late General Han-Fu-Chu, who was executed recently for trying to ensure that whichever side won he would remain Governor of Shantung. But apart from these two there appear to have been very few men who have sold themselves to the enemy. As for the various puppet governments set up in the occupied provinces, they are all composed of old men who are of little, if any, importance, and who are also completely out of touch with the modern ideas of Young China.

A further improvement on the same lines is the very great reduction in the amount of " squeeze " that is both demanded and obtained by many Government officials. As a result of this very little of the money that is being raised for the war is being diverted into private pockets, whereas formerly enormous percentages of all public money were spent in this way.

Up to about the time that Nanking fell one was being constantly questioned as to whether Great Britain was likely to join in. The answer to this was quite simple, being merely to tell the questioner to go and take a look at the ammunition trains from Hong Kong going northwards. Most of the more responsible people completely realized the advantages of a free and unblockadable port of entry for their supplies, while the remainder, after they discovered that their country was not defeated because the capital had fallen, fairly quickly adopted the same view. Another opinion which has been stated by quite a number of people, of the class which supplies most of the more important Uni-

versity officials and doctors, is that if China is ever going to take her place in the world as a great nation she must first of all unite herself, and that the successful defence against an invader is, in spite of the sacrifices in blood and treasure that are bound to be necessary, the best and quickest means of achieving this. Whereas if the European Powers were to spoonfeed China more than is absolutely necessary she would never advance very much beyond her present state.

The attitude in which various foreign countries are regarded is interesting. Great Britain seems to be regarded with most respect, and this is probably not mere politeness that is shewn only when one is present. The principal reasons for this are the way in which the Chinese are being allowed to use Hong Kong both for importing war supplies and for doing commercial business. In addition the banking profession is quite certain that an agreement exists between the British and Chinese treasuries to maintain the value of the dollar. It is also fostered by the constant stream of anti-British abuse that is poured out from Tokyo, while the constant pro-Chinese tone of the British press and similar statements in the majority of speeches on the Far East are very much appreciated. France is held in very similar esteem for much the same reasons, only substituting Hanoi for Hong Kong. Russia, in spite of the assistance that she is giving to China, is looked on with a certain amount of distrust, probably because the half Asiatic mentality of the Russian is too much akin to the Chinese. Germany, though handicapped by the German-Japanese understanding on Communism, is also looked upon with respect. This is largely due to the very considerable number of German military advisers attached to the Chinese Army and also to the fact that the biggest supplier of munitions is Krupp's. The United States is looked on almost with contempt, since she is supplying to both sides provided that she can get ready cash in advance, while the calm way in which the *Panay* incident was taken did nothing to alter this feeling. Meanwhile there is open dislike shewn towards Italy, due to the constant anti-Chinese speeches of Mussolini and his talk about the Rome-Tokyo axis. There are also constant accusations that Italy is supplying both aircraft and pilots to Japan in a similar manner to her actions in Spain.

Now that the quick collapse of the Chinese armies seems, for the moment in any case, unlikely, there is a very great deal more optimism shewn by the educated classes. Their reasoning is that it is fairly certain that the war will be a long drawn out affair, while the huge distances and the far greater natural resources of their country will wear down the Japanese. Now that they realize that they do not depend on

outside assistance of a direct military nature, they would prefer to finish it by themselves, except for the kind of help that is already being given to them by the greater part of the world. The only extra assistance that would be welcomed would be the cutting off of the Japanese export markets by the refusal of the world to buy Japanese goods. Some of the German advisers, however, think that, when Japan discovers that she is bound to lose, her armed forces might try to force a war on to Great Britain, France, Russia and possibly Holland, so that she can say that she was beaten by the greater part of the world, and not by a nation that she has always treated with the greatest contempt.

H. R. R.

III.

THE China incident has produced little in the way of direct naval war experience; but it is possible to guess a certain amount from aerial warfare conducted by both sides, although mainly against land targets. It is true that the Japanese succeeded in bombing the two new Chinese cruisers *Ning-hai* and *Ping-hai,* and a few gunboats, but it is believed that the cruisers had no ammunition, and much reduced crews. The guns of the gunboats were all taken ashore for use in local defences in various parts. One of the two cruisers was lost from the effect of close misses puncturing her side, after which she was beached. The other was sunk by a direct hit.

Before considering the effects of bombing, it is necessary to consider the men. The Chinese pilots, on the whole, are reputed to be better individually than the Japanese, but do not combine happily and are liable to be seen off separately by an equal number of Japanese fighters. Most of the Chinese successes in aerial warfare were at the beginning, when Japanese bombers were flying from Formosa unaccompanied by fighters. Chinese bombers have, however, carried out some fairly successful attacks, but as a typical instance, a party of four returning to Nanking after a successful raid crashed two planes on the landing field, killing both pilots and one observer. Probably most of the pilots in their new air force are foreigners, the Chinese having been killed.

To turn to the Japanese. It has been suggested that, taken as a whole, their eyesight is not too good. Having watched their efforts at Shanghai, Nanking, and at shipping, it appears to me that they are fairly accurate when left to themselves, but any sort of gunfire will keep them high, and probably wide of the mark.

Chinese air operations in Shanghai had a rude setback over the unfortunate incidents in the International Settlement. These bombs

were all meant for the *Idzumo*. One was a high attack and the plane was never seen; the bomb which dropped by the Cathay Hotel was only a few hundred yards from the river. Another incident was caused by fighters driving off a bomber which was attempting to attack the *Idzumo*, and forcing it down. The pilot tried to drop his bombs on the race course but let go too soon. The loss of life was very heavy on each occasion. This was due to enormous crowds in narrow streets, between high buildings. The material damage seems to have been comparatively slight, although these were large bombs. Finally, the only ship hit was the American flagship *Augusta* proceeding up river. The river at Shanghai is not wide. The whole of the property on one side is foreign owned, and a large part of the shipping—including warships—is also foreign. After these disasters the Chinese stood to lose more by creating worse trouble with foreigners than would be gained by a hit on the *Idzumo*. Raids, however, were carried on further down river—usually at night and by single planes—which, if they achieved no material damage, at least had the effect of inducing the Japanese to expend thousands of pounds' worth of ammunition. The Japanese anti-aircraft fire appeared to be on barrage principle, and searchlights were not good at finding or holding a target, but all guns went on firing whether the target was illuminated or not, and appeared to be quite ineffective though very spectacular at night.

Japanese bombing of Chinese positions in and around Shanghai proceeded steadily the whole time, almost always entirely unopposed, though there was one mobile battery of small guns—probably not more than 35 mm. Their time was mostly taken up in shifting billet rapidly after being located. The result was that Japanese planes could bomb, how and where they liked, without fear. Level bombing at a height of 2,000-3,000 feet was usually employed. About four or five raids a day over the whole period, until the Chinese withdrew from Shanghai, was the order of the day.

The effect of this bombing is not easy to judge, so much of the areas bombed consisting of lightly constructed houses or shacks. What is clear is that the Japanese around Shanghai, unworried by anti-aircraft fire, were able to keep their bombs out of the International Settlement whilst carrying out low level bombing. It is very doubtful if this could have been achieved had there been any Chinese anti-aircraft batteries there, judging from later experience at Nanking. The North Station Administration building—only about one hundred yards from the International Settlement—was regarded as a key position in the Chinese line, and this was subjected to air attacks at least three times

a day over an extended period. A visit was made to the North Station one morning, and Chinese troops came out and talked during an air raid. The usual three planes followed by two others appeared, and we were making for cover, but the Chinese having noticed the moment of dropping bombs, waved to us to remain as the bombs were wide. These bombs dropped about one hundred yards away, but as everything there was in ruins and a mass of rubble, there was no effect of any sort. After two or three raids one got quite good at guessing where bombs would drop, and there was still time to move out of the way. I gathered that an occasional Chinese was caught by being too casual; but they were entirely unaffected from the point of view of morale. The other very noticeable thing was the tremendous resisting power of modern concrete, of which the North Station building was constructed. Time and time again, direct hits were scored on this building. The day before our visit, I had seen it hit badly and burst into flames. The fire lasted all day. This was the first occasion on which the defenders had to abandon ship, even temporarily, but the next morning they were back inside again, morale entirely unshaken.

Nanking in October had been raided a few times, and had become a very air-minded city. Thanks mainly to Madame Chiang Kai-Shek, the air raid warnings and dugout systems were extremely efficient. First warnings could guarantee twenty minutes or more, and cover was taken at the second warning. The nearest Japanese lines were then about one hundred miles away. There was no question of panic amongst the civil population, and they waited by dugouts from the first warning to go to ground at the second. Nearly all the raids at this time were on the aerodromes outside the city, and the inhabitants were unaffected, but one attack was carried out on the electric power station. This was done by dive bombing. The power station was hit badly, but two planes were lost—not apparently from anti-aircraft fire, but from over diving, and defective petrol pipes setting them on fire. This was apparently their first actual dive bombing attack, and put them off for some time. No opportunity occurred for visiting the air fields after bombing raids, but from the 4th of December onwards Japanese attentions were increasing rapidly and we soon found ourselves close enough to raids on Pukow Station and the railway. Pukow was bombed on the 5th, 6th and 7th of December—all during the afternoon. Pukow was visited two hours after the raid on the 7th, which had caused fires in several places. The railway track had been damaged on the previous day, but was already in working order again, and trains were running out carrying refugees. The station staff appeared quite unmoved and,

incidentally, had excellent dugouts handy—even fitted with electric light. A few cooked bodies were in evidence in a matshed village which had burnt out, but these were mainly people who had looked out of dugouts to see what was happening. No damage that counted had been done, and the bombs had fallen over a wide area, although apparently intended for the station and the track. The general impression, again, was that small brick buildings will be knocked endways; but concrete is a very different matter. The damage seen was caused by eight heavy and fifteen dive bombers on the 6th and four medium bombers on the 7th. All attacks were carried out from a height of about 11,000 feet, as the Japanese obviously had a wholesome respect for the Chinese anti-aircraft batteries—one possibly 3.5-inch and two of 3-inch—which did some very good shooting on the whole. Even dive bombers never came below 4,000 feet. This was very noticeable after the uninterrupted bombings at Shanghai, and obviously much more inaccurate. Further heavy raids took place on Pukow on the 9th, 10th and 11th of December; but as the Japanese were then at the gates of Nanking, discretion urged us to the so-called safe anchorage, three miles up river, and the actual effect of these raids was difficult to judge; but, on going down river again, the roof of the station building had at last been blown in.

On the 11th of December we were shelled out of our anchorage and proceeded further up river—the *Panay's* convoy anchoring separately. Next day at about 1245 the first dive bombing attack occurred. At that time we had four river steamers, three tugs, and a Jardine's hulk with about 400 people on board, in company. The first attack, entirely unexpected, was only met with Lewis guns towards the end, and it is inconceivable how they missed everyone. It was the first bomb in her raid that hit the *Panay,* but the aiming of our attackers was not so good, though every bomb fell between some two ships. The next raid was by level bombers, but as we were still not certain if the first raid had been a mistake we did not open fire on them until we saw bombs start to fall. The ship was under way at this time, and it appeared to be an easy matter for a small ship to dodge level bombing if drastic avoiding action is taken shortly before the planes reach their firing position; and, after watching a few attacks from underneath, a pretty accurate guess can be made as to where the bombs will land. All bombs in this second raid were fired in one salvo at the A.P.C. tanker in company with us, and just missed astern. One plane was forced out of formation by gunfire and, it was hoped, was coming down; but he managed to get away. The third attack took place some four hours later—more dive bombing. This time there was no doubt of their intentions, and fire

was opened at once with the result that only one plane dropped a second bomb, compared to three each in their first raids. It was very evident that they did not like the attention of pom-poms, etc., and all dropped their bombs at about 3,000 feet or more as opposed to about 1,500 feet in the first raid. In all these raids every bomb was close to some ship, and appeared to be about 100 lb. or less, and of very thin casing. However, the A.P.C. steamer was holed in about two hundred places by fragments from one salvo. The Jardine's hulk was also riddled everywhere, but most of the splinters were too small to cause any serious damage.

The bombing of the *Tuckwo, Tatung,* etc., at Wuhu just previous to this was all done by level bombing, and the bombs used were also about 100 lb. Two possible duds which dropped in the semi-mud by Wuhu station penetrated to a depth of about six feet without exploding, making a hole about nine inches across. The bomb which hit the *Tatung* went right through the upper deck leaving the same sized hole, passed through a wheat sack cargo, penetrated through the bottom of the ship, and exploded underneath causing a hole inwards in the bottom plating about nine feet across. It was presumed that this was a semi-dud, as most of the bombs appeared to explode on impact. A photograph of the upper deck of the *Panay* just after being hit shows, however, the same kind of hole, and this bomb also exploded inside the ship, so they appear to have used two types of bomb.

The morale of the sailors was very good during the bombing and the previous shelling; they also had had a very trying time at Nanking for the fortnight before these attacks. Even the fact of waiting to see whether a plane was going to attack you first seemed to worry them little, and the conclusion that 90 per cent. of them have no imagination is certainly all to the good. The effect of firing back was very noticeable, especially amongst the refugees, and the effect of bombing on morale would appear to be small in a war in which you are yourself engaged!

From a material point of view, little has been achieved by either side other than hitting sitting birds—and using a lot of bombs to do that. Now that the Japanese have had a shock at Hankow, delivered by foreign pilots, presumably they are pretty low grade in the air, and there is nothing to show what good airmen could have achieved with their opportunities. It does appear, however, that a well armed fleet will be able to hold its own against aircraft, and long hours of air action stations should not worry the sailors. The danger to oil tanks and such-like vulnerable targets appears infinitely more acute.

BEETLE.

IV.

IT is with considerable hesitation that I write in answer to Alpha, whose contribution I read with much interest in the November, 1937, number of THE NAVAL REVIEW. Modesty, however false, bids me deny that I claim that my opinions are even worth the paper upon which they are written! I have had, however, some very slight experience of the war on the Spanish Coast and have therefrom formed some opinions.

My most strongly held opinion, formed from very sketchy observation off the coast of Spain from the autumn of 1936 to the spring of 1937, is that the offensive power of aircraft against surface ships has been, and is being, very greatly overrated by those who have not been in close touch with the situation. Unless those manning the aircraft are men of redoubtable courage and great determination, their bombing of a ship ready and willing to defend herself is never likely to be so accurate as to cause that ship much inconvenience, let alone damage.

From observation, and from a study of the Press (which is sometimes reliable!), I also consider that the moral effect upon the civil population of the bombing of a town has been given too much consideration. The bombing of Madrid has not shaken materially the morale of her population nor did the bombing of those towns upon the coast of Spain, into which I frequently entered soon after they had been bombed, both by day and by night, appear unduly to have frightened the people in them.

It appears to me, therefore, that the war of "frightfulness" or the "absolute" war has yet to prove its usefulness. It may well be that the scale upon which it is being fought in Spain is infinitesimal compared with that to be expected in a future "first-class" war, but it does at the moment look as though the only result to be gained from the prosecution of a war of "frightfulness" is a stiffening of the morale of the enemy.

I agree with Alpha when he says that the men should be kept below armoured protection when our ships are within easy range of hostile air bases, but I consider that much can be done to decrease the time to be so spent by a good system of lookouts, both on board the ships and on the shore surrounding the harbours in which the ships are lying. Allied to the system of lookouts, and to a scheme of instantaneous warning, must be a high state of drill to enable all men not actively engaged in defending the ship against air attack to take cover in the most speedy manner possible.

The risk of a loss of morale will be great if a commander has to order his men to spend too long a time below decks after a long period at sea on patrol; and the decision when to take cover, with the ship at "rest"

in harbour, may well become one of the hardest which a commander in a future war will be called upon to face.

It does not seem quite reasonable of Alpha to claim that many ships of the Royal Navy have been exposed to air attack for weeks. Certainly not if he is referring to those on the Spanish coast. I admit that there was, when I was there, always the possibility that a bomb might be accidently dropped from an aircraft which was about to raid a town, or from one which had just carried out a raid. But that has, I submit, a psychological effect wholly different from one's fear that every aeroplane which one sees approaching is about to attack one.

A far graver possibility, nay, in the light of after events, probability, was that one's ship would strike a mine. In a case like that the warning is negligible, and the "attack" is completely impartial. Both these factors appeared to weigh not at all with the men in those ships operating off the Spanish coast before the mining of the *Hunter*. I have no experience of their reactions to that affair.

The naval conduct of the war in Spain has, on both sides, been little short of disgraceful. The causes may well be those which Alpha gives. I would like to read the opinions of others upon this subject. But other reasons may have had a very considerable bearing upon the undoubted lack of offensive spirit displayed both by the Government fleet and by that of General Franco. Perhaps both sides had to conserve their ammunition as much as possible. Perhaps General Franco had no admiral worthy of the name or perhaps the advice of his admiral was overruled by the General's military advisers. Perhaps General Franco wished only to be sure of maintaining a clear path to North Africa, which he could well do without seeking a fleet action, and perhaps that is why he has given no orders to his naval forces to go out and destroy their enemy.

The above remarks were first set down before the news reached us of the action in March, 1938, which led to the sinking of the *Baleares*. Because no details of this engagement are available to us yet, I let them stand.

When Alpha criticizes General Franco for neglecting to carry out combined operations, I agree with him in so far as that is another example of the lack of offensive spirit in his navy. But I think that Alpha gives too much weight to the "Command of the Sea" held by General Franco. It seems to me to be an essential requirement of any combined operation that the sea force which a prospective invader produces at the point of invasion, or in close touch with his invading force, should be greatly superior in every way to that force by which he may expect to be opposed. I submit that General Franco has at

no time held such a superiority over the naval forces of the Government. In view of that fact, and in view of the fact that he required the undisputed command of the sea in the Gibraltar Straits area in order to ensure the safe arrival of his troops and supplies from Italy and from North Africa, it is more than probable that he decided against risking his ships in the gamble of a combined operation. This is, of course, mere conjecture, because it is extremely doubtful that the Government naval forces would ever have opposed his landing anywhere he liked!

To conclude this short reply to Alpha's request for those with first-hand experience to give their views, may I say that I much regret that I so often find myself in agreement with his opinions? It would be far better fun, and it might be of more value to other readers, if one were able to take up the challenge issued and whole-heartedly to refute each one of Alpha's theories!

M. C. R.

THE ROYAL INDIAN NAVY.[1]

THE Royal Indian Navy, in its present form, owes its inception very largely to the proposals put forward by the late Admiral of the Fleet Earl Jellicoe; i.e., it is again, after a lapse of years, a combatant force; and, although it is the youngest of the Empire's Navies, it has the oldest tradition next to that of the Royal Navy. It dates from 1612, when it was known as the Honourable East India Company's Marine, and was established to deal with the annoyances caused by the Dutch, Portuguese and the pirates of the west coast of India. The headquarters were at Surat.

Very early in its history Captain Best, with the Honourable East India Company's ships *Red Dragon* and *Hoseander* defeated a greatly superior Portuguese fleet near Surat. This started the decline of Portuguese power in the East.

In 1659 the Bombay Dockyard commenced building small armed craft for the defence of merchant vessels trading between India and the Persian Gulf. In 1670 the transfer of the headquarters from Surat to Bombay was begun. This took sixteen years to complete, and the headquarters have remained in Bombay ever since.

In 1686 the name of the Service was changed to the Bombay Marine. The Marine consisted of two cruisers, three second rates and a number of smaller craft.

In the eighteenth century the Marine's principal activities were directed against the pirates which infested the Persian Gulf and the west coast of India, notably Angria, and in 1756 in combined operations with the military under Colonel (afterwards Lord) Clive and the Royal Naval forces under Vice-Admiral Watson, the final stronghold of Angria at Viziadrug was taken.

In addition to the provision of local forces the East India Company contributed to the cost of the Royal Navy by giving free freights for its stores, giving money allowances to ships' companies in Indian waters and maintaining a dockyard at Bombay.

In the latter half of the eighteenth century the English Government found that it was more economical to build ships in Bombay, as teak was cheaper than oak and more durable. Many fine ships, including the *Malabar*, *Hindustan* and *Ganges* were built in the present dockyard. Bombay Dock is the oldest in the British Empire excepting English docks

[1] A lecture given by Vice-Admiral A. E. F. Bedford, C.B., C.S.I., to the Royal Central Asian Society last February, and reproduced by the kind permission of the Society.

and was made in 1725. The first ship was launched in 1735 and the last in 1881. The master shipbuilders were a family called Wadia, and their descendants are still employed in the constructive department in the Dockyard. Ships were manned by Europeans and natives, the former being the bigger percentage.

Admiral Hughes, the Commander-in-Chief, considered Bombay of the greatest importance as a refitting port and emphasized the necessity of its being strongly defended. The Company was responsible for "Local Defence", i.e., the defence of harbours against raiding attacks as well as the protection of coastal trade, but the Governments of Bengal and Madras maintained no sea-going forces, and losses were consequently more frequent on the east than on the west coast.

In 1767 all Royal Navy ships were withdrawn from Indian waters, and the defence of trade devolved entirely on the Bombay Marine for two years, when another small force was sent out. Bombay Marine ships worked under the Commander-in-Chief East Indies when wanted.

In 1830 the name of the Service was changed to Indian Navy. In this year Commander John Wilson in the *Hugh Lindsay*, the first steamship to be built in the Dockyard, completed a voyage from Bombay to Suez, taking 32 days including stoppages at Aden, Mocha and Jidda.

In 1857, when the Indian Mutiny broke out, a naval brigade was formed and served in Bengal and Assam. Two officers of the Indian Navy won the new and much coveted decoration, the V.C., during the Mutiny.

From 1863 to 1877 the Service was once again known as the Bombay Marine. In the latter year it became the Royal Indian Marine and retained this title until the 2nd October, 1934, when it was granted its present status of Royal Indian Navy.

Under its various names the Service provided ships to take part in practically every war in which the Empire was involved.

In 1914 the Royal Indian Marine consisted of three troopships of about 7,000 tons, 20 knots speed and armed with six or eight 4·7-inch guns. They were capable of carrying 1,000 troops. These ships were unpopular as troopships as the combination of Navy and Army routines was always clashing. One can imagine the captain's indignation when, on going round his ship, he found that one of the soldiers' wives had rigged a clothes line between two guns on which to dry the baby's clothes.

The remaining ships—four so-called station ships and employed at Rangoon, Port Blair (Andamans), Aden and in the Persian Gulf—were used principally for conveying Governors about and for tending on various lighthouses. There were, in addition, two surveying vessels which did a great deal of admirable work in charting Indian waters. All these ships were earmarked to be taken over by the Admiralty in cases of emergency,

and were so constructed as to be capable of being converted into auxiliaries in time of war. This was part of India's contribution towards Imperial defence.

On the outbreak of war all the ships were taken over by the Admiralty and R.N. officers were appointed in command. Key ratings were also provided from the R.N., but the Indian ratings were retained on board and this involved, owing to the language question, the bearing of a R.I.M. officer as an additional first lieutenant, which was not a very satisfactory arrangement. The R.I.M. ships then all flew the White Ensign, and about 60 per cent. of the officers and all the crews served under this ensign during the war. The remaining 40 per cent. of the officers were employed in Mesopotamia, at Indian ports, etc., supervising the fitting out of transports, routeing and port administration generally. A number of officers served in gunboats up the Tigris and Euphrates, and some of them went into the ships operating in the Caspian Sea. There were R.I.M. officers serving in every theatre of war, except North Russia, West Africa and North China.

When the German Cruiser *Emden* carried out a raid on Madras in 1914 and shelled the oil tanks, there were no local defence forces to act as any form of deterrent, and this raid caused all trade to be held up in the Bay of Bengal for some weeks.

In 1917 the German raider *Wolf* laid mines off Bombay which resulted in the loss of a number of merchant vessels. India had no mine-sweepers, and eight trawlers were ordered; these were not completed till the end of the war and then were used for towing various river craft from Mesopotamia to Calcutta and Rangoon, from which they had been borrowed. For various reasons these trawlers were found to be unsatisfactory, and only two now remain: one used for towing targets, training divers, etc., and the other as a water boat at Bombay.

After the war the R.I.M. reverted to its previous peacetime duties until 1920, when a rear-admiral was appointed as director with a view to reorganizing the Service so that it could be to some extent responsible for the local naval defence of India.

In 1923 the Inchcape Committee recommended the abolition of the R.I.M. troopships on the ground that trooping could be done far better by ships taken up under contract from the Merchant Service. This was approved, and the Service was then left with nothing but station and surveying ships.

In 1925 another Committee was convened to draw up a scheme for the reconstruction of the R.I.M. as a combatant force to enable India to commence undertaking her own naval defence. The Committee drew up a scheme which was approved. The principal features were that the

Indian Navy should consist of four sloops, two patrol boats, eight mine-sweeping trawlers and two surveying ships. The Service was to be commanded by a flag officer lent from the Royal Navy, and its chief functions were to be that of a training squadron in gunnery, mine-sweeping, harbour defence, etc. The Committee recommended that the service should be called the Royal Indian Navy, and that ships should fly the White Ensign.

The peacetime functions were to be—

(*a*) Training of personnel for service in war.
(*b*) Services required by Government of India in Indian Ocean and Persian Gulf.
(*c*) Organization of naval defences at Indian ports.
(*d*) Surveying.
(*e*) Sea transport work for Government of India.

In 1926 all station ship duties were taken over by local governments, and ships were concentrated at Bombay. Two officers were lent from the Royal Navy as instructors, and the militarization of the ships was started. They were armed with 4-inch guns and fitted for mine sweeping in Bombay Dockyard. With the exception of a few officers who had served during the war and the younger ones who had had a certain amount of naval training in the Royal Navy, the Service was untrained for war.

By 1928, when Rear-Admiral Walwyn was sent out, a definite start had been made and, with the reorganization, the Naval Discipline Act was introduced into the Legislative Assembly, its aim being to change the designation from Royal Indian Marine to Royal Indian Navy. This Bill was defeated in the Assembly by one vote, but on re-introduction in 1934 it was passed by a good majority, and the service became the Royal Indian Navy on the 2nd of October, 1934.

Prior to 1928 the uniform worn by the ratings consisted of blue jean tunic and baggy trousers, with a stocking cap similar to that worn by the Lascars in P. & O. ships. Admiral Walwyn obtained permission for the men to be dressed as in the Royal Navy, which was greatly appreciated. The men take a great pride in their appearance, and always turn out looking very smart.

In 1930, thanks to the efforts of Admiral Walwyn and Sir Philip Chetwode, a very fine officers' mess was built in Bombay Dockyard. This was badly needed for the accommodation of officers on the staff and from ships refitting. In this year also, a new ship, the *Hindustan*, was built in England. She was a thoroughly up-to-date sloop, similar to those building for the Royal Navy, but slightly larger to allow for extra accommodation for officers and men living continually in the tropics. Following the *Hindustan*, a new surveying ship was purchased. This ship,

Investigator, had been a cable ship, and was converted for her new duties in the Dockyard at Bombay.

In 1935 another new sloop, the *Indus*, was completed in time to take part in the Silver Jubilee Review. She is an improvement on the *Hindustan*, though fairly similar in design. She was at home in 1937 for the Coronation.

The squadron to-day consists of the *Clive* (flagship), *Indus*, *Hindustan*, *Lawrence* and *Cornwallis*, now all classed as escort vessels, the *Pathan*, patrol boat, used principally for training boys at sea and for carrying out practical gunnery training for older men, the *Dalhousie*, boys' training ship, the *Investigator*, surveying ship, and the *Madras*, trawler.

I have mentioned that in the 17th century the ships of the Bombay Marine were manned by Europeans and Indians with a larger percentage of the former. Now there is not a single white rating in the Royal Indian Navy; all ratings, from boys to chief petty officers, are Indian. The officers are mostly European at present, but the new entries are being taken in in the proportion of two European to one Indian. A number of warrant officers are Indian.

The budget for all the fighting services in India is under the heading of Defence, and up to date the amount set aside for the naval defences has been very small. Progress has, therefore, been slow, and the essential expansion of the Service is still in embryo; but, under revised conditions which have been concluded with the Imperial Government, a very material advance should be made in the near future.

Apart from the active service squadron and the training of its personnel on sound up-to-date naval lines, it is of paramount importance to introduce and train reserves to man the auxiliary vessels, mine-sweepers, anti-submarine and patrol vessels, which will be taken up in war time. This has been postponed, principally for financial reasons, far too long. The machinery, instructions, etc., are all in being, and it is not anticipated that there will be any difficulty in enrolling the officers, European and Indian, in the proposed R.I.N.R. and R.I.N.V.R.

With regard to the ratings, a small fleet reserve is being started from men discharged from the active service, but a large number of Naval and Volunteer Reserves is required and their recruitment is a matter of some difficulty. Although there is a large fishing population round the coasts of India, many of these people, through lack of education, knowledge of deep sea work, large ships, etc., are unsuitable. There are, however, Indians from certain districts who should make good recruits. These come principally from the coast areas between Bombay and Karachi, Ratnagiri, South of Bombay, Calcutta and Chittagong. Most of

those who now man ships trading to India and round the India seas come from these districts. They are good seamen and could soon be trained in naval duties. A number of them are descendants of the old pirates who gave us so much trouble in the 17th and 18th centuries.

The personnel of the Royal Indian Navy is recruited from the Punjab and Konkan (south of Bombay), the greater percentage coming from the Punjab. They are recruited three times a year ; an officer with a doctor, a warrant writer, a petty officer, and generally an A.B. as " mannequin ", are sent to the various districts, the local army recruiting officers having been advised beforehand. Boys of between 15 and 16 years of age are collected in villages, where they are vetted by the recruiting staff. A very large number of volunteers appear and, owing to the small numbers required, a very high standard is obtained.

The procedure is sometimes rather amusing ; the boys are fallen in in a long line, the recruiting and medical officers walk down the line, rejecting about 50 per cent. out of hand. On one occasion the officer thought the line was rather long, and found that, as boys were rejected and told to fall out they crept along to the other end of the line and fell in again. To get over this difficulty the medical officer stamped the " eligibles " on their backs with a rubber stamp ; but even this was no good, for the boys managed to transfer the still wet ink from one back to another with the palms of their hands !

At present only about 140 boys are being taken each year owing to the size of the training establishment at Bombay. A new training establishment is now being built at Karachi, and will be capable of receiving and training 250 boys to start with, and it is hoped that this number will be increased to 500 later. As soon as the boys have been accepted they are sent down to Bombay. Many of them from the Punjab have never before seen a train, tram or the sea. On arrival at Bombay they are sent out to the end of the breakwater, where they have to strip, are given a thorough good wash down, and then given their first naval uniform, consisting of a singlet, pair of shorts, stockings, boots and cap. Their civilian clothes are disinfected and returned to them later, for use when they go on leave.

The naval uniform is, of course, strange to start with, and the boys are not sure at first how to wear it. One boy, the day after he joined, was seen going over the gangway of the training ship limping. An officer who saw him and wondered what was the matter found that he was wearing his boots on the wrong feet. The boy had never worn boots before.

It is astounding to see how quickly these boys pick up naval routine and discipline. Many of them have been poorly fed before joining, and it is extraordinary how quickly they fill out and develop and understand orders.

All boys, for whatever branch recruited, do six months' common training on entry. They are taught discipline, P.T., seamanship, etc.—and all do school under qualified schoolmasters who teach in English and Urdu. After six months the boys are separated into classes for the communications branch (Signal and W/T), E.R. branch, writers, ordnance, and electrical artificers, S.B. and shipwright ratings and, while they all continue to live together in the training ship, undergo special instruction to fit them for their various branches of the service. At the end of two years (this is now being reduced to 22 months to get boys to sea earlier to fill vacancies) the boys go to sea for six months before becoming ordinary seamen or the equivalent in other branches. As soon as the ordinary seamen are sufficiently trained to take their part in the ships' companies of the sea-going squadron, they relieve older men who are then sent to the schools in Bombay to qualify for higher rank in seamanship, gunnery, communications, engineering, etc.

The schools at Bombay are very small and do not now and will not for some time meet requirements. However, I am glad to say they are being enlarged as far as the very confined area of the dockyard admits. By careful re-arrangement of stores, re-allocation of buildings, etc., I was able to see, when I left the Service in November, a gunnery school about five times the size of what it was when I went out in 1934, a mechanical training establishment several times bigger and still expanding, an enlarged signal school, and a coalshed converted into a very good barracks and gymnasium, enabling all the men who had previously been accommodated in the training ship and all those from ships refitting, to be properly housed. In addition, a new signal station has been built, which accommodates all the communications ratings employed at Bombay. The available space is still far too small, and there is no parade ground and no recreation ground except one hockey field situated at a considerable distance from the dockyard.

The men turned out of these establishments are smart, intelligent, quick to learn, give practically no trouble, and show up very well when in company with their fellows of the Royal Navy. I would particularly like to mention the communications ratings. These young men and boys maintain W/T communication day and night with the Admiralty, and all parts of the world, ships at sea, etc., under the supervision of two signal officers and about four warrant telegraphists, who in addition to this have to carry out instruction of ratings and boys. A large number of applications to join are continually being received and some of these are very amusing.

Executive officers are normally entered through the public school entry system, and are also taken from the training establishments at

Pangbourne, the *Worcester* and *Conway*. Entrance examinations are held in India and England simultaneously. Having passed the examinations, educational and medical, cadets are sent to the R.N. cadets' training ship, where they spend a year, after which they spend another year as midshipmen undergoing training in destroyers, gunnery, mine-sweeping, etc. They then go out to India as acting sub-lieutenants.

Owing to shortage of numbers it has been necessary during the last two years to have a direct entry in addition to the cadets. Direct entry officers are obtained from the R.N.R., in which they have already carried out naval training. They join the Service as sub-lieutenants, and then come under exactly the same regulations as the cadet entries.

Candidates for engineer officer are sent to Royal or mercantile dockyards to undergo a five years course. On completion of this they go before a selection board, and successful candidates are given further courses in discipline and electrical work, after which they go out to India as engineer sub-lieutenants. Medical officers are lent from the India Medical Department for various periods.

Gunners, signal boatswains and warrant telegraphists are obtained on loan from the Royal Navy in the first instance, and a proportion of these are, if volunteers, transferred permanently to the Royal Indian Navy. Boatswains are similarly either obtained on loan or are promoted from Indian petty officers. Warrant writers are promoted from Indian writer ratings, and this branch is completely Indianised.

In a normal year sea-going ships carry out independent cruises in Indian waters, being concentrated at certain periods for combined training in gunnery, mine-sweeping, etc. Competitions take place annually in gunnery, musketry, and in a general efficiency test, for which Lord Brabourne, the Governor of Bombay, presented a magnificent cup. This is at present held by the *Indus*.

Ships take part frequently in combined exercises with the Army and Air Force. They also carry out exercises with the ships of the East Indies Squadron, and three of them have recently taken part in the big exercises at Singapore.

Officers and men are keen and anxious to keep up to date so as to be fit in all respects to take their full share with the Royal Navy in the defence of the Empire. But it is not fair to send these officers and men to sea in war or emergency in obsolete and under-armed slow ships. Their replacement by modern vessels with the latest armament and equipment is essential to maintain that prestige and *esprit de corps* without which no fighting force can hope to remain efficient.

In addition to the replacement of obsolete ships it is most necessary for the local naval defence of India to recruit at once the officers and men

required to man the auxiliary craft for mine-sweeping, anti-submarine and patrol work outside the major ports. If these ports cannot be kept open in war time it will be impossible to move troops in and out of India, keep trade going and maintain adequate communications with the rest of the Empire.

For a great many years the Government of India has paid £100,000 to the Treasury in Great Britain as a contribution towards the naval defence of India. In addition to this one of the vessels of the Persian Gulf Division has been maintained as regards fuel, refits and docking by India.

From the 1st of April this year the subsidy will cease to be paid, and the money will be spent by India on local naval defence, i.e., entry and training of reserves, provision of mine sweepers, etc., and the provision and maintenance of six modern escort vessels which will be available in war to augment the Royal Navy.

India has thus come into line with the Dominions, and is definitely resuming what the East India Company did in the 18th century in not only making provision for her own local naval defence, but in contributing in personnel and ships to Empire defence.

In 1936 His Majesty the King Emperor was graciously pleased to grant to the Royal Indian Navy the privilege of carrying a King's colour similar to that carried in the Royal Navy. This colour was presented in December, 1936, by His Excellency the Governor of Bombay. It was received and carried for the first time, most suitably, by the senior Indian executive officer.

RESOURCES AND COMBINED STRATEGY.

RECENTLY many questions have been asked in Parliament, and letters and articles written in newspapers, about food supplies in war ; available cargo tonnage has also been discussed. This subject is only one aspect of the much wider problem of the total resources available for all purposes in war.

A bold and brilliant strategy, though directed by the finest leaders, is valueless if the resources to carry it out are insufficient. Our resources are made up of three main factors—maritime power, the supply of food and raw materials, and industrial capacity at home. Maritime power is the most important of these ; by it is meant not merely the ability to protect our sea routes, but a commercial and financial organization in touch with every source of supply, export industries with which to pay for the supplies we need, credit which can be stretched to cover an expanded demand for imports, and finally, a large and efficient mercantile fleet. This fleet can only be efficient when supported by a highly developed overseas trade, world-wide and elastic.

In past wars, the side which possessed the most resources and could greatly limit those of the enemy nearly always won, as is so clearly shown in the history of sea power. Modern armaments and the advent of air power, with its unlimited possibilities, require even greater resources ; thus, in future wars, to maintain those resources and deny them to the enemy will be of even greater importance than in the past.

In the last war, our strategy might be termed unlimited in that we attempted not only to control the sea routes, but also to dominate the land with an army of Continental size, the air being still in its infancy. It is of interest to examine briefly how our resources were taxed by this unlimited strategy.

Demands came from our allies' war efforts as well as our own, the demands of our allies being unprecedented. The productive power of France was so reduced by mobilization and the occupation of her industrial provinces in the north east, that she could produce little for export ; her credit was therefore soon exhausted and it was only the financial strength of Great Britain that made imports possible. By 1917, French imports amounted to some 32 million tons, almost as great

as our own, and Italian imports exceeded 11 millions. Of the French and Italian imports, 45·4 per cent. and 51·6 per cent. respectively were carried in British ships.

It was commonly supposed that these countries were self-supporting for foodstuffs; yet in 1917 France and Italy imported 9 million tons of food and feeding stuffs. When the French and Italian harvests practically failed in 1917 and 1918, the crisis was met by diverting two million tons of cereals in British ships. Three quarters of the coal and munition supplies to Russia in 1916 and 1917 were carried in British shipping. Twenty-six British ships, averaging 5,000 tons each, were lent to France for the Salonika expedition. The fact that exports from this country to France, Italy and Russia rose from 13 per cent. in 1913 to 35 per cent. in 1917 gives some idea of the great number of supplies which were sent direct from these islands to our allies. We were, as we have always been in the past, the workmen, the general carriers, and the bankers of the whole Alliance.

So much for demands on our resources from our allies. By the middle of 1918, 45 per cent. of the male workers in this country in industry, agriculture, transport and commerce had joined the colours. Of our total number of workers, 61½ per cent., male and female, were on Government work, mainly for war purposes. The effect on our export trades was most marked; by 1918, our export values had been reduced to 40 per cent. of our import values; the strain thus thrown on our credit abroad for the purchase of supplies was very heavy. Port congestion, due to recruiting of port and railway labour and military demands on port and railway facilities, was alone responsible for reducing the annual carrying power of our ships in commercial employment by 15 to 20 per cent. As a result of all these factors and enemy action, the volume of British imports dropped from 54 millions in 1913, to 35 millions in 1918.

As is now well known, the result of the submarine campaign on our maritime power, already strained to the utmost, was nearly fatal, and by 1917 our resources were insufficient for the enormous demands; it was only the entry into the war of America, who threw the whole of her resources into the pool, that saved us. It is often thought, erroneously, that the "U"-boat campaign alone brought this about. This was, of course, the main factor, but when this demand was suddenly made on our resources, they were already severely strained by the immense diversion of tonnage to military purposes, the deterioration in the annual carrying power of the ships, and the decline in shipbuilding—all fruits of military expansion. Thus they had not the necessary resilience to withstand the double strain.

The " U "-boat losses were not without precedent : in the Napoleonic wars of 1803–1815 it is estimated that 40 per cent. of the tonnage on the register at its outbreak disappeared through capture or wreck, but so buoyant were our resources then that in 1814 our tonnage exceeded that of 1803 by 21 per cent. The Great War showed a very different picture : of the eight and a half million tons destroyed, captured or wrecked during the war, less than half had been replaced by new construction in British yards ; this was caused by the shortage of labour from recruiting, and the shortage of materials, chiefly due to the demands of steel by the Ministry of Munitions.

The above gives a bare outline of the strain on our resources in the last war. Without the entry of America, a serious reduction in war effort would have been forced on us and our allies by the end of 1917, which might well have lost us the war.

If such was the strain in the last war, it is to be questioned whether our resources could possibly support a similar unlimited strategy in a future European war. It might be possible, if we have either a considerable saving in one or other of the defence forces, greater resources, or greater protection for those resources.

To consider, first, if any saving be possible in one of the defence services. Our sea communications must be quite secure. The danger in the East, with the possibility of being involved in the East and West at the same time, precludes any saving in naval forces. In the case of the air, it is now laid down that we must be as powerful as any possible enemy in Europe ; but it is very doubtful if this can give us security. There being no vast accumulation of past war experience available, as is the case at sea, on which to base calculations to give us security, the margin of safety must be large to cover the unknown. It is common knowledge that should the enemy gain air superiority over the docks and sea approaches to the Thames, our resources would be very seriously reduced in a very short time. Six hundred tons of explosive a day is already within the capability of one European Power alone, and when reinforcements from a second enemy are added to this, the magnitude of an air attack can be realized. No other country in Europe is so vulnerable. It is a moderate estimate that from the air our vulnerability compared with any other country in Europe is as three to one. This being the case, we can only be secure with a decided superiority, not mere parity. Therefore our air effort will make a demand on our resources far exceeding anything in the last war.

Finally, if our military expansion is likely to be as great as in that war, the demand on our resources will be considerably greater than in the past. It is common knowledge that modern armies, with armoured

vehicles, mechanization and their additional fire power, require equipment, supplies and ammunition greatly exceeding armies of twenty years ago. The last factor also means that the demands for our allies will be considerably greater than in the last war ; neither will their demands for feeding their civil populations be less.

It may be argued that only a very limited military effort would be made on the Continent, but the danger is that once a small force is absorbed it is very difficult to limit reinforcements ; public pressure alone will force the hands of the War Cabinet. A distinguished Frenchman said at the outbreak of war, " If England only sends to our aid a corporal and a squad of soldiers, we would be satisfied," knowing full well that we should be compelled to reinforce them continually and in ever increasing numbers to prevent their annihilation.

It seems doubtful if a saving in any of the defence forces would be possible in an unlimited strategy such as that in the last war, and such strategy will, under modern conditions, make far greater demands on our resources than it did twenty years ago.

The next consideration is whether we have greater resources now than in 1914. It is very difficult to estimate how industrial power and the supply of food and raw materials compare with those of 1914, but possibly the stock of food and raw materials in the country is no greater now than it was then. Industrial power is greater, but this is possibly largely offset by an extra four million persons to feed, the population having increased by that amount since 1914.

In the next war reduction of unnecessary imports to make room for vital raw materials will be an urgent problem ; an obvious saving of imports by producing the maximum amount of food from our own soil is being sadly neglected. Such home production would not only increase our resources, but its distribution—being internal and dispersed—would relieve the congestion at the bottle-neck of the ports, the vital danger area from air attack.

But in the third and chief factor comprising our resources—maritime power—there would be a decrease in time of present or future war. Before the war, 43 per cent. of the world shipping was British—now it has fallen to about 27 per cent. Sir Archibald Hurd, in a recent letter to " The Times ", pointed out that we have about two thousand fewer cargo vessels than we had in 1914 and that we are weaker in ships which could carry food and raw materials to the extent of three and a half million tons as compared with 1914. The extent of this shortage can be realized when the total loss of shipping during the war, from all causes, was only eight and a half million and this amount of loss nearly defeated us.

One of the greatest economies in shipping during the war was effected by drawing our supplies from America and thus saving by the quick turn round of the short sea voyage. But the neutrality policy of the American Government may easily prevent that country being a supply base to the same extent as in the last war. The supplies can be obtained elsewhere, but only from long distances, thus reducing the carrying power of our ships in any given time.

The pressure we applied during the war by " bunker control " to induce neutral vessels to accept employment useful to the allies will not be possible to anything like the same extent in the future, for 50 per cent. of Dutch, Norwegian, Swedish and Danish ships are now Diesel-driven, and it was from these nations that we drew nearly all our neutral shipping. This in itself considerably weakens our maritime power.

The final consideration is whether our resources can be better protected now than in the last war. In that war, our losses were nearly all from the submarine campaign ; that campaign was ill-prepared, with insufficient submarines, handled in a vacillating manner, was totally unsupported by surface cruisers and raiders, as these had all been rounded up by the time it started, the air took no part in the attack, and our industrial centres were left unmolested.

In a future European war, we can expect three simultaneous, co-ordinated forms of attack—by air, by submarine and by fast groups of armoured ships in the outer seas. The attack from the air will be by far the most serious of the three. Comparing the aeroplane and the submarine as a weapon against our resources, provided both are used unrestrictedly, the possibilities of the former are truly alarming. Over a period of, say, ten days, the submarine, if it is very lucky and finds a target for all its torpedoes, can fire four and a half tons of explosive ; in the same time, an aeroplane can drop fifteen tons of explosive. Submarines sink ships in the open sea and no other ships are affected ; but air power may so congest the ports and centres of distribution that a complete stoppage may be brought about in certain areas. Submarines cannot be built quickly, but aircraft can be delivered like cars. At the end of the war, we were producing a hundred a day. A submarine requires three trained officers and thirty trained men, a bomber—four, and the latter can be trained more quickly. The submarine attacks only one part of our resources—the lines of communication at sea. The aeroplane attacks two—the lines of communication at their most vulnerable and accessible places, the ports, and the industrial centres, hitherto immune.

It is clear that this air attack is a greater menace than the submarine. The losses from submarines themselves in the future will certainly be less

than during the war, owing to the knowledge gained in defence, by convoy system, chiefly; but the offensive power of submarines has also increased, and their tactics improved, so the losses they will cause may still be serious.

Finally, we have the attack in the outer seas by the groups of armoured surface vessels. Such a group might be composed of one or more battlecruisers or heavily armoured fast ships, three or four cruisers and some destroyers. The actual sinkings from these groups may not be large, but the diversion of traffic, repeated stoppages and often long delays, due to the need of heavily protected convoys in certain areas, would greatly reduce the "turn round" and thus the carrying power of our available tonnage. The dispersion forced on us to round up these groups will be very large, not only in warships, but in aircraft to locate them. Undoubtedly, in the next war we must expect a loss in resources greater than was the case in the last war.

To sum up: Empire resources were insufficient to carry out our unlimited strategy in the last war, its deficiency being made good from America. In future, an unlimited strategy on the same lines will demand far greater resources, yet we now have less, and must expect a greater loss due to enemy action. No saving can be expected in the Navy, Army or Air Force, and neither can America be counted on as a source of supply. In the face of these possibilities, to adopt an unlimited strategy again would be impossible.

If this be impossible, some other strategy must be planned. In most big wars, victory has finally gone to the nation who could exercise the greatest sea power, but the process is slow, and the enemy may gain a quick decision before sea power can strangle him. Many European States, realizing the threat of sea power, are now endeavouring to make themselves self-supporting. But air power has given a new and more deadly life to sea power. The obvious danger to us from air power has blinded us somewhat to its offensive possibilities against the enemy. Sea power and air power working in close co-operation is a formidable weapon with great possibilities. For example, the enemy may possess ports on seas which our naval forces cannot command and through these the enemy may import much raw materials and food; but aircraft can attack these ports, reducing them to some 25 per cent. or less of full capacity.

Materials brought over neutral frontiers must be destined for factories or distribution centres which can constantly be attacked from the air. In many European countries, a large amount of their industrial power is concentrated in a small area. Although such an area could not be destroyed, the effect of constant air bombardments will not only reduce its efficiency by actual damage, but will lower the output of workers

through fear and reluctance to stay in the district. The effect of the destruction of certain railway junctions can well be imagined. Sea and air power, working thus in close co-operation, will before very long weaken and demoralize an enemy.

In this strategy, the function of the Army would be the capture of all enemy oversea bases, the protection of our bases, both sea and air, the protection of the sources of our oil supplies and of the Suez Canal, both of which may in future require overseas expeditions of considerable strength, and the capture of advanced air and sea bases to assist in exercising sea and air power. Finally, an expedition to the Low Countries may be forced on us. If this be the case, and bearing in mind our resources, it must be a small armoured force with a highly developed mechanical fire power, used primarily for defence, and all attempts by our allies to induce large reinforcements should be resisted with the utmost firmness. This in no way prevents us building up and training military forces from the resources left over from those required by sea and air power, but these forces must not be thrown in until we have built up sufficient resources to maintain them, and have partially neutralized the loss of resources due to enemy action. Employed thus, when the enemy have been weakened by the increasing stranglehold of sea and air power, they may well prove decisive. This also gives us time to decide where our main military force can best be used; the enemy, in the meantime, will be hampered in his plans by the uncertainty of the place and time of employment of this force. Our allies will also receive the material help which we have always given them in the past; we shall be their workmen, their general carriers and their bankers.

In conclusion, the following significant paragraph is reproduced from a recent leader in "The Times", referring to the trend of recent war experience abroad:—

> "... wars are likely to be prolonged tests, and in them the industrial potential of a country will count for more than the actual forces it can deploy at the outset. That trend is favourable to the situation of a country such as ours with its inherent resources, while it also accords with the strength-conserving strategy that we followed with success through the centuries and from which we departed only in the last war."

P. R. K.

NOTE.—Many of the facts in this article were obtained from a most interesting lecture by Mr. C. E. Fayle on the subject of "Maritime Power and Continental Alliances", which will be found in the "R.U.S.I. Journal" for May, 1925, and is well worth careful study.

QUO VADIS?

THREE REPLIES.

I.

IT is many years—more than I like to remember—since I was executive officer of one of H.M. ships and, if one or two sentences had not caught my eye, I doubt if I would have given the article "Quo Vadis?" in the February number more than a cursory glance. But as soon as I detected that Sea Arrow was using heavily barbed weapons I read the article through.

A Victorian wit coined the epigram "Nothing succeeds like excess" and Sea Arrow may have had this in mind when he set out to warn his brother officers against the teachings of this new book on running a man-of-war, which appears to have had a very good press so far. "Pernicious"; "Its teachings spell disaster"; "Better if the book had never been published"; "The author has completely missed the bus" (twice); "I am glad that a certain midshipman I was specially interested in has escaped serving under an executive officer with these ideas."

This is pretty strong stuff, and as I read through the article another better known epigram kept on recurring to my mind—"Nothing succeeds like success"—because no one who was in the fleet at the time the matter for this book was collected can deny that the *Hood* was an outstanding ship, supremely happy, splendidly disciplined, first in nearly everything, not, be it stated, excluding fighting efficiency.

Younger officers who watched that commission from near or far and who now read Sea Arrow's comments will find themselves in a quandary. Were these methods which produced these fine results really all wrong? Had these men, who won the Cock, the King's Cup, the Bronze Man, and who kept their ship so clean and were so well dressed and well conducted when ashore, really no pride in their ship? Are those midshipmen, in whose bringing up the commander took such a personal interest, really doomed to fail later on? Was the fighting efficiency of the ship really sacrificed for other things?

I undertake the task of writing a reply to "Quo Vadis?" because I think that harm might come from leaving the matter where it is. Sea Arrow criticizes the Ten Commandments but hangs his criticism on something the reviewer said about the absence of "Nots" in the book.

I think he makes unfair play with this theme. It is really not of very great importance how orders are framed provided they are obeyed, and I am informed that in the *Hood* orders were obeyed implicitly.

It must be nearly 25 years since another commander brought out a book for executive officers, and I remember asking him why he had broken away from the tradition of posting ship's orders running into forty or fifty and including everything the mind of the commander could think of, even " Vegetables are not to be thrown out of the scuttles ". His answer was very convincing. " I have studied this matter for years and I know now that it is far better to post nine or ten simply worded *positive* orders, which will be read and can be instilled into young ratings, than a mass of ' Don't's ' which are never read." He added that the better educated sailor of his day did not require to be reminded constantly that he was not to spit on the deck or throw slops out of a mess deck scuttle. I wish Sea Arrow had been more explicit, because his thesis that an absence of " Nots " renders our seamen unfit to face hard times seems, as presented by him, to be far fetched. That ship's company must have been in fine physical condition, as crews for a regatta and teams for long distance running to-day embrace a very large proportion of the ship's company, and men who are physically fit can generally face up to hardship better than their weaker brethren.

Sea Arrow takes exception to the wording " The executive organization laid down is to be conformed to by all officers, chief and petty officers and ratings " and dubs the inclusion of officers as " socialistic pandering "; but in my experience the officers have always been connected by name with the ratings when something affects them all equally. The Articles of War read " Every person subject to this Act " and I can remember countless orders which began " Officers and ship's company " or " Officers, petty officers and ratings ". No, there was really nothing to criticize here.

" Pride of ship " is dealt with next and much has been made of the absence of these words from the book. But in the same paragraph he gives the author's hopes as " a well disciplined ship ", " a clean ship ", " a contented ship ", " the Cock ", " the King's Cup ", and the " Bronze Man ". Well, well, if you are fortunate enough to achieve all that and your men are not bursting with pride, what on earth are they made of? Sailors to-day are not robots. They are very human beings, and Sea Arrow should not ask his readers to believe that men who have put their ship at the top in everything are not proud of her. No, no; that is nonsense.

Then there is the implication that fighting efficiency is sacrificed. But I thought we had left behind long ago that strange period when

certain officers promulgated "the great new thought" that if a ship was clean and smart she could not hit a target. Bitter experience in the early years of the century proved these officers false prophets. The moment "pride of ship" was reduced by giving up the traditional spick and span-ness everything else began to sag; and it is an incontrovertible fact that in pre-War days the ships at the top of the battle practice and gunlayers' test were invariably the smart, clean ships. It was of course just common sense, and those who tried the "great new idea" were generally officers who did not understand the ways and thoughts of the sailor.

Sea Arrow ascribes importance to the commander being called head of a department. I do not think this of any importance one way or the other.

He then passes on to "Command"; and every reader of THE NAVAL REVIEW will be in agreement with what he says on this subject.

But his strong criticism of the subject "Midshipmen" must not pass unanswered. The trivial question of whether or not a leave book is desirable need not detain us, though Sea Arrow has much to say on the point. But on the graver question whether midshipmen are to be treated as officers, I think he has let his pen run too fast. Most of the older officers will remember breakfasting with their captain when they were midshipmen, and it was not at all unusual for the captain to draw out his young guest and find out what he thought of the Navy and the way it was conducted. The author of "Running a Big Ship" appears to have done much the same thing, but has incurred Sea Arrow's vials of wrath.

But is there not a loss of proportion in all this tirade about midshipmen? Is the Service really going to pot because the midshipman's leave book is not used, because the commander has a weekly meeting to discuss Service matters, because the commander takes for his guidance "the midshipmen of to-day are the commissioned officers of to-morrow"? No, no, the Service is not so flabby as all that, and I venture to suggest that Sea Arrow would not find one of these young gentlemen wanting if one is appointed to his ship one day.

"Sunday routine" has been a vexed question for half a century and, at a guess, I should say the Service is divided about fifty-fifty on this subject, half believing that a greater effort should be made to establish Sunday as a day of rest and the other half, for quite good reasons, averse to changing the existing routine. Sea Arrow is in the latter half, but, probably owing to lack of space, does not present any very good arguments.

Sea Arrow's own ideas on running a ship occupy a fair proportion of the article, and much that he says is of great interest. But his attack

on " Running a Big Ship " has not been very skilfully conducted. He would have been far more convincing if he had been more circumspect in his criticism. If he had a case he has spoilt it. Invective is of little use against a system which, as all the Service knows, produced one of the happiest, smartest and most efficient ships of recent years. Carefully reasoned argument would have been ever so much better.

In the Navy officers often judge by results. In the old days of the gunlayers' test gunnery officers used to besiege a ship that had broken records, to find out how it had been done. Outstanding success was usually due to the introduction of some new methods of training. When the *Natal* astounded the world by beating by a large margin all records for all calibres of guns she carried, the gunnery world avidly seized on the methods she had employed—trainer's teacher, the rolling motion dotter, etc.—and spread them through the Service. The same happened when a ship riddled the battle practice target.

But innovations in methods of " running a ship " have always been looked on with suspicion, results or no results. Older officers will remember well the commissioning of the *Queen Mary* and the attention she attracted. The Admiralty, disturbed at reports on the ship's police system, decided to commission certain ships without police and the *Queen Mary* was the first one selected. This experiment of course attracted much attention from executive officers, but there were other things also. The captain, confident that war was approaching, decreed that the ship was to be organized on a war basis. As on every return to harbour 1,000 to 1,500 tons of coal would have to be taken in, he considered that the strain on the personnel would be too great if they were in two watches all the time at sea. The executive officer and the specialist officers sat down to this problem and found, to their dismay, that there were not sufficient men for a four watch system, i.e., part of a watch (starboard or port) on duty. They were forced to adopt a three watch system.

This organization was subjected to much acid comment and hilarity in the Service, which never realized the true reason for its adoption. But the laugh was on the other side when war broke out. Except in ships with a very rich complement the commander's two-watch bill had to be put away and a three watch system inaugurated.

Then in that same ship there were many innovations; there was that cable jack which made mooring so much easier; there were those petty officers' messes made more comfortable as part of a scheme to enhance the prestige of the petty officer; there were those boot racks under the mess tables, made by the ship's carpenters, which made the mess deck so much tidier; there were those tanks in the bathrooms, obtained by various means from ashore, which replaced the geysers

and which enabled a watch of stokers to bath in half an hour instead of two hours.

There were many other innovations, but they received scant notice from the rest of the fleet or were regarded as dangerous or too advanced. Yet to-day every one of H.M. ships in commission is a silent witness to the imagination that lay behind these innovations. Nearly every one came to be adopted eventually in the Service.

I still remember hearing officers say that there were many things they would like to have adopted, but the fiery enthusiasm that lay behind these innovations was lacking in their ships. Captain F. C. Ogilvy of the *Natal* and Captain W. R. Hall of the *Queen Mary* were both " electrifying " personalities.

The task of the executive officer is not an exact art. In no task does personality count for so much. No two ships are run on exactly the same lines. I should judge from Sea Arrow's remarks on his own experiences that he was one of the successful executive officers, but "times change and we change with them", and when a ship has made her name famous by success in all and every activity, it is important that the methods employed should be widely known.

No executive officer who writes a book expects everyone to agree with him. That could never be the case because, as I remarked above, the work of the executive officer is not an exact art. But those who criticize new ideas should be circumspect and generous. You can't make a silk purse out of a sow's ear, and I am told that H.M.S. *Hood*, during that remarkable commission, was rich in thought and performance. So I hope none of the readers of THE NAVAL REVIEW will run away with the idea that the author of " Running a Big Ship " missed the bus. The history of that commission leaves lookers-on with the impression that he caught the bus and secured a good front seat. But not the *only* bus, or the *only* front seat—or the *only* way of reaching one's destination, the terminus named " success ".

EPSILON.

II.

" AUTRES TEMPS, AUTRES MOEURS."

SEA ARROW, in his outspoken article " Quo Vadis? ", characterizes as " quite favourable " (as opposed to " very favourable ") the review of the book " Running a Big Ship on Ten Commandments " that appeared in the May, 1937, number of this journal.

This will be a source of gratification to many, including, no doubt, the author of the review itself, who was obviously with Sea Arrow all the way on such important questions as fighting efficiency and water carnivals. There is, indeed, much in the book to which exception may well be taken; but to many people there is much in Sea Arrow's article to which exception may equally well be taken.

Sea Arrow complains that many young officers, impressed by the apparent weight of authority and opinion behind the book, are swallowing its precepts whole, both the good and the bad. Figures are not available to show whether the book will enjoy a wider circulation than THE NAVAL REVIEW, but it may with equal force be claimed that Sea Arrow's article invokes complaints of a precisely similar nature. His views on the functions and status of the second-in-command, his advice to prospective seconds-in-command, and his remarks on requestmen and defaulters are so manifestly right, and he speaks throughout from such an obviously wide experience, that there is a grave danger of many young officers swallowing *his* precepts whole.

There is, however, a large body of "informed service opinion", using the expression in the same sense that he does, whose views on such subjects as "permissive" orders and the treatment of midshipmen are diametrically opposed to those of Sea Arrow, and it is desirable that readers of his article should be made aware of the fact.

To take first the question of orders. It is just possible that Sea Arrow has entirely missed the point at issue—and equally possible, of course, that the writer of these notes has done the same thing. Sea Arrow is understood, however, to advocate a form of discipline that consists in telling men that they must *not* do certain things, and punishing them if they do. This is the discipline of the penitentiary; it is open to question, in fact, whether in a Service sense it is discipline at all.

Obviously, there must be some definite "nots", particularly where the safety of the ship is concerned, or where a proceeding that is regarded as proper for the citizen in his own home is regarded as improper for the seaman on his mess-deck.

The principle involved in the "permissive" type of order, however, is twofold in its scope:—

(i) It prevents the issue of bulky and ever-expanding sets of orders designed to cover all eventualities.

For example, it is surely better to state where refuse may be disposed of than to try and bring out a list of methods by which it may *not*? The latter scheme merely incites a certain type of mind to think up some method not already covered by the orders.

This type of mind is in the minority. Why then adopt a type of " discipline " designed to cope with it, rather than one designed to eradicate it by training, precept, and example ?

(ii) It teaches a man to think for himself, and to do the right thing *because it is the right thing.*

This is held to be true discipline. Sea Arrow complains that it is easy to spoil children. It is maintained that we are not dealing with children, but with men, who can be taught the principles of decent citizenship and encouraged to apply them.

The " permissive " system is, in short, consistent with the British temperament, as opposed to the "*verboten*" or "*rigoureusement défendu*" systems, which are not.

On the question of midshipmen, the divergence of opinion is even wider. Many officers, both of the modern and earlier generations, are convinced that the altered conditions of a midshipman's life, largely social in their scope, have rendered him more receptive to treatment as an officer. This is particularly so in the case of the public school entry. Sea Arrow gives the impression of being slightly confused on the point. He apparently accepts the principle that the midshipman is an officer, but insists that our treatment of him should be based on the fact that he is a *young* officer. This is incontrovertible—it is on the subtle distinction between a young officer and an oldish schoolboy that the clash of opinion occurs.

I suspect, in fact, that Sea Arrow has allowed himself to take unnecessary umbrage at the mere idea of accepting *suggestions* from midshipmen, for he gratuitously distorts this to mean the acceptance of *advice.* With all respect, I believe that the ability to consider suggestions from a junior, whatever his rank, is one of the more important attributes of a leader.

On the subject of the proposed new week-end routine, Sea Arrow takes up an attitude that many will find bewildering. He asks why the author should expect matters to be so very much better for the sailor in a ship than they are in his own home ? No one has advocated that they should be very much better, but it is to be wondered whether Sea Arrow has seen some of these homes. The writer was recently called upon to enquire rather closely into the character, antecedents, and home conditions of a number of young seamen typical of the lowest type that are now being accepted by the recruiting authorities. It can only be said that many of these lads were completely sub-human, and it was clear that the only form of discipline to which they had been accustomed was that represented by the belt-buckle, if not the open razor. Whatever views one may hold as to the extent to which recruiting should be

stimulated by laying emphasis on the " attractions " of Service life, it seems clear that to offer something better than the conditions to which a large percentage of the rising generation have been condemned through no fault of their own is to do something very much worth while.

This may seem a long way from the relatively unimportant point as to whether everyone should pipe down at 0930 on Sundays. Sea Arrow asks whether it is really supposed that there is no work going on in the average sailor's home after 0930 on Sunday? There may be, but the men of the house most certainly are not doing it.

Sea Arrow is earnestly requested to accept the assurance that the foregoing are not purely personal opinions, but that they are shared by a large number of thinking officers whose sole preoccupation is the good of the Service. That such cleavage of opinion should exist is distressing, but it is too much to hope that an authority of sufficient omniscience is likely to be forthcoming to strike the balance.

Many books such as that under discussion have been written immediately on the conclusion of a successful commission, and they nearly all suffer from the same defect—a tendency to adopt as principles theories which have been found capable of practical application to that particular commission.

From the point of view of experience, Sea Arrow would appear to be admirably equipped to undertake the writing of a book of this nature. It is therefore all the more to be regretted that his views on certain important matters do not command universal respect.

SAMPAN.

III.

Human nature being what it is, the ship which is successful in those things which are visible to all eyes often receives jealousy as a reward, which is invariably translated into the catch phrase that in order to achieve her success she must necessarily be letting something much more important go.

The article under the heading of " Quo Vadis? " which appeared in the February number of THE NAVAL REVIEW must surely present us with the classic example of the danger of judging from one's own interpretation of the written word untempered by a knowledge of the facts which that word has tried to portray.

As one who has probably better knowledge than most of life in H.M.S. *Hood* at the period under discussion, may I be permitted to make a few remarks?

First. Having read "Quo Vadis?" turn to the book which it criticizes and in the light of those criticisms read (*a*) The Author's Preface, and (*b*) The Foreword.

In the preface the author puts forward a very modest claim—indeed my criticism is that it is too modest; but what he says in effect is this:—I realize that experience is varied, that views of different people are not the same, and I do not claim that my way is necessarily the best. I am only telling you the story of how the problem was dealt with by me and the lessons I have learnt from the experience, and my hope is that my contribution may be of some value to others who are faced with the same problem.

As to the Foreword, in view of the rather sarcastic references to boat and athletic clubs contained in "Quo Vadis?" let me invite attention to the words:—"The Ship's company that can make a collective effort in one direction can usually make it in others."

Second. It is startling to discover that an officer of apparently high rank (to judge by the reminiscences in "Quo Vadis?") is capable of reading the book which he criticizes largely on the score that it does not emphasize "Pride of Ship" without being able to appreciate that the whole structure of the organization, advice, suggestions, etc., etc., lies on that fundamental basis. To criticize the references to Cock, Bronze Man, etc., simply shows confused thinking and is a perfect example of inability to see the wood for the trees.

Let us examine the criticism in more detail. "The first and principal objection" is that the discipline is of the "give away" type. The evidence in support of this seems to me to be chiefly conspicuous by its absence. One regrets the intangible substance of the criticism, as it presents nothing to repudiate. It is, however, true to say that the discipline was probably just as strict as in any other ship in H.M. Fleet, while it was enforced in a spirit of reason and understanding. In this connection it is interesting to see that Sea Arrow appreciates that present day ships' companies are more intelligent than in years gone by, from which perhaps one may draw the inference that methods of providing the necessary discipline require to be no less stagnant.

As to the author not having had the opportunity to reap where he has sown, I agree that it is a pity, for reasons other than those presumably held by Sea Arrow, but there is still time ahead, and when the opportunity comes there will be little reason to feel anxiety.

The argument in criticism of the wording of the orders under "Executive Organization" seems to be rather far fetched. Is it really to be

argued as a fact that the officers lose prestige by being named with the remainder of the Ship's company, or—as Sea Arrow picturesquely puts it—" classing them in one bundle with the ratings " ? I do not think we are quite such snobs, and it is surely unnecessary to connect the phrases used with Machiavellian suggestions of socialism. In actual fact, Sea Arrow's criticism is equally applicable to many official publications, headed by King's Regulations and Admiralty Instructions. The point of the particular phrasing really is of course that it expresses what is required ; no more, and no less.

Fighting Efficiency. Sea Arrow is staggered that he cannot find reference to this important question. What does he want—how does he want it expressed ? Let us agree at once that the book makes no claim to be a Firing Manual, but I suggest further that in the claim made for the book (see preface) there is no object in discussing it. It is the executive officer's business so to arrange the general routines as to enable the weapon training to be efficiently carried out as required by the captain. On page 44 of the book is reproduced a weekly programme form, in which will be found the normal times allotted as " Training Period ". A description of the details of the activities in this period is not the purpose of this book, and would not, to my mind, serve any useful purpose ; but to assume from its omission that fighting efficiency is lost sight of is equivalent to supposing that everyone starved because the details of cooking and examples of the menu are not reproduced in full.

As a matter of fact, during the commission in question there was one fleet gunnery competition, and one only. It was won by *Hood*, in spite of (or may it perhaps have been because of) her efficiency in other directions also. For the rest, *Hood's* weapon-efficiency was, in my opinion, at least the equal of other ships of the fleet in general performance. I do not suggest she was " tuned up " for war (except in the autumn of 1935), but nor was any other ship, and nor should they have been in the prevailing circumstances.

Second in Command. Sea Arrow's remarks on this question are doubtless quite sound, though perhaps they do not add much to our knowledge. But as an omission-weapon wherewith to chastise this book they are not really of any value whatever, for the reason that the author was, at no time during the commission, second in command, and quite clearly did not write his book with any idea of expressing opinions on matters other than those with which he had had to deal.

I will not attempt to follow the long argument about whether midshipmen should be treated as the author of the book suggests or as Sea

Arrow suggests, nor in particular need the merits of the Midshipmen's Leave Book be discussed. I agree that different people may have different opinions ; but suppose we watch the careers of the young officers who were in the *Hood* at the time and those of their contemporaries. I shall be surprised to hear that the former find that their early training has handicapped them, and I shall expect the reverse. Up to the present time I have no reason to feel anxiety.

Week-end Routine. Sea Arrow appears to dislike the proposal to obviate more work than is necessary on Sunday. The origin of the combined Saturday and Sunday routine referred to in the book was that in the Home Fleet there are periods at home ports when seasonal leave is not being given, but week-end leave is. Sunday divisions on such occasions are rather pointless—hence the idea, which was also later used infrequently when away from Portsmouth and when the conditions allowed. Obviously one agrees with Sea Arrow that it could not always be done, but that seems a poor reason for condemning it altogether.

In this connection, it seems to me that we should be very wrong to assume that, just because a particular framework of routine has proved satisfactory, there cannot by any chance be room for improvement. This opens a big subject, but I wonder how long we shall continue the " daily divisions and prayers " and similar methods of occupying valuable working time.

Sea Arrow concludes his criticism with a rather long statement in the form of the advice he would give a " second in command " about to commission a ship. No quarrel can be picked with his choice of words or what they imply, but the officer in performing his functions as executive officer would certainly have to get down to the business of translating the advice into practical methods of giving effect to it. " The Ten Commandments " makes no extravagant claims, and I should be the first to admit that if everything in it were to be slavishly copied in detail the results would be variable, depending, as they must in the long run, on the personality of the executive officer. But I firmly believe that the book is on the right lines, and to describe its tenor, as Sea Arrow does, as " nothing less than pernicious " or to say that " its teachings may spell disaster " is to insist on an individual's opinion to the point of absurdity.

In my considered opinion, and as a result of seeing it in operation for two-and-a-half years, an executive officer could count himself fortunate if he produced methods and results which made for a more efficient or more contented ship than was H.M.S. *Hood* from 1933–6.

F. T. B. T.

THE MUTINIES IN THE GERMAN FLEET IN 1917 AND 1918.

MUTINIES have occurred in every navy in every generation throughout history. For this reason it is suggested we should do well to study all we can of such incidents in the past in order that we may clearly understand that they are usually attributable to the same underlying causes.

Perhaps the most significant mutinies in modern history are those which occurred in the German High Sea Fleet in 1917 and 1918. Not only did they exert a material influence on the course of the Great War, but they provide examples of all the causes which normally go to bring on such outbreaks. Comparatively little has been written about these incidents, and this article is compiled with the object of focusing some attention on the disciplinary aspect of the problem, and at the same time to draw attention to the outlook of the German people, both of which questions are considered to be of vital importance to naval officers to-day.

German Policy.

Before we can understand the incidents themselves, it is necessary to go back and trace briefly the rapid growth of the German Navy in order to see upon what principles it was based.

The history of Germany ever since the time of Frederick the Great has been one of alternate subjugation and victory, and on each occasion of defeat we see Prussia arising, like the phœnix from the ashes, with increased strength and with the vitality born of adversity. And thus, up till the year 1866, did Prussia dispute with Austria the hegemony of Central Europe. In that year, four years after Bismarck's accession to the office of Minister-President of Prussia, this question was settled for ever by the defeat of the Austrians at the battle of Sadowa by King William I of Prussia.

Following upon this came the formation of the North German Confederation and the attempt to produce a united Germany.

The successful conclusion of the Franco-Prussian War in 1871 led to the realization of these dreams of unity, and on the 18th of January, 1871, King William I of Prussia was proclaimed German Emperor in the Hall of Mirrors at Versailles. That was sixty-seven years ago.

The policy of Germany in the seventeen years which followed, guided by the master hand of Bismarck, may be described as one of caution and consolidation.

In 1884, however, rather tardily, Germany began to take part in the scramble for colonies and overseas possessions, and began to acquire such territories as German East Africa, the Cameroons and some Pacific Islands. This Colonial expansion was against the wishes of Bismarck. But the teachings of the German philosophers, notably Kant, Fichte and Hegel, had spread their influence wide over the German people, and in the writings of Treitschke we find the expression of that spirit to which we now append the label of "militarism". The following is an example: "War is Statecraft *par excellence*. Only in war does a people really become a people. War is a radical medicine for the ills of State." The influence of these and similar writings is clearly stated by Tirpitz in his "Memoirs".

It is of more than passing interest; it is a matter of the greatest importance to us all to see how this spirit is growing and developing in Hitler's Germany. Mr. Wickham Steed's recently published book, "The Meaning of Hitlerism," is strongly recommended for study of this theme.

The Early Years of the German Navy.

During these same seventeen years—1871-88—the Navy worked under landsmen. Lieutenant-General von Stosch assumed the chief naval command from 1871-83, and General von Caprivi succeeded him as head of the Admiralty from 1883-1888.

Though a soldier, Stosch laid the foundations of German sea power, and also taught the Navy to work; but he trained it on military lines and without much war outlook. Caprivi, on the other hand, under the influence of new international conditions, and the possibilities of colonial expansion, adapted all his work to the idea of war, which he expected yearly. But Caprivi, who was in 1890 to relieve Bismarck as Reich-Chancellor, had little understanding of the meaning of sea power. Tirpitz says:—

> "Until the Great War, the Army did not take the study of the world, and particularly of England, to heart. In all essentials it marched into the world war with the old ideas of a 'two front' war, and with the natural superiority which it possessed over the Navy in consequence of the prevailing land tradition in Germany; it still looked upon the fleet, indeed, as a kind of pioneer detachment from the Army, unmindful of the fact that the real main front was the sea front, now that a grave, but not hopeless fate had made us the target of a world coalition. In short, this insistence on Caprivi's standpoint under completely altered conditions was one of the historical reasons for the war taking the course it did."

The fact remains that from the strategical standpoint the German Navy throughout the Great War was regarded by the High Command partly as an appendage of the German Army and partly as an instrument of political bargaining. Its true value was perceived by its creator alone, Tirpitz, and he had not the necessary authority to employ it in its true sphere.

Caprivi was succeeded in 1888, on the accession of the Emperor William II, successively by Count Monts, Admiral Heussner and Admiral Hollman, under whose direction the German Navy sank into a lethargy.

Tirpitz writes :—

> " The ten years lost between 1888 and 1897 compelled us either to inscribe a permanent ' too late ' on the aims for which Germany's sea power was striving, or else to cross a political danger zone by proceeding with the building of the fleet."

The two objects for which the German fleet was originally formed were the defence and extension of overseas colonies, and the protection of overseas commerce. Bismarck had frowned upon naval expansion even as he had on the colonization question, but on his departure in 1890 William II began to pursue both these objects with vigour.

In the year 1897 Tirpitz became Secretary of State for the Navy Department, and the real birth of German sea power took place. In 1898 the first Navy Bill was passed, with a comparatively modest programme. In 1900 the Second Navy Bill was passed, doubling the strength of the fleet. The memorandum accompanying this Bill contained the following message :—

> " To protect Germany's sea trade and colonies, in existing circumstances, there is only one means. Germany must have a battle fleet so strong that, even for the adversary possessing the greatest sea power, a war against it would involve such dangers as to imperil his position in the world."

Other Navy Bills followed in 1908 and 1912, and in the latter year Lord Haldane visited Germany to endeavour to call a halt to the competitive building programmes. These diplomatic contacts did not achieve any measure of success.

Strategic Employment in the Great War.

And thus, when the Great War came in 1914, Germany was in possession of a strong and modern fleet, built on sound technical lines and of good construction, but created in a hurry and without a general understanding of its correct employment. In consequence, there was no clear conception of naval strategy or indoctrination within the High Command, and the strategical history of the German Navy in the last war is

one of vacillation, indetermination and caution. This was, in no small measure, due to the personal control which the Kaiser himself exercised upon the Navy, and his dislike of the prospect of losing any of the fleet which he had been instrumental in creating, and which he came to regard as a personal possession.

A further cause was the system of high command, which was organized, not so much on the lines which would give the soundest and swiftest control, but rather on political lines which would ensure that no naval department could become too strong, in order that the Emperor himself might continue to exercise personal control. A study of the decisions taken during the war by the High Command brings out clearly the nervous, divided and ineffective lines upon which German sea power was employed.

It is not the purpose of this paper to describe in any detail the operations at sea; but, in general, the effect of German policy may be summed up as a series of half-hearted raids on the British coast, such as the Scarborough raid, Sunderland expedition, etc., alternating with submarine warfare against trade, at first conducted on experimental lines, and finally growing, in 1917, to the concentration of all German sea effort on concentrated submarine warfare. There is also evidence in the writings of German admirals that the prestige alone of the British fleet, a fleet which had suffered no defeat for over a century, was a tremendous deterrent to German offensive operations.

Pre-war Training.

It is difficult for one who never knew the pre-war German sailor to say what the standard of discipline in the German fleet was; but there is reason to suppose that the sailor was a hard-working, loyal, and zealous man—imbued, as are all Germans, with a great spirit of service. Nevertheless, broadly speaking, they were not natural seamen, and they would more accurately be described as sea-soldiers, though this was becoming less marked as time went on. It was the inevitable consequence of trying to turn a military and continental nation into a sea Power.

In the early days under Stosch, the discipline was hard and soldierlike, and the Service suffered tremendously from the introduction of a great preponderance of short service ratings. As this latter process is going on to some extent in our own Navy to-day, the following quotations at length from Tirpitz's "Memoirs", concerning the Stosch era 1871-83, may not be out of place:—

> "In the twelve-year ratings—long service men—the old Prussian Navy possessed a personnel *such as we have never since obtained.* Stosch intro-

duced the three years', or more correctly the two-and-a-half years' service, more ruthlessly than was adapted to the requirements of the Service."

"In spite of all the zeal, the frequent retirement of experts and the short-dated periods of service rendered the achievement demanded by the Admiralty quite impossible. We were brought into a well-nigh dangerous situation by the abolition of the petty officers' categories. . . . Just as this abolition of necessary specialists and the introduction of the two-and-a-half years' service period did not suit the material and personal characteristics of the Navy, so, inversely, the training on shore was screwed up to an importance which it did not possess . . ." "There was no time left during the short summer manœuvres for any battle, or even squadron, training, and indeed scarcely any time for the roughest training in ordinary ship routine."

"Strict watches, in the military sense, were introduced on board the ships and devoured time and energy without having any real use. We had to wear the uniform introduced by Stosch with the Hussar's sash, even on watch in the tropics, until one officer fainted on the bridge; then white drill appeared once more."

However, this spirit had become much modified in the succeeding years under the administration of Tirpitz; and, of the 1914 fleet, Tirpitz writes:—

"The morale of the Navy at the beginning of the war was very high, and permitted us to hope for the best. Old reservists on their recall begged to be allowed to serve the guns and not to work in safety below on the ammunition hoists. Our torpedo-boat commanders were longing for the order to 'attack'. The cadets and midshipmen from the Naval College, which was closed, and the training ships, which were placed out of commission, were wild in their desire to get on board, even if only as captains' messengers."

The above, having been written by the Grand Admiral, creator of the High Sea Fleet, might well be expected to be a eulogism—but it probably represents the enthusiasm pervading the lower ranks of the German Navy in 1914.

However, other German writers, notably Captain Persius, have indicated certain undercurrents prevailing. The engineer and warrant officers were dissatisfied with their conditions of service; and the personnel as a whole was overworked, due to money voted by the Reichstag being spent on new construction and not on the necessary increase of personnel. There also seems to have been a wide gulf fixed between the officers and men, between whom there was little sense of human understanding and sympathy—and the belief among the sailors that their right of complaint through their officers was entirely illusory.

The War and the First Signs of Unrest in the Fleet.

On the outbreak of war the Germans, like ourselves, started to strip their ships of all woodwork and inflammable material. We realized our

error and replaced such gear as was necessary to ensure the comfort of ship's companies. The following passage from Scheer's book is significant :—

> " The removal of wooden chairs, tables, curtains, tablecloths, easy chairs and such like, the scraping off of paint which was too thick, the transfer of clothes and supplies of all kinds to the space under the armoured decks where they could not easily be got at, took up a lot of time and produced a good deal of noise and discontent. However, the work of destruction was carried out with as much devotion as if it were the enemy himself who was being destroyed, and in the certain expectation that we should not have to wait long for the actual meeting."

In August, 1914, when the crews of the ships in the High Sea Fleet realized how they were being employed and the defensive role that they were expected to fulfil, the first lowering of morale and the will-in-to-win began. This was recognized by the Commander-in-Chief, Admiral von Ingenohl, who issued a memorandum to the fleet setting forth the reasons for this inactive policy.

Again, the battle of Heligoland Bight on the 28th of August, 1914, had a great influence, because it led the Kaiser to enforce even greater inaction upon the fleet, lest his precious Navy should suffer further material damage. He failed to foresee, however, the mental damage it would suffer as a result of his edict. There is a great deal of very illuminating reading in the German Official History, of correspondence between Von Tirpitz and other admirals and captains of ships deploring this appalling inactivity.

In October, 1914, the Chief of the Naval Staff, Admiral von Pohl, was sent to Wilhelmshaven to explain to the Commander-in-Chief and the senior officers of the fleet the " necessity " for the adoption of a completely defensive policy, and he was charged to enquire whether there was really a serious threat to the morale of the fleet.

On the 18th of February, 1915, the first submarine campaign against merchant shipping began. The strategical wisdom of that step is not here under examination, but the point to note is that it marks the beginning of a steady increase in submarine building, and the beginning of the drain on the personnel of the High Sea Fleet to man them. The best ratings in the Navy were taken out of the big ships and trained for manning submarines, their places being filled by reservist or new entries. As Scheer says :—

> " The requirements of the ' U '-boat campaign demanded many-sided service from the fleet; this applied more particularly to officers and men, for in addition to the existing Navy a second one had to be created for submarine warfare, one which had to be developed out of the old Navy sailing ON the water, and which was dependent on it in every respect, although it represented an absolutely new creation."

In 1916, under a new commander-in-chief, Admiral von Scheer, the High Sea Fleet awakened to a degree of strategical offensive which it had not hitherto experienced. This period cover such ventures as that which led to the Battle of Jutland on the 31st of May, 1916, and again to the sortie against Sunderland on the 19th of August. Scheer made a minor sortie into the North Sea in October, 1916, but thenceforward for twelve solid months until October, 1917, the big ships made no move to sea from their base in the Jade.

The third and unrestricted submarine campaign began on the 1st of February, 1917, involving further drains of personnel from the Fleet.

Political Unrest in Germany.

In making the decision to embark upon the third submarine campaign, the German Government recognized that it would inevitably bring the United States into the war against them; but they staked all on a quick decision at sea by the campaign before the Americans could develop any appreciable effort against them. Before embarking upon the campaign, the German naval command had made certain calculations which led them to assure the Government that Great Britain would be brought to her knees in six months.

But, four months after the campaign started, that is in June, 1917, though hard pressed, Britain's war effort had been in no way diminished. In Germany the effects of the British economic blockade were becoming acutely felt; hunger and starvation were widespread among the poorer classes in Germany. The country was feeling the effects of shortage of raw materials for prosecuting the war. In these circumstances the miscalculation of the Naval High Command in respect to submarine warfare, together with the whole question of the prosecution of the war, was raised in the Reichstag on the 3rd of July by Herr Erzberger, a member of the Centre Party. Hitherto the conduct of the war had been peculiarly the business of the High Command—now it was coming to be realized by the country that it was the business of the people, whose mass will-to-win was beginning to weaken in face of the privations they were enduring.

Thus were the doubts about ultimate success brought out into the open and freely discussed in the country, and they led to suggestions from the Socialist Party for obtaining peace terms.

" Naval Operations ", Vol. V, quotes the German Chancellor at this time as follows :—

> " The social democrats pressed forward the formula—' No annexations or indemnities '. Their speakers painted the internal and external situation in the darkest colours. We were at the end; revolution was threatening.

> The submarines had not done what the naval High Command had promised, and ought to be abandoned. Independent speakers went further, and said that revolution was at the door. The altered attitude of the middle-class parties was extraordinary. Overcome by the prevailing depression, they opposed these views weakly and without conviction, and mainly for reasons of parliamentary tactics, abandoned the defence of the Government. The Secretaries of State, Doctor Helfferich and Admiral von Capelle, could not break down the general suggestion of failure with their statistical material."

German Fleet Bases.

The accompanying map of the German North Sea coast indicates the position in which German naval forces were normally based. This is a matter of some importance for the question under discussion, as the proximity to industrial areas and contact of the sailors with the civilian life of the country had a great bearing on the subsequent events. Added to this, the German big ships spent many weeks, or even months, at anchor in the mouth of the Jade River, in sight of the shore, but at short notice for steam and with little shore leave or recreational facilities.

Generally speaking, the heavy ships were based on Wilhelmshaven, though one squadron was usually kept at anchor in Schillig Roads. Light cruisers, destroyers, minesweepers and submarines were based in the Ems, and a few cruisers and a destroyer flotilla were kept in the Elbe at Altenbruch or Brunsbüttel. From time to time ships passed through the Kaiser Wilhelm Canal to Kiel for target and other practices and for refits.

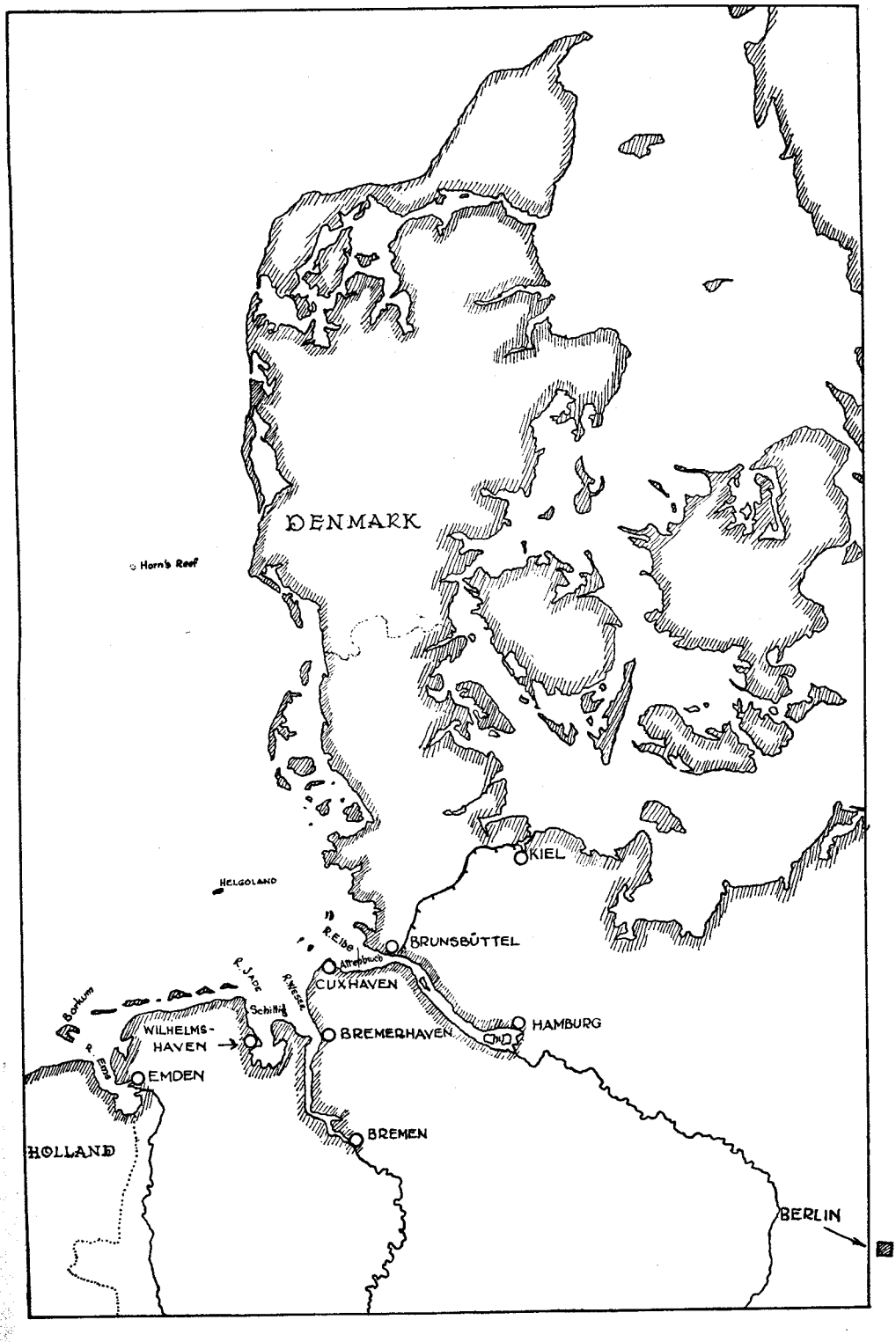
The Mutiny of 1917.

It has been necessary, in order to gain any true perspective of the events which follow, to give the above summary of the conditions prevailing when, in 1917, the first active disorder broke out in the High Sea Fleet.

The first outbreaks occurred in the *Kaiserin* and other ships of the Fourth Battle Squadron in Schillig Roads at the end of May, 1917. On this occasion many ratings, principally stokers, remained below in their messes and refused to relieve watches or carry out the ordinary ship's routine. Order was, however, soon restored, and the only demand of the men which was acceded to was the granting of an extra bowl of soup on changing watch at night when at sea.

The primary causes of discontent were the insufficiency of the rations and the harsh and high-handed treatment of the men by the officers. Morale in this squadron appears to have been low, due partly to the inactivity already described and also to the presence of a large number of reserve officers and men who were themselves tired of the war.

SKETCH MAP OF GERMAN COAST SHOWING NAVAL BASES.



News of these " hunger strikes " spread quickly through the fleet, but were largely ignored by the officers, who had become insensitive to the feelings of the men. Thus did the sailors obtain their first concession by the power of the "strike." The men were, however, not satisfied with this result, and delegations of seven or eight men from each ship were chosen to attend secret conferences *held on shore* with a view to organizing a further attempt to redress their grievances.

At about this time, their ringleaders, notably Stoker Reichpietsch of the *Friedrich Der Grosse,* got in touch with certain members of the Independent Social Democrat Party in the Reichstag and started to circulate pamphlets amongst the sailors urging a peace proclamation. Thus the utterances of the Left Party in the Reichstag began to gain a foothold amongst the discontented element of the German naval ratings. It is recorded that most of the older petty officers were careful not to take an active or incriminating part in the proceedings, although many of them secretly sympathized with the movement.

The plan agreed upon was to work for a general mutiny in the fleet, which was to coincide with a general strike on shore, to force the Government's hand and obtain the Leftist demands of peace " with no annexations and no indemnities ". The officers and those men who were not in favour of the movement were to be placed under lock or key or otherwise disposed of; the ships were then to have put to sea under the command of selected warrant officers, who were to navigate them to a neutral harbour in Sweden or elsewhere for internment.

In the meantime, the Social Democrats in the Reichstag enjoined on the delegates in the fleet three things: Caution, Secrecy and Obedience to Party discipline.

This concerted plan, however, did not materialize, for other elements of discontent in the fleet took charge, and the outbreaks occurred in August, whereas the general strike on shore had been planned for January, 1918. Thus, though the element of political disaffection and ferment were active in the fleet, it was not they that set the forces of mutiny in motion. The incidents which will now be described took place, therefore, against the wishes of the political fermenters on the lower deck, who found themselves unable to check the impetuosity of the mutineers, whose action was premature to their ends.

At the beginning of July, 1917, the Fourth Battle Squadron left its base at Wilhelmshaven and proceeded to Kiel for training, recreation and target practice, and here the opportunity arose for free discussion of plans in the local drinking houses on shore. Before the *Prinz Regent*

Luitpold had left Kiel on the return voyage to Wilhelmshaven, they had made a disturbance over coaling ship, and, whilst on passage through the Kiel Canal, they went on another hunger strike. This was on the 19th of July.

The *Prinz Regent Luitpold* was apparently the worst disciplined ship in the Fourth Battle Squadron, and was known as the "convict ship". Punishment was harsh on board, and her first lieutenant, Herzbruch, was a hated martinet.

When the Fourth Battle Squadron returned to Wilhelmshaven the political leaders in the fleet, which at first numbered about sixty, set actively to work to enrol members; and by the end of the month their numbers had grown to about six thousand men.

On the night of the 25th of July, Captain Thorbecke, commanding the *Konig Albert,* was stabbed in the back while stepping out of his boat at the gangway. He was returning after a convivial evening in another ship of the Squadron. The boat's crew were arrested, but nothing could be proved against them, and though the greatest efforts were made to hush up this incident, news of it naturally spread quickly round the fleet.

On the 30th of July over two hundred men of the cruiser *Pillau* walked ashore in Wilhelmshaven as a protest against cancellation of leave which had been promised to them.

And yet the officers remained in ignorance of what was brewing.

On the 31st of July, the Fleet was disposed roughly as follows:—

Alongside the Wharf at Wilhelmshaven the whole of the Fourth Squadron	*Friedrich Der Grosse.* *König Albert.* *Kaiser.* *Kaiserin.* *Prinz Regent Luitpold.*
Six ships of the First Squadron	*Ostfriesland.* *Thüringen.* *Westfalen.* *Helgoland.* *Oldenburg.* And one other.

The Third Squadron, which had just arrived from the Elbe, was in Schillig Roads	...	*König.* *Bayern.* *Grosser Kurfürst.* *Kronprinz.* *Markgraf.*

The battle cruisers *Derfflinger, Moltke* and *Von Der Tann* were lying at buoys abreast the dockyard at Wilhelmshaven.

The *Rheinland* and one other ship of the First Squadron were at Kiel.

Thus it will be seen that free intercourse was easy between the heavy ships of the First and Fourth Squadrons.

On the 1st of August fresh disorders broke out in the *Prinz Regent Luitpold,* and fifty stokers broke out of the ship and held an illicit meeting on shore. On their voluntary return aboard three hours later, eleven of them were put under close arrest. In consequence of this, a hastily convened meeting was held that night *on shore* by the ringleaders, who, forgetting the caution urged upon them by their friends in the Reichstag, decided to call a mass strike to demand the release of the eleven men.

On the morning of the 3rd of August, eight hundred men from the *Prinz Regent Luitpold* walked ashore and held mass meetings in the suburbs of Wilhelmshaven, some of them remaining on shore all night.

On the evening of the 3rd, the Tivoli Cafe in Wilhelmshaven was surrounded by armed police, and forty or fifty delegates and ringleaders were arrested whilst conducting a meeting.

On the next day, 4th of August, the outbreak became more general, and many more ratings from the *Prinz Regent Luitpold* broke out of the ship. Those which had returned or remained on board held "free speech meetings" at which their officers were present, and were allowed to state their grievances freely without fear of punishment. In the afternoon, orders were given for the ship to raise steam and proceed to the anchorage in Schillig Roads. This operation was successfully completed and the ship was isolated from the fleet.

Meanwhile, a general outbreak took place in sympathy with the *Prinz Regent Luitpold.* The crew of the *Kaiserin* refused either to relieve watches or to fetch or eat their food. Repeated attempts by the officers to induce the men to return to work were met with either sullenness or open jeering. That night the officers posted sentries from amongst the loyal ratings outside their cabins, but in the early

morning the provision stores were invaded and plundered. The next morning, 5th of August, largely due to the square meals obtained by the plunder of the store rooms, the men were in a better temper and enough men were available to move the ship to Schillig Roads.

Similar incidents also occurred though in lesser degrees in the *König Albert* and *Kaiser,* but both ships were successful in carrying out their orders to proceed to Schillig Roads, which orders were given by the High Command when the general nature of the disturbance was realized. The outbreak in the *Freidrich Der Grosse* was more serious, and at one time the uproar in the ship was general; but she too was safely navigated to Schillig Roads.

So much for the outbreak in the Fourth Squadron, which was by far the worst.

On the 5th of August, the *Kaiserin, Kaiser* and *König Albert* were ordered to Brunsbüttel, where the men of all three ships were given unrestricted shore leave, better food was issued, and games and concerts were organized. By these means, it was hoped to restore the men to their former state of discipline. Smaller outbreaks also occurred in the *Markgraf* and *Kronprinz* of the Third Squadron. The *Ostfriesland, Thüringen* and *Westfalen* of the First Squadron had similar disturbances, and were also sent to Kiel, where a minor disturbance and refusal to coal ship broke out again in the *Westfalen* on the 17th of August.

By this process of segregation, and by the promise of increased rations, together with firm handling by the employment of armed police and loyal ratings, the mutiny was thus quelled and order restored. Largely due to some of the ringleaders turning king's evidence, most of the men who were responsible for the organization were brought to book. Two ratings, Stokers Reichpietsch and Köbis, were shot in Cologne, and about half a dozen ratings sentenced to terms of imprisonment of twelve or fifteen years, while a number more received short sentences of three to six months.

The captain, executive officer and paymaster of the *Prinz Regent Luitpold* were relieved, and a number of exchanges were ordered between other officers in the fleet. Nearly all the older seamen and stokers in the disaffected ships were drafted away in twos and threes, and their places taken by young recruits who had not had the three years' monotony of waiting for actions which never took place. A number of men were also sent to the naval corps in Flanders. The daily ration was increased by an appreciable amount and, anyway on the surface, the men returned to the business of making war against their national enemy.

But the Commander-in-Chief, Admiral Scheer, divining the real causes, decided to undertake offensive operations, and in October, 1917, the majority of the Fleet were employed in the combined operations with the Army for the taking of Oesel Island in the Baltic, an operation, incidentally, which must be regarded as a model of its type.

Analysis of the 1917 Mutiny.

In order to gather the lessons from these events we must trace all the factors which went to cause the outbreak; for we find when we do this that every factor which, throughout history, has been a contributory cause to mutiny was here present. These factors are just as potentially present in peace as they are in war; but, clearly, under the stress of the latter conditions, they are more dangerous and more likely to occur than they are in peace, for, generally speaking, in war the ameliorating influences are absent.

It is a noteworthy point that no outbreaks of indiscipline of any sort occurred in any of the small craft.

(*i*) *Inactivity.*

It seems to be quite clear that in the minds of the crews of the German ships at the beginning of the war there was a genuine warlike feeling of desire to " get at the enemy ". It was only when they began to see first, that when contact was made their commanders withdrew as early as possible, and secondly, that as the war progressed less and less effort was made to do anything active against the enemy, that their enthusiasm began to wane. It must ever be so. It cannot be expected that a force which has been trained for years to fight can sustain its capacity to do so if, when the opportunity arises, it is deliberately not used for this purpose.

The same condition of inactivity applies also in peace time. No human organization can remain static; if it does not progress, by work and activity, it must inevitably stagnate and decay.

From the above can clearly be deduced the necessity throughout a war for constantly proceeding to sea to seek out the enemy—if for no other reason than to preserve the desire to fight.

The following quotations from Tirpitz's " Memoirs " are germane to this.

> " The battleships lay behind their booms in or around the river estuaries, without any apparently useful function and seemingly nailed fast, and the hard but monotonous daily routine became almost unbearable after from five to seven years' unbroken life on board. All peace-time comforts, scanty as they were, were banished from these iron boxes. At the same

time, the men were always standing by, so that they had little leave and hardly any relaxation. Thus, this life, which would depress any but the most fish-blooded, resulted in a school of grumblers and a hotbed of revolutionary infection."

"The naval history of all nations shows that it is difficult to maintain discipline in big ships in relative idleness."

The factor of monotony to which Tirpitz refers is undoubtedly a powerful demoralizing influence. His reference in the above quotation to the living conditions leads us to placing this as the second heading in the analysis.

(*ii*) *Living Conditions and Bad Food.*

Earlier in this paper, a quotation from Admiral Scheer called attention to the discontent which the gutting of ships in the first days of the war caused among the crews. Service at sea, particularly the North Sea, under war conditions, brings in its wake a large number of unavoidable hardships and discomforts, and it is logical, therefore, that avoidable discomforts should be avoided. This is particularly the case when men have previously been used to a higher standard of comfort. It is, perhaps, a truism to say that there are few things against which the human mind rebels more strongly than that of lowering a certain standard of living once it has become accustomed to that standard. There would, therefore, appear to be a danger in granting in peace time such a high standard of living that it cannot possibly be maintained in war. This applies, perhaps, equally to the question of feeding. It is not suggested that the standard of living should be kept as low as possible in peace, but merely that the standard maintained in peace should not be raised to such an extent that it could not be lowered in war, when necessity demanded, without suffering a decline in morale in consequence.

Clearly, men who are comfortable are more likely to be happy, and therefore efficient, than those who are uncomfortable. Due to economic pressure and the difficulty of obtaining food, there is no doubt that the standard of feeding in the German Fleet at this time was very low: this in itself caused discontent; but from a study of available literature it would appear that it was the contrast between their own underfeeding and the apparent sufficiency, not to say plenty, that obtained among the officers, which galled the men.

(*iii*) *Lack of Sympathy and Understanding and Trust between Officers and Men.*

This, as we have seen, coupled with the bad victuals, was one of the underlying causes of discontent which led the German sailors into

the frame of mind in which they became fertile ground for disruptive propaganda. They were not in that desirable state which may be summed up by the colloquialism " happy, fat and well ! "

There was a great social and mental gulf fixed between the officers and men. The former regarded the latter as automatons, drilled executors of orders which they were accustomed to give in curt and unsympathetic tones.

Perhaps the following quotation from Sir Henry Newbolt on page 70 of " Naval Operations ", Volume V, gives the prevailing outlook as clearly as possible :—

> " In addition to their grievances on the question of rations, the German seamen appear to have felt that their officers were treating them with undeserved harshness. It is not easy to understand why this feeling became so general ; for there are no grounds for supposing that the ordinary German officer treated his men more harshly and discourteously in the summer of 1917 than he had done for many years past. The professional code of the German Services has always been understood to insist on rigour as the first element of discipline. Authority must be obeyed and exerted at all times, without any regard to the feelings of those concerned ; and in particular, courtesy and consideration towards inferiors are not qualities that an officer can admit into his practice without weakening the military virtues which it must be his first consideration to cultivate. Such a theoretical inhumanity is in time of peace a barbarism to be borne only by a people which has not yet experienced a humane social life ; in war it may be tolerated while success lasts, but in a long fight and still more in a losing fight, it is likely to prove fatal. The officers of the High Sea Fleet were now to realize in the supreme hour of their country's danger that they had with them neither the trust nor the affection of their men."

This speaks very clearly for itself. One is inclined to wonder whether the German mind, which so readily lends itself to subservience and to autocratic rule, is really capable of understanding any other form of discipline. But it would seem that the strength of autocracy is also its weakness ; while the top is strong, the rest will follow, but weakness or indecision at the top will produce a tottering of the edifice below because there is no individuality of thought or mental resistance to support it.

" A house that is divided against itself cannot stand."

(iv) Inadequate Channels for Forwarding Grievances and Complaints.

The German sailors felt that they had no means of getting their grievances, real or imaginary, redressed. Their officers did not or would not listen sympathetically to their proposals and hopes and requests ; and because this channel was blocked, they adopted the other method of going direct to their sympathizers or supporters in the Reichstag, with the appalling consequences which we have seen.

(v) Political Influences and Contact with Shore Agitators.

An effort has been made in this paper to show how the undermining political influences which were at work in civil life on shore began to gain their foothold in the fleet. This can, of course, all be read at length in the various histories of the war, and a bibliography is appended at the end of this article showing the sources that have been consulted. Generally speaking, however, political propaganda will fall on stony ground if ships' companies are well fed, active and happily disciplined; it is only when their condition is such as to make them discontented that the majority take any material interest in politics. The influence of lying alongside, in dockyard ports, in a state of unwarlike inactivity was also plain, for it afforded every opportunity to the agitator to stir up trouble.

It is worthy of note that the organization of the disturbances always took place at meetings which were held *on shore* and therefore presumably away from the influence and observation of the officers and petty officers.

Admiral Scheer says :—

> " The great danger which lay in this unrest stirred up in the fleet by conscienceless agitators could not be overlooked. Conditions in the big ships in particular unfortunately provided fruitful soil for such activities, as the crews were all the time in close communication with their homes and could, therefore, not be kept immune from the prevailing depression. These men performed the same service in the big ships all the year round, and they lacked the refreshing stimulus of meeting the enemy in battle. On the other hand, they had a daily supply of newspapers and pamphlets which teemed with war weariness and the condemnation of our war leaders. Thus it was unhappily possible to influence their views and make them forgetful of their duty."

A study of the 1917 mutiny reveals what is usually the case, that the political agitators represented only a minute fraction of the total personnel, but also, as usual, they were a very active and insidious faction. It is suggested that these men as a rule belong to one of three types : the malcontent who by nature is always disgruntled and against any authority ; the assertive man who is determined to make his presence felt somehow, and failing to do it by laudable means turns to dissension ; and finally the deliberate political agitator who often joins for the purpose.

German Naval Operations during the Remainder of the War.

Following upon the Oesel expedition in the Baltic in October, 1917, came the engagement between British and German light forces in Heligoland Bight in November, 1917, and the two raids on the British

Scandinavian convoys in October and December, 1917. In the former raid two cruisers, *Brümmer* and *Bremse,* and in the later raid four destroyers only were employed.

In April, 1918, the whole High Sea Fleet proceeded to sea towards the Norwegian coast for a raid against our convoys, which resulted in no contact taking place, and this was the last occasion during the War that the High Sea Fleet left its harbours.

The Mutiny of 1918.

Space does not admit of a detailed account of all the incidents and events of the 1918 mutiny, and in any case this is not necessary, for there is a good deal of literature upon the subject; but it was from the flare up of the mutiny in the Fleet at Kiel that the wave of general revolution spread with such speed throughout the country.

Germany was already beaten when this mutiny took place. By August the British and French armies on the Western Front were everywhere in pursuit of the defeated and retreating German armies, and Germany's national resistance was weakening. Scheer had assumed the post of Chief of Naval Staff in August and took his place at German G.H.Q. at Spa on the Western Front, having transferred the fleet command to Hipper. And in these circumstances Scheer was staking all Germany's sea effort on the successful prosecution of the submarine campaign. But the will of the German people was breaking, and everywhere in the country was the feeling widespread that Germany was beaten. However, Scheer continued to plan for the continued prosecution of the war at sea.

Then came the collapse of Bulgaria, followed by the formation in Germany of a Socialist-Liberal Government under the Chancellorship of Prince Max of Baden. The new Chancellor instigated peace negotiations via America. President Wilson replied that an armistice could not be granted while German armies remained upon Allied soil, and followed this up with a demand for the immediate cessation of the submarine campaign. To this Scheer objected, maintaining that until there was an armistice the fighting must proceed. However, the pressure of events was so great that Scheer had to agree, and on the 21st of October the submarine campaign ceased, and all submarines were ordered to return to their bases.

He then planned an operation involving the employment of the whole High Sea Fleet and all the submarines in attacks upon the Thames and Flanders coasts and in an effort to draw the British Grand Fleet over lines of waiting German submarines.

To implement this plan, twenty-two submarines left harbour on the 25th of October, and on the 28th of October the High Sea Fleet raised steam and assembled in Schillig Roads. Rumours were rife, the officers were desperately anxious to be allowed to fight, but the feeling was spreading swiftly among the crews that they were to be ordered to sea to fight with no possible chance of success—to make a Roman holiday. All they then wanted was peace, and to live. The spirit of 1917 was bubbling up again. Agitators were hard at work. The example of Bolshevist Russia was before them.

Rioting began in the *Markgraf, Kronprinz Wilhelm* and *Grosser Kurfürst.* On the evening of 29th October, the orders to weigh and proceed were given. As soon as these signals were received, open mutiny broke out in the *Thüringen, Helgoland* and *Markgraf,* and the ships companies refused to weigh anchor.

The sailing of the fleet was promptly cancelled, and a further attempt was made the next day to get the fleet to sea—with whatever ships remained loyal. Again, open mutiny and threatened violence against the officers broke out in the *Thüringen* and *Helgoland,* whose stokers drew fires in the boilers. But the weather outside prevented the minesweepers from operating, and so for the second time the sailing was cancelled.

The conviction prevailed in the crews of the big ships that they were to be needlessly and hopelessly sacrificed to the enemy. In the meantime, Hipper set about enforcing authority in the disaffected ships. The small craft all remained loyal, and three destroyers carrying detachments of armed men were ordered to proceed alongside the *Thüringen* to arrest the mutineers; at the same time, a submarine covered the ship and was prepared to open fire with torpedoes and guns if required. The atmosphere was charged with tension; but force prevailed, and five hundred men were taken ashore in custody from the *Thüringen* and *Helgoland.*

When this had been done, Hipper realized the impossibility of pursuing his intended operations and immediately ordered the dispersal of the fleet with a view to localizing the disturbances. The First Squadron was sent to Brunsbüttel and the battle cruisers to Wilhelmshaven. The Fourth Squadron remained to keep a watch on the coast. It is interesting to note that there was practically no disturbance in this squadron, which, it will be remembered, had been the worst affected squadron in the 1917 mutiny. This improvement in morale was probably due to the fact that Admiral Souchon, famous for his handling of the *Goeben* and *Breslau* in the Mediterranean, had been in command of

this squadron for the past year until his recent appointment to the exalted post of Naval Governor of Kiel.

The Third Squadron, which included the disaffected *Markgraf*, was ordered to Kiel. Kiel itself, by this time, was in a state of acute disaffection among the dockyard and civilian workers, with which feelings the twenty thousand naval ratings in the port were closely associated.

On arrival in Kiel, 180 mutineers from the *Markgraf* were landed for imprisonment. This action immediately called forth demands from workers and sailors that they be released. On the 2nd of November mass meetings of sailors were held in Kiel, and armed parties were ordered out to arrest them. This measure was too late—the armed parties were also disloyal.

On Sunday, the 3rd of November, these mass meetings, which were attended by sailors and workmen alike, had grown to vast proportions, and violent mass disturbances broke out. In these straits, Admiral Souchon appealed for help to the IXth Army command at Altona, but was told that no help could reach him for twelve hours. The mutiny was spreading and bloodshed had taken place, but order was temporarily restored by armed parties of sailors from the First Torpedo Division, which remained loyal.

Further and larger outbreaks of armed mutineers from the fleet occurred on the 4th of November, and the disaffection spread, and a further call for troops was made by Souchon. However, professional jealousy between him and the army command arose as to whose orders the troops should be under. So that when they did arrive they were unaccompanied by any senior army officer. In the meantime the mutineers had formed themselves into Soviets and their demands were now political, including the immediate abdication of the Kaiser.

On the 5th of November those ships of the Third Squadron and cruisers which could muster enough loyal men put to sea, leaving behind the *König* and the old battleship *Schlesien*, in which latter ships the officers were soon afterwards overpowered and the Red Flag was hoisted—symbol of the negation of everything which Germany held sacred, and of the downfall for two decades of German sea power.

The outbreaks which had flared up so quickly at Kiel, spread like wildfire to Brunsbüttel and thence to Wilhelmshaven, and on the 9th of November the mutiny in the German fleet became utterly and irrevocably the Revolution of the German Empire.

The above is but a short résumé of events which are so clearly and vividly described in "The Death of a Fleet", but it perhaps may

serve to show that the seeds of mutiny which were sown in the early days of inactivity of the High Sea Fleet came to bear their inevitable fruit. The factors which have previously been analysed were all present:—

(i) Inactivity.
(ii) Bad living conditions and bad food.
(iii) Lack of sympathy, understanding and trust between officers and men.
(iv) Inadequate channels for forwarding grievances and complaints.
(v) Political influences and contact with shore agitators.

PHOENIX.

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THE REGULATION OF BOMBARDMENT.

THE new menace from the air is in the minds of all of us at present. So, nearly a hundred years ago, our great-grandparents were gravely apprehensive about a new menace from the sea. Steam was replacing sail, and our insular security appeared to many, including the Duke of Wellington, to be seriously endangered by the change. "Punch" is usually an index of popular opinion, and if one refers to its numbers for the year 1844, one can appreciate the feeling of alarm which the new development caused in this country. The Prince de Joinville with "his black ships"—the steamers—became a kind of bogey-man. That menace passed. It does not follow that the new one will prove to be equally baseless. All that one can deduce is that there is a historical precedent for our present apprehension.

Raids for the purpose of bombardment, whether conducted by cruisers or by aircraft, have much in common. The air raid can be carried inland, but in principle there is little other difference. Legally as well as operationally the two kinds of raid are akin. It is true that aircraft are not specifically referred to in the Convention (No. IX) on bombardment by naval forces signed at The Hague in 1907. That Convention must, nevertheless, be regarded as embracing aircraft operating with the warships. Otherwise a naval commander would be free to use his aircraft to destroy a town which, being undefended, he was specifically forbidden to bombard, and this would obviously reduce the Convention to a nullity.

It is notable that the German official history of the naval operations in the late war, *Der Krieg zur See*, justifies the airship raids and the cruiser raids upon grounds which are identical. The airship service was a branch of the German Navy and the raids are dealt with in the third volume of *Der Krieg in der Nordsee*, issued by the Marine Archives, Berlin. The writer of this part, Korvetten Kapitän D. Groos, claims that the raids were in each case directed at military objectives. He protests indignantly against the suggestion that in the cruiser raid of 15–16 December, 1914, upon Hartlepool, Whitby and Scarborough, attacks were made upon undefended towns or that the crews of the cruisers were "baby-killers" (Kindermörder). The cruisers fired, he contends, only at militarily important points (militärisch wiktige Punkte) and were

therefore within their rights under the Convention of 1907, even though that Convention was not formally in force in the Great War. So, too, the airship raids had military objectives—militärische Ziele *or* Anlagen—as their targets.

Now, it is beyond question that, whether military objectives were aimed at or not, the main damage resulting from the shelling by the *Seydlitz, Moltke, Blücher, Derfflinger* and *Von der Tann* and from the bombing of the zeppelins was damage to entirely non-military property, and the chief sufferers were civilians. If the raids were permitted by the Convention of 1907, then it is clear that that Convention is in need of revision.

Still more important is it, in the writer's view, to regulate air bombardment as a whole. The Naval Convention would not apply to a bombing force acting either independently or in conjunction with an army. Except for one entirely useless reference in the Land Warfare Regulations, there is no international convention governing air bombardment *per se*. The gap in international legislation ought to be filled.

In filling it, the writer suggests, we should have regard to a differentiation suggested by Herr Hitler two years ago. One is inclined at present to look askance at any proposal from that quarter. If, however, the idea in the proposal seems to be one worth following up, and if an agreement resulting from it holds out some prospect of being observed, because observance would be to the mutual advantage of the parties, then we should be unwise to refuse even to consider the proposal because of its origin.

Herr Hitler's proposal was put forward as part of his " Peace Plan " of the 31st of March, 1936, and provided for " the prohibition of dropping bombs of any kind whatever on open localities outside the range of the medium artillery of the fighting fronts ". The " plan " as a whole was launched at an unfortunate time, just after the military re-occupation of the Rhineland, and the particular proposal in regard to bombing was so formulated as to leave its intention obscure (what, *e.g.*, did " open localities " mean ?) and its practicability dubious. There were possibilities latent in the proposal, nevertheless. It came close, gropingly, to the real heart of the problem—the differentiation of *bombardement d'occupation* and *bombardement de destruction*. (The terms are those of the late Professor Paul Fauchille, who, however, suggested no differentiation of regulation.) It might have led, if it had been pursued, to the settlement of the international law of air bombardment on scientific and effective lines.

Any such settlement must recognize the essential difference between the two kinds of bombardment in question—the bombardment which

is an operation preliminary to the seizure of the place attacked and the bombardment which is a self-contained operation, limited to destruction and not followed up by seizure; between, in other words, investing attack and raiding attack. Examples of the two kinds of attack are to be found in the Japanese air raids of September, 1937, upon Shanghai on the one hand, and upon Canton on the other.

Bombardment for occupation is confined in the nature of things to an area in which warlike operations are in actual progress. It is part and parcel of a battle waged for the possession of the place assaulted. In bombardment for destruction, on the other hand, no battle has been staged; there may be fighting in the air, but that is a different matter. It may have as its target places hundreds of miles from the front. It has a quality of unexpectedness that bombardment for occupation lacks. Its disastrous consequences for non-combatant urban dwellers are intensified for that reason.

The consequences of air bombardment for occupation may also be serious for non-combatants; but so they are in bombardment by land or (investing) sea forces. It could not logically be urged that aircraft should be subject to a discriminatory restriction. It would be anomalous if one set of rules applied when aircraft were "spotting" for artillery fire and another and different set when they were themselves bombarding the place under assault. The rule of the military objective should be applicable to all three arms alike. Observance of that rule will not preclude loss and suffering for non-combatants. That is unfortunate but inevitable. A place which is the scene of active warlike operations cannot expect to be handled with kid gloves. Towns which defend themselves must necessarily suffer. It is the price which they have to pay—*væ victis*!—for the failure of their defenders to stop an enemy before he arrives at their gates.

In the raiding attack the circumstances are different. Here military necessity should be less imperious in its demands than when the bombardment is an incident of a battle for possession. Regard can and should be had to the fact that acts which can be condoned *flagrante bello* may be entirely unjustifiable in the conscience of mankind when done a hundred miles away from the lines. They cannot be excused by the plea that the rule of the military objective has been duly observed if, nevertheless, a whole town is practically wiped out and thousands of non-combatants are slaughtered or mutilated. Conditions have changed since 1922–23, when the Commission of Jurists agreed at The Hague to the rule in question. The hitting power of heavy bombers has increased in the interval out of all knowing. To-day a single bomber can load a weight of bombs almost as great as a squadron could carry

then. That fact should be taken into account in any consideration of the question of bombardment for destruction.

It is irrelevant, of course, to the bombardment of *non-urban* military objectives. It would be entirely unreasonable to ban or restrict aircraft raids on marching troops, on military depots, on fortified works, or on other similar targets outside centres of civilian population. Such raids are as legitimate as the far-flung cavalry raids which J. E. B. Stuart led behind the Federal lines in 1862–63. They are at least as legitimate as our own warships' raids in the Baltic and the Sea of Azov in 1855, for the objectives were not then invariably military stores and establishments. It would be to put an undue strain on the self-restraint of belligerents to restrict their right to attack or destroy from the air concentrations of troops or armaments which air reconnaissance had observed in the heart of the enemy's territory.

Centres of population not in an area of currently active operations—that is, towns and cities which an enemy is not seeking to capture and occupy—are a different matter. Here it is not unreasonable to ask belligerents to concede some assuagement of the extreme rigours of war. Military exigencies ought not to be adamant against acceptance of the principle that in bombardment for destruction, whether by cruiser or aircraft, the interests of the non-combatants who may be the chief sufferers should be put first. The question is how that principle, if accepted, is to be applied in practice.

The suggestion which the writer puts forward tentatively is that the seven Powers whose air strengths are formidable and comparable might be well advised to agree to drastic restrictions upon bombardment of this kind. They might be wise even to agree that cities and towns behind or away from the front should be placed out of bounds for raiding aircraft or warships. Such a proposal, ambitious though it might be thought to be at first view, would probably be found to be open to less practical objection than some possible alternatives which did not go so far.

One such alternative would be a rule that only towns in which there had been no military objectives from the first, or from which all military objectives had been removed, should be immune. To make such a rule workable it would be necessary to institute some system to ensure that the immune towns were known to enemy pilots. They would probably have to be marked by special signs, visible by day and night and affixed under the supervision of neutral observers, and a list of the immune towns, similarly verified, would have, possibly, to be communicated to the enemy Government. The result would be that the latter Government could arrive, by a process of elimination, at the position of all urban military objectives in its opponent's territory.

In any case, it is doubtful whether the removal of all military objectives from all the towns in an industrial area is in fact practicable. How, for instance, could blast furnaces, steel works, rolling mills and similar works and plants which might be classed as military objectives, possibly be transferred ?

Another variant would be a rule that bombardment was forbidden wherever a military objective was so situated that, in the opinion of official neutral observers, it could not be bombed without disproportionate losses to the civil population. Here, again, some system of special marking and of exchange of certified lists of immune localities would probably have to be arranged, and again the result would be to disclose the position of the military objectives that would be open to attack.

A rule forbidding absolutely the bombing of military objectives in cities and towns behind the front would be free from the objections referred to above ; it would be open to others, but they should not be insuperable. There should be no need for special marking or for notification of the immune localities. Cities and towns cannot spring up in a night and any map of a belligerent country would show the places to be avoided. If air reconnaissance disclosed agglomerations which were not shown on up-to-date maps, it would be a fairly safe inference that they were military cantonments or new munition factories or depots. Nor should it be necessary to define precisely what a " city " or " town " is. These terms are used in the Air Navigation Order (Article 9) but are not defined. If it is objected that villages or hamlets, not being marked on maps, might be attacked under such a system, the answer is that no belligerent is likely to waste good bombs on such objectives.

It is true that a number of objections would remain to be met. How far, for instance, must a town be from a defended line to bring it within the rule of immunity ? (Perhaps Herr Hitler's criterion of " the range of medium artillery " would be appropriate here.) What would be the position where a naval dockyard was so situated that it was to all intents and purposes a part of a large commercial town ? What, too, of the great city which may have aerodromes within its perimeter ?

What, again, of reconnaissance flights over the towns and cities which (it is assumed) it would have become unlawful to bomb ? Would such flights be permitted ? Would the aircraft engaged in them be liable to be shelled by anti-aircraft guns in the town and yet be forbidden to reply to the fire ? Would the aircraft be entitled in turn to the immunity which the town or city enjoyed ? Would the rule be, in fact, that in and over populated areas *horizontal* air warfare was alone lawful,

so that aircraft combats would be permissible, but that *vertical* fighting—from air to ground and from ground to air alike—would be banned?

Passing to a different order of thought, a critic could reasonably ask on what principle location in a centre of population should be held to give protection to munition works, military establishments and barracks within its bounds. The destruction of such military objectives may be of vital moment to the enemy. To accord them immunity because they are located, perhaps deliberately, in a city or town would be to sacrifice military interests to humanitarian ideals.

Undoubtedly the difficulties are formidable, the objections not lightly to be dismissed. If it were not so there would be no problem to be solved. That there is a fair prospect of its being solved on the lines here tentatively suggested the writer, after twenty-five years' study of the question, is personally convinced. But no man has a monopoly of wisdom and he may be mistaken. Some more modest scheme may have to be adopted: perhaps one for placing a portion only, not the whole, of a town out of bounds for raiders. London had its place of sanctuary, the monastery of St. Martin-le-Grand, in the 14th Century. It would be a curious reversion if it had another and more extensive one in the 20th.

It is at first sight the extreme of optimism to expect a belligerent to refrain from bombing a military objective because it happens to be situated in a town behind the battle area. Equally, however, the restrictive rule, it can be argued, will benefit him in turn. It is not, in fact, simply a question whether the interests of war or of humanity are to have precedence. If it were, the answer to be given would differ, no doubt, in a totalitarian and in a democratic State; though even in a country in which the State is all, the individual *nil*, the advantage must be apparent of a workable rule which would go far to make the seat of government secure.

It is questionable, however, whether the wings of air power would in fact be clipped under such a system. It would restrict, of course, the (at present) practically unrestricted freedom of action of the air arm; and the belligerent who is the stronger in that arm, or whose enemy's capital is more exposed to air attack than his own, would appear to that extent to lose an advantage. Would he, however, in fact do so? The fact that one belligerent's capital is closer to the frontier than the other's is not to-day such advantage to the latter as it was when the radius of aircraft was more limited. A vast number of targets would still be open to a belligerent powerful in the air. He would be able to concentrate attack on the air bases, the armies, the fleets, the extra-urban military depots and naval establishments of his opponent. So far from nullifying the advantage of superior strength in the air the acceptance of such a

self-denying ordinance as is here outlined would quite conceivably increase the strictly military influence of air power. It may make the movement of armies and their impedimenta impossible. What air power can accomplish against marching columns of troops has already been proved. British air squadrons destroyed the Turkish 7th Army between 8 a.m. and noon on the 21st of September, 1918, on the road from Nablus to the Jordan. Not since the great battle-trap of the Trasimene Lake has history witnessed such a rout of an armed host caught lucklessly in a ravine.

Where, indeed, the loss or gain, in a military sense, resulting from the adoption of the restrictive rule here suggested would lie is a very open question. The older arms of war would suffer to the extent that they drew upon themselves directly the volume of fire—of air attack—which would otherwise have spent itself upon urban objectives. They would gain in so far as their sources of armament supply—the munition factories in the towns—would be protected. The advantage and disadvantage might be found largely to balance one another in the end.

So dubious, indeed, is it what the military effect of the rule would be that one cannot conceive any war cabinet lightly disregarding it if it were once accepted and if, as a necessary preliminary to acceptance, the inexpediency of a refusal to accept and observe it were clearly demonstrated and understood, as obviously it is not as yet. To initiate city wrecking must always be a most perilous gamble when the other belligerent disposes of comparable strength in the air. Even if that belligerent's cities are easier to reach, or if they contain more military objectives, or if his people are assumed to have weaker nerves and to be less fitted to stand punishment, or if one's own people are, in comparison, " well drilled and well gagged and well cowed "—as well as being inspired by " a gospel of war and damnation "—when all is taken into account, it is still an extraordinarily stupid manner of warfare in these days of enormously destructive bomb loads. It is not really war at all ; it is simply international Kilkenny-cattery.

Because it is, the usual argument based on naval operations is irrelevant. Worse things, it is said, happen in a blockade. A whole nation may then be choked slowly to death. That argument would be relevant only if *both* belligerents could blockade one another simultaneously. If they could, they would be very foolish not to agree to call off their blockades.

The great Powers would be wise to call off their plans, if they have any, for bombing one another's cities. The champions of air power should think twice before they adopt a die-hard attitude to such a proposal. They should remember that a few years ago it seemed to be

quite within the bounds of possibility that air warfare would be banned completely. Yes, on paper, they will say: but do they want it to be banned even on paper? Do they wish this slur to be put on their arm, that it should be outlawed, placed beyond the pale, stigmatized as a barbarous arm?

It is just because the air arm is a threat to the whole civilian population that the movement for its abolition has gathered strength. The threat is a challenge, a provocation to all, to organized labour not less than to idealists and reformers. The civilized world will not brook *unrestricted* air bombardment. Those who wish to preserve the air arm must take note of that fact. If it is to be preserved as a great defensive force, a great stopping force, a force which can halt invading armies in their tracks, then, to survive, it must give up the idea of city wrecking. When it does the arguments for its abolition will be no stronger, and no weaker, than those for the abolition of land and marine artillery.

Another common objection to any proposal of this kind is easily answered. It is that reliance upon such a restrictive rule would create a false sense of security and would lead to the neglect of national defences against air attack. So far from that being the case, it is an essential condition for the success of such a plan that the parties adopting it should each be strong in the air and capable of a prompt and effective *riposte*. It should lead, however, to parallel reductions in the contracting parties' air establishments.

To be workable any such rule as is here suggested should be formulated on broad but clear lines. It should apply to raiding warships, as well as raiding aircraft; Article 2 of the Hague Convention (No. IX) on Bombardment by Naval Forces should be amended to conform with it. But that is a less pressing question; the immediate and urgent necessity is to regulate the law of air bombardment. That question should be taken in hand.

J. M. SPAIGHT.

THE UNITED STATES AND THE FAR EAST.

THE final decision regarding America's participation in a war in the Far East rests with the President. The President, anxious to uphold American prestige, clearly understands the Japanese threat to the European Far Eastern colonies, to the white races in general, and the ultimate danger to the United States itself. He therefore lends his weight to all preparations that are now actively being made against war. He will not oppose fighting if further serious insults are paid to the United States. He foresees the possibility of further insults, and is more willing than otherwise to encourage the growth of a stiff public reaction. But he is a very busy man with American politics, and is willing to leave his course of action largely in the hands of Mr. Cordell Hull, who is a high-minded and able Secretary of State.

Mr. Hull and the members of his Department are intelligent enough to realize the potential meaning, on a broad scale, of events in the Far East. The tendency of the State Department is to wish that America should play its full part in world affairs. In fact, they are rather jealous of England's lead. Mr. Hull in dignity of thought is far superior to any of his colleagues, and represents rather the old type of American statesman. One might say that he is not in essence a New Dealer, but rather a Secretary of State of the McKinley or Cleveland age, mindful of the higher things which a great nation should stand for.

But any working up of the American people to an active bellicose state of mind against the Japanese has a long way to go in the absence of any exceedingly provocative act, although it can be done. In fact, a stiffening of the public attitude is already slightly in evidence. Pacifism since the War has become rampant in the United States, and the influences for peace at any price are powerful. The growth of pacifism is the direct outcome of the great turning point when America turned backward instead of forward over the League of Nations. Ever since that moment American international morale has been slipping, and this weakening has allowed the germs of pacifism almost to take charge. No American is ever taught that he may one day be called upon to die for his country. He is only taught that he is likely to be killed by an automobile. He thinks that to be killed by a bomb is a worse type of death than to be

killed by an express train when stalled on the tracks. In fact, he is definitely anti-war, partly because, as in the case of any highly civilized nation, he sets too high a value on life, partly because he is forced by environment to consider first and above all the acquisition of means for material living, partly because, after all, America is not yet easily attackable, and partly because his education in world history, on the causes of national decay, and the dependence of one people on all other peoples for trade and prosperity, is woefully neglected.

(It is a curious thing that so far in the United States there has been absolutely no reference to the rapidly disappearing immunity from attack of the coasts of the country. There has never been any mention yet of protection of the civil population from hostile air raids. There is probably not one gas mask in this country for the purpose. There is a blind faith that the Navy on the Pacific Coast can prevent such raids. That, of course, is impossible, and it is also quite possible to conceive that there might be Japanese air raids on the Atlantic coast, but except for a few naval and military officers, no one dreams of it.)

The people are very slowly approaching a sense of realities, but nothing very drastic is being done by the Administration to assist this development. Any man except the President, or possiblyMr. Hull, who would rise and make an epochal speech describing to the full the dangers of the situation in the Far East might be printed more or less in full, but it would be forgotten by the next day; but visits of pacifist women to the President are fully reported; anyone who asks whether there is a naval agreement with England and if so, why there is, will be given columns, since this means a taste of twisting the lion's tail.

The old spirit which brought about the war with Spain over the *Maine* appears to have entirely disappeared. No one appears to realize that the Japanese, ultimately, are an infinitely greater danger than ever the Spanish were. The *Panay* incident certainly shocked the people. The Government made no attempt to hide the details. In fact, it rather encouraged their being published. But, since nobody in the United States was hit by the bombs, it was difficult to become really excited over an incident that occurred to a small gunboat seven or eight thousand miles away. But a similar incident in the future, which now seems improbable, would undoubtedly do much to stir anti-Japanese feeling.

But the President has not only the people to deal with but Congress as well, and in Congress he has a large stumbling block. Many of the members are distinctly pacifist. In the case of the Senate it is not so much that their intelligence is not great enough to see things outside the United States, but they feel that it pays them to shut their eyes.

Many of the Senators have quite able brains, but they lower the level of their output to purely political purposes. A very large majority of them are thinking about the next election. A very large number are thinking of the public funds that they can obtain for their own State or District. A very large number have nothing but contempt for the rest of the world, and consider that its affairs do not in any sense concern a patriotic American. A very large number, through long tradition, delight in using Great Britain as an " Aunt Sally ". A very large number have an inordinate suspicion of Great Britain's diplomatic ability, however stupid it may on occasion be. A very large number show their fearless spirit by twisting the lion's tail and refusing to " drag England's chestnuts out of the fire ". And moreover, all of them in defence of their sacred body are liable to turn against the President if he does something they don't like, except for a very few.

So far as the House of Representatives is concerned, the vast majority are purely little local " boys ", who know and care nothing about anything except their own immediate interests. They also love to defy the President on occasion for the fun of it.

In addition to all these difficulties of approaching a belligerent condition there is, of course, also the naval and military hesitation in view of the actual difficulties of waging a war so far away in the beginning, lack of ships with sufficient operational radius, lack of tankers and supply ships, etc., etc. Nevertheless, the preparations for a possible war are very active; and, of course, as America rises to the greatness of her destiny as a democratic nation and as a world power for peace, there is no doubt that the scale on which she could take part would, after a year or so, be nothing less than immense.

HELLESPONT.

The above remarks by a member of THE NAVAL REVIEW with a long experience of and residence in the United States are very much borne out by an article in the April number of the American quarterly " Foreign Affairs " entitled " American Policies in the Far East ". The writer discusses what might happen in the event of another *Panay* incident or similar happening, and says the broad choice left to the United States would be between non-resistance and coercion. The former might involve the withdrawal of all armed forces and diplomatic officers from the Far East with the probable evacuation of the 6,000 American nationals. This would mean peace at a heavy price, whether Japan eventually won or lost the war, and the almost certain loss of the next Presidential Election. He then discusses possible forms of coer-

cion, which, as he says, are many. Boycott and embargo, though measures short of war, would almost certainly lead to it eventually. The presence of the whole United States Fleet in Pacific waters might cause Japan to pause—but also it might not. And so he visualizes some coercive action in which England and perhaps France would participate, though he points out that such " associated " action would revive many controversies. This coercion, he thinks, would probably be wholly naval, a strangling of Japanese trade everywhere. There would, he admits, be heavy losses to British, French and American property in Japan and China; but " sustained steadily and persistently the strategy indicated could not fail to bring about Japanese withdrawal from China, and probably it would bring on a revolution in Japan itself ".

Finally the writer asks whether, if there had been no agreement at the Washington Conference in 1921 and if each Power had retained its freedom of action, Japan would ever have embarked on the Manchurian venture. Which, indeed, brings the wheel full circle.

HON. EDITOR.

A NAVAL OFFICER ON AN INDIAN ARMY STAFF.

II.

BEFORE continuing the yarn of my experiences in Burma at the Editor's request, it will be best to devote a few lines to describe the general situation after the main body of the expeditionary force had occupied Mandalay, and King Theebaw had been deposed and exiled as already described in my last article. One of the first objects of the Indian Government now was to establish native confidence by restoring the normal river traffic on which the population depended so much for a prosperous existence. Being no longer required, the majority of the hired river transports were released therefore to revert to their regular peace-time occupation. The troop steamers were already empty, and, with certain special exceptions, departed in the course of the next few days—their places at the bank being taken by the store and munition carriers, most of which also returned down to Rangoon as soon as unloaded.

But it remained necessary, nevertheless, to keep enough river type shipping to maintain touch with the numerous troop detachments of different sizes stationed to prevent disorder all along the various waterside centres of population for nearly 200 miles from the capital. A few of these were drawn from the three English battalions in the expedition; but most of them belonged to the Indian regiments, and in some cases consisted merely of a native officer and a score of sepoys. The work of relief, distribution and supply, therefore, was taken over by the river steamers and launches temporarily manned by the Navy, together with several craft of the same description belonging to the Indian Marine and sent over from Calcutta, and five stern wheelers specially hired for duty in very shallow creeks or tributaries to the main stream. Thus, although the Navy's share of any actual fighting had nearly come to an end with the conclusion of the river advance, the services of the White Ensign were still much in request by the Indian Council for armed transport work on the big river, as the main and almost sole line of army communications. In that way consequently the up-river representatives of the Navy passed two or three months more before returning down the 500 miles or thereabouts separating them from salt water.

Some of these isolated military posts were among the earliest objects to attract the notice of the concealed remnants of Theebaw's disbanded army; in which matter their experiences gave the military authorities

their first indication of the difficult task ahead. Detachments living in buildings or tents in villages were not much troubled; but if they were obliged to camp or move anywhere within clear range of the bordering jungles they were almost sure to be sniped sooner or later, with very little chance of making any effective reply. Of this sort of thing there were so many cases before our soldiers accepted the necessity for constant caution that only one or two can be recounted here as general examples, including an affair that happened right under the eyes of our officers and men serving on board the *Irrawaddy*. For instance about 20 miles down river from Mandalay on the opposite bank a party of three officers and sixty men belonging to one of the English regiments had been detached to guard an abandoned stockade opposite Theebaw's river barrier at Ava, where the Burmese had left a store of ammunition. This position overlooked the water from a site completely surrounded by dense trackless forest extending for miles along the shore in both directions close down to the brink of high river level. But it was the low river season when we were thereabouts, which left an open beach of hard dry mud some 40 yards wide all along between this jungle and the water's edge, like a broad natural road with a sideways slope. Among her other short trips soon after the taking of Mandalay the *Irrawaddy* was sent to carry four staff officers, including an R.E. and an army doctor, across to this post on inspection duty. As the water was too shallow however for her to get close enough to put a gangway ashore exactly opposite the stockade, she went to the bank where it was deeper, at a distance of no more than five minutes easy walk along the foreshore, and there ran her lines out to some big trees. The four staff officers landed, walked off along the water side, remained away in the stockade for two or three hours and then started back. They had arrived to within less than a hundred yards of the ship on their return, and her first lieutenant had actually gone to the gangway to meet them, when a volley of half a dozen shots was fired from the jungle and all four dropped, three being killed outright and the fourth severely wounded. An armed party was rushed ashore from the *Irrawaddy*, but the shooters were not waiting to meet them, and the bush was so thick that our men might as well have tried to catch rats in standing corn. Spraying the jungle with a machine gun was equally futile, as the Burmese were adepts at crawling like snakes, or could shelter behind trees.

Shortly after this another of our navy-manned steamers was despatched to carry reinforcements and bring back wounded from a post on the other side, stationed where a path connected a jungle village with a riverside berth where native craft loaded rice. Here a detachment about 80 strong suffered nearly 30 casualties in the course of less than

a week's skirmishing with sniping bands. Frequent reports of a similar nature kept coming in to Headquarters from all directions; nor were the attacks always directed against our soldiers. Isolated villages sometimes suffered, although in their case the motive was food and loot; not revenge, unless the inhabitants were suspected of telling tales.

My former article mentioned that General Prendergast and staff transferred from the Headquarter steamer to the palace the day after the removal of King Theebaw. It was an immense rambling structure, all on ground floor level, built of teak and native brickwork, if I recollect aright, and containing a labyrinth of apartments great and small, mostly entered from a series of outside verandahs. The walls inside were covered in parts with silk hangings and the floors were matted; but ornamentation was grotesquely mixed. Some splendid French mirrors valuably framed were hung about, though alongside them dangled dozens of the cheap Christmas tree type of coloured glass balls in every hue and size. Only one hall contained any furniture as we understand the meaning of the word; and in this a long teak table ran down the middle, round which it was said that Theebaw had held councils. It made an excellent staff mess room. The other halls had nothing but some low carved and cushioned lounges; and the many sleeping rooms nothing but floor mattresses except for about half a dozen charpoy bedsteads scattered among them.

Fortunately these quarters were all quite clean and free from vermin; and speaking for myself I know I found a floor mattress in a high and spacious room more comfortable than the hard cramped bunk of a mid-Victorian gun-vessel with only two feet of clearance overhead. I was told off to share an apartment (and washing tub) with Captain Agnew of the transport staff, whom I often met nearly thirty years later at levées and Court functions when he belonged to the Gentlemen-at-Arms and I was one of the Naval A.D.C.'s to George V. Like all eastern habitations fifty years ago, high or low, native or European, the palace was lit by oil lamps and candles. Gas had not reached the East in those days, and electricity was not understood even in England to have any public use except for sending telegrams. Sanitary and washing arrangements were in the primitive but adequate style used in the bungalows built for Europeans.

As soon as the palace had been cleared of the King and his officials it was taken in charge by the Royal Engineer officers of the expedition, who were responsible for all buildings in military use. In their exploration of its interior they came across two strongly locked doors, leading to unknown places. After considerable trouble those were forced open and revealed two blank walled rooms lit from overhead—one large, the other small—each presenting a sensational picture. When I saw them

next day they were still exactly as found, except that two sentries were now in the passage outside and an officer sat on a camp stool on duty at each door. The smaller room was not much more than a dozen feet square. On the centre of the floor, in a confused pile, lay the whole of Theebaw's regalia, jewels and gold plate in all sorts of shapes and sizes. Most of it was barbaric in form and crude in workmanship; but the substance was genuine, and no Bond Street window could have shown the equal in quantity. Many pieces were set in gems, and one in particular was positively barnacled in rubies and diamonds. A great deal had the deeper red of the pure metal when not mixed with the alloys in common use for gold jewels and coinage. Out of the heap a very few trophies were afterwards selected and sent to London, but all the rest were sold a few months later for the benefit of the Indian Treasury. As being rather a poverty stricken crowd ourselves, the General and his staff gazed on this at first with envious awe and then with philosophic amusement; for the possessor of all this priceless stuff twenty-four hours before was now about the sorriest man east of Suez.

The other room was much larger and rather odd to see. It contained a collection of some of the innumerable gifts brought to Theebaw and his father by the representatives of trading companies, or individual prospectors and travellers seeking advantages in business. Just the old story of "cumshaws" in fact, on a rather expensive scale. Many of them were clocks or watches, of which a varied stock were up on the walls, either showing different times or not going. Clockwork toys also featured in the cast. The other things were of endless variety, such as mother of pearl inkstands, ormolu table ornaments, etc.; and a great collection of the once fashionable Victorian photograph albums of extravagantly ornate covers; but in their case with no photos inside, excepting one album which contained all the crowned heads of Europe, many with autographs. Everything in this room was sold by auction later for the Indian Government.

Until the arrival of Sir Charles Bernard (about two weeks after the deposition of Theebaw), to begin duty as Chief Commissioner, a vast amount of civil administrative work based on military occupation and martial law was temporarily imposed on the General, in addition to army responsibilty. Mandalay City was in a state of general insecurity requiring continual troop patrol, and the country round for an indefinite distance was disordered in every direction by release from Theebaw's heavy hand. A staff of about half a dozen district magistrates—civil or military—with experience in the Indian courts, had been sent up and detailed for duty in various areas with full powers of summary trial and punishment, including authority to pronounce death sentence for certain offences. They were kept very busy. Every dawn for more than a

fortnight executions by shooting were found necessary to suppress murder, rape, looting, incendiarism and like serious crimes. Flogging by bamboo dealt with minor villainies. As daily reports of all these cases had to be passed in to headquarters, in addition to the reports of proceedings from brigadiers and detachment commanders, the General's whole mornings were occupied in reading despatches and dictating instructions and orders. His afternoons were spent in visiting such places as could be reached by riding in time to get back the same evening; or going afloat if they were on the far side of the river, and taking ponies on board, but returning to the steamer for the night. Ponies could be walked between the bank and the deck over an ordinary brow almost anywhere; but we never landed twice at the same place unless it was well picketed against chance jungle snipers beforehand.

It was on one of those trips that the only executions and floggings occurred which I chanced to witness myself; although anybody whose tastes lay that way could have seen them often enough if he chose to be outside the city gates by daybreak. The General went to visit a spot on the other side of the river, where a gang of dacoits had raided the livestock of a village and indulged in a pretty beastly orgy, till interrupted by the very inconvenient arrival of a jemadar's patrol of Indian infantry. Eight of the raiders were caught in bolting, of whom four carried fire-arms; a capital offence. On this trip the district magistrate accompanied the General, and conducted the trial on board the steamer, which—as in most of the General's river movements—was one of those still manned by the Navy. Four of the prisoners were sentenced to be shot next morning; but the other four, though doubtless just as bad, were given the benefit of the circumstance that no arms were on them when captured, and so got off with flogging. Next morning accordingly the first four were marched across the gangway and placed with their backs against a perpendicular natural bank, about forty yards away, where each ruffian took six snider bullets in the chest from an Indian army squad. They deserved what they got on clear enough evidence, but in justice I must say that only one of them went groggy in the knees on being blindfolded. The floggings were administered with slim whippy bamboos about ten feet long; and as the knots might seriously injure the spine if laid on across the back, they were applied lower down, where the beef lies thickest. But the sterns were bare, and though the bamboo does not draw blood like the cat, the strokes left awful weals. The floggers were told off from the magistrate's native police; and these rather smelly proceedings terminated on a grimly comic touch with the culprits solemnly and assiduously massaging each other's buttocks. They were afterwards sent to work with the coolie gangs employed by the transport officers.

On another cross river visit we saw a most remarkable object, when taken in conjunction with its surroundings. This was the second largest bell in the world—estimated to weigh 90 tons, as big as an ordinary circular tent, and as lofty as an ordinary room—lying where it had been abandoned in the bush long years before. Nearby the gigantic ruined and creeper covered pile of the never completed Mindoon pagoda rose high above the trees; it had been begun as a sort of Buddhist tower of Babel, but got cracked from top to bottom by a subsidence of the foundations when half built, and was thereupon left derelict to the monkeys. How they ever managed to get the bell landed from the river and transported over the soggy ground nobody knows. It might have been dropped from the skies in so far as any indications of a prepared roadway or landing jetty are discoverable. I believe the only larger bell is at Moscow. Our own great bell of St. Paul's is a mere thimble compared to this heathen in the mud.

During intervals between periods under way the steamers manned from ships of the Navy lay at the landing bank opposite the main road to Mandalay, awaiting orders. No leave was allowed to the men for several very sufficient reasons; but they were permitted to visit other vessels lying at adjacent berths or stroll about the foreshore so long as they did not pass beyond certain bounds. It was a great excitement to them therefore when the transport branch picketed some twenty or more of Theebaw's captured pack elephants permanently at the river side, for use as necessary in carrying disembarked army stores to the various distributing centres in and round the city. Properly approached, most elephants have friendly manners combined with a healthy appetite, and these sagacious beasts soon began to associate the lower deck uniform of the British Navy with a bunch of bananas or plantains; obtainable from native fruit hawkers at a price about equal to a halfpenny a bunch in local currency. As for the lower deck, it soon learnt than an elephant isn't an elephant in far eastern longitudes but a " hutty "; or in the mixed tongues of east and west (generally prevalent at the waterside) a " ruddy hutty ".

During working hours most of the animals were " variously employed " (in deck log language), so banana time came usually after evening quarters. From that a mutual familiarity developed along several lines. For instance, when one of the naval steam pinnaces brought up from Rangoon ran hard aground between an off-lying shoal and the bank, at a spot where it was very difficult to get another of them into position to pull her off, somebody had the bright idea of borrowing a transport hutty. A big beast accustomed to hauling teak logs was accordingly lent, and waded out in draught harness to be shackled to the boat's stern towing bollard. In hauling heavy timber the great

thing is to start with a good jerk, and so when he got the order " pull " he threw his five tons weight into action so suddenly that he carried the bollard away and fell on his long nose, much to his annoyance. But being mollified by bananas he tackled the job again, after a line had been passed right round the boat, and, by beginning gingerly this time, eventually fetched her afloat.

An interesting sight was to see a dozen or more of them swim across the river in close line ahead to feed in cane brakes along the opposite margin, with only two men in charge. Though an elephant floats so deep that only the bare crown of his head remains visible, he swims in small danger of drowning, for he keeps his trunk pointed well aloft and can breathe through it. Moreover he smells through it also over an extraordinarily long range of scent; and though his eyes are so much awash that he can't swim a straight course by compass card he can always follow his nose to a windward shore. The river was about 500 yards wide here, of which they could wade sixty or eighty yards on each side. A big beast walked in first, with a man standing on its head, and the others followed in close order. If the wind blew from the far bank they sniffed their way straight across; but if that bank was to leeward the man conning the " flagship " tapped the upraised trunk one side or the other with a stick to keep a steady course, and as each ship kept station by the near smell of the next ahead the rest was easy. As some precaution however—quite unnecessary as far as I could make out—the hutty at the tail of the line also carried a man on the bridge, presumably as a whipper in. I never grasped how they told off fleet numbers, except that apparently the admiral was chosen from the beast having the most powerful odour. Possibly a sound principle.

The so-called white elephant at the palace held a sacred rank far above the others; which cost the poor brute his life in the end. He had led an overfed and privileged existence on the strength of a supposed mystical religious association with Theebaw's dynasty, which the people had been told was so close that he would never endure to survive if it came to a finish. And the priests, who were his attendants, took good care to justify this prophecy for their own sakes, by putting some arsenical seasoning into his rations as soon as Theebaw was dethroned. On the morning after the installation of our army headquarters in the Palace he was found writhing on the floor of his lofty house; and there we saw him, with two mystified transport vets helplessly watching, and forced to keep beyond reach of his swishing trunk. By the evening his trunk was stiff, and next day two common rank elephants dragged his exalted carcase out to a pit where he was interred with solemn rites as the last of his line. Of course he wasn't really white at all; merely ordinary colour with some splotches of grey on his shoulders. His

drinking water was in an enormous silver bowl as big as a cask, standing in a corner of his spacious loose-box; and against the wall were folded the four gilt sunshades, with ten-foot handles and crimson silk lining, which were held over his back on processional occasions. The General presented these last to the four of us who were with him on the spot, and mine has been a white elephant to me ever since, as I have never had a hall big enough to stick it up in. It lies sewn up in canvas in a box room as I write these lines.

Meanwhile an emergency of disquieting importance had suddenly cropped up. About a fortnight after the occupation of Mandalay reports began to come in through native sources of a massing of Chinese at a point on the mountain pass between south-western China and far Upper Burma, about three days' march from the stockaded riverside village of Bhamo, which stands about 250 miles up-stream from Mandalay, surrounded by very dense hill forest at the highest extreme limit of navigable water. The Emperors at Pekin had often claimed that their frontier properly touched the river; but the Kings of Burma had always denied that, and kept a small garrison at Bhamo inside the stockade, as they were quite unable to assert their rule over the wild men of the encircling woods. A 60-mile trading track of the roughest description passed from the river over the jungle-clad ranges into China; and it was persistently rumoured that Pekin meant to use the uncertainties of the situation created by the deposition of Theebaw as a chance to follow this route down and jump a claim. If they really had occupied Bhamo the situation would have been difficult for us, as the British Cabinet were still hesitating whether to annex Burma or not, and the frontier had never been drawn on any officially recognized map. In such cases an unopposed military occupation on an effective scale is usually regarded as establishing the prior claim to legitimate possession. Prendergast saw this and acted promptly on his own initiative, as the massive brains in Downing Street were apparently unable to make up their minds about anything but the proper time for going to bed. The whole matter really depended on whether the first sentry at the gates of Bhamo stockade was to be a sweating British private carrying a martini rifle, or a Manchu dragon brave carrying heaven knows what. The river was very low and still falling.

Time being everything a small force of half a battalion from the brigade at Mandalay with a mule mountain battery and some field howitzers were put quickly on board five stern wheelers drawing less than 3 feet, one of which was armed with boat guns and men from the *Turquoise* as an escort. Sir Charles Bernard had arrived at Mandalay to take over civil authority, in full agreement that the General himself should get to Bhamo without delay, and leave military charge at the

capital in the brigadier's hands. The flotilla started up-stream on 19th December and was nine days in covering 240 miles. It was a very interesting excursion from a passenger's point of view, but a nightmare for the steamer captains. In normal peace time, during high river, a monthly paddler made the trip up for trade, and all these skippers had done that. But never at low river, and there was a lot of difference between a channel 20 feet deep and a channel sometimes less than five, often with a zigzag. To reduce maximum draught to $2\frac{3}{4}$ feet each steamer towed a flat alongside for carrying her fuel and the army stores and provisions; also the horses and mules. But in spite of that not a day passed without at least one of them getting temporarily on the mud, and the General's own was as often in difficulties as any. Being absolutely flat bottomed however they never dug themselves in, and after a time the mere strength of the current always pushed them off the shoal. In surface appearance the water gave no indication of variations of depth; remaining everywhere a smooth expanse of uniform flow five hundred yards or more wide; and the only way to keep to the scoured channel was to poke with sounding poles from the bows of whichever vessel chanced to be leading. At this however the native deck hands were so expert that a speed of five knots over the ground was usually maintainable. Of course we anchored at night, and as near midstream as possible on account of snipers. Luckily these fellows had no fire-arms with an effective range of more than a couple of hundred yards, so their occasional pots did no harm beyond being a nuisance.

We had hoped to arrive by Christmas Day, but the many delays caused by pilotage trouble made us three days late; and on Christmas Day itself more of the flotilla bumped the mud than on any other, which admittedly sounds suspicious. As we ascended the waterway the scenery changed by degrees from flat country all round to hill ranges rising ever higher and steeper on both hands; but always, whether level or mountainous, smothered in the ubiquitous forest to the furthest visible limit. At scores of miles apart we passed lonely clusters of fishermen's huts, always enclosed on the land side by stout stockades as a protection against jungle inhabitants, whether human or tiger; of which from all accounts the tiger was the least objectionable. At sunset on the eighth day we anchored for the night about ten miles short of Bhamo, being now nearly 800 miles from the sea, and I believe about 300 feet above its level. Very early next morning a boat brought the Burmese commander on board to offer surrender, with the satisfactory intelligence that no Chinese troops had arrived; greatly to the relief of his small garrison, who realized they would have to submit to the first flag appearing in force, and much preferred the prospect of white captors to yellow. We found we could only get the steamers alongside at a position about three miles

below the village, with which it was connected by a mule track; and there the transports were berthed accordingly and the troops disembarked. The native garrison were disarmed without trouble, and glad to be taken on for paid coolie labour in defence works and road making. For sheer desolation Bhamo looked like the last spot on earth in those days. Its landscape suggested an uninhabited planet, covered to the highest sky-line with trees as close as the fur on a bear's back, but devoid of any sign of man, bird or beast. They were said to be there, but certainly not on view. And not good to meet.

As any doubts about the situation here were at an end the General left the senior officer of the troops to take charge, and started three days later to return with his staff to Mandalay by the first empty transport. By now her captain had acquired some knowledge of the channel and the current was with us; but running aground was a more serious matter than before, as it meant striking the up-stream end of a shoal, in which case the current was a hindrance to getting afloat again instead of a help. And so, when on the second day we missed a sharp bend in the fairway about three in the afternoon, we took a bump that left us stuck fast for nearly three days to follow, being only pulled off even then by another returning steamer, which happened to start down river about ten or twelve hours behind us.

A day later we passed a strange and fortunately very rare sight; at a long straight reach where the channel ran deep and close to a steep section of the bank rising about twenty feet above low river and free from trees at the top for some distance back. It was a lonely part with no sign of human habitation or presence anywhere, and on the crest of the bank, facing the river, two men had been crucified on bamboo poles since we had passed the same spot going up 12 days before. We could see they were dead, as a couple of crows had perched on their extended arms; but there was no time to stop and investigate, nor is it likely that it would have left the General any the wiser. It was never known therefore who they were or why they died, as they were gone when the next vessel passed up a month later; though obviously their position had been selected so as to be conspicuous from the river. Our native crew opined that they were meant to be a warning from dacoits or jungle tribes, to all whom it might concern, against interference with their proceedings in that region.

An ordinary crucifix is so common an object that few people realize the horror of the actual thing unless they chance to see it. The peculiar ghastliness lies in the upright and lifelike attitude of the corpse; and in the case of this pair that was emphasized by the staring poise of their heads, which had been tied back so as to remain raised instead of hanging

forward or sideways as in conventional art. They were completely nude except for a small shred of cloth, suggestive of rather a curious insistence on propriety under the circumstances. As we were at full speed with the current in our favour on a straight reach of fairway we soon left this gruesome sight astern.

About 48 hours later we arrived back at the Mandalay landing bank, having taken as long to come down from Bhamo as to go up, and thus being only in time with a day to spare for a great ceremonial function. During the General's absence the Viceroy had announced his intention of making a State visit to Mandalay to proclaim the annexation of Upper Burma to the British realms; and the palace had been prepared by the civil administration for his personal occupation with his family and secretaries. At that time he was still the Earl of Dufferin, but on becoming a marquess a couple of years later took " Ava " as his second title, which had been the ancient historic name for the Burmese kingdom and capital in the days of their power. He was a great Viceroy, with a partiality for display well suited to his exalted position, as it impressed the eastern mind; and he arrived at Mandalay in the largest steamer on the river accompanied by Lady Dufferin and his son, and all his household and personal staff—including no less than twelve A.D.C's—besides some members of the Indian Council, and a full dress naval guard of three officers and 40 men from the flagship down at Rangoon. A second steamer followed with Lord Roberts, the Indian Army Commander-in-Chief, and all his staff likewise; while a third brought the Viceregal Bodyguard of scarlet uniformed six-foot Indian troopers, wearing resplendent turbans, beards and gigantic boots, whose bright bays were the handsomest horses I ever saw anywhere, not even excepting the paddock enclosure on Derby day, for which I was once given a ticket.

The durbar that took place in the main hall of the palace was a tremendous function, though deprived of some of its scenic effect from the unavoidable absence of full dress among the officers on active service. To some extent however this was redeemed by the gorgeous turn out of the high rank Burmese invited to attend in recognition of their new status as British subjects, who made the most of their opportunity for indulging in the Burmese fondness for brilliant colours. It was a great crowd of east and west, with Lord Dufferin as a very conspicuous leading figure on a raised platform a little above the floor level, in his viceregal array with large silver epaulettes, backed by Lord Roberts in field marshal's uniform, and their combined full dress staffs. When I saw him some years later he had become British Ambassador in Italy, and was in flannels off duty, sailing a skiff single-handed through our fleet lying in the Bay of Naples, and heaving-to opposite the flagship to

semaphore a message for the admiral with his arms. As officer of the watch in the next ship I took a squint through my glass and noticed that the only article he seemed to wear on all occasions, whether at the tiller of a dinghy or the tiller of the Indian Empire, was his monocle.

The next few days were mainly spent in inspection visits up and down the river a few hours steaming from Mandalay on board the Viceregal paddler, with informal champagne lunches for all officers in attendance. I never saw that stuff turned on in such hose-like fashion anywhere else. Then the Viceroy and all his host took their departure. Meanwhile the Admiralty had decided that the services of the Navy up the river were no longer required for work that could be done by the Indian Marine; and as the reliefs of the ships employed elsewhere on the station on slave trade suppression and other routine duties was overdue we were recalled to rejoin our own. So ended a very interesting and exciting break in the ordinary round of service in mid-Victorian days; which had lasted nearly four months as it was now near the end of February. I bid farewell to General Prendergast and my messmates on his staff with great reluctance, and as he had been very friendly to the Navy the other naval officers went to pay their respects also before leaving. We had a fast run of six days down river in the *Irrawaddy,* which struck the White Ensign when we turned over again to the old *Woodlark* the day after our arrival at Rangoon. Two days later we sailed to relieve the sloop *Kingfisher* at the Arabian end of the slave trade route; and exchanged the greenest land on earth for the most arid and barren desert coasts; while for me in person it was a change from a brief spell of shore-going existence in a palace to the contrast of a spell of seagoing existence in the hard stern sheets of a ten-oared cutter. But that independent boat cruising was not without its attractions, and I did catch a slaver, which was better luck than fell to our first lieutenant.

Through some red tape friction between the Admiralty and the India Office, of which we never knew the actual history, the Navy was kept waiting for more than three years for the Burma medal, though the troops got it in one. But it was rather an interesting memento when it did reach us, as being the last occasion of an issue of the original Indian frontier medal, and therefore the last of any medal—frontier or otherwise —bearing the effigy of Queen Victoria as a young woman. In the later medals struck during her record length of reign the portraiture was changed three successive times, showing her at different periods of life, and so making four in all. I happened to receive all four, and though I cannot positively assert that no other naval officer could say the same I can at least assert that I never met or heard of one.

G. A. B.

A NAVAL BRIGADE IN BURMA IN 1858.[1]

A FEW years ago THE NAVAL REVIEW had an account of the proceedings of the boats of the *Alarm* and *Vixen* up the River San Juan de Nicaragua, in 1848.

Recently, while going through the East Indies dispatches at the Public Record Office, I came across the reports dealing with another expedition—this time up the Irrawaddy—which may be of interest.

Included in Captain Seymour's reports are his arrangements for the movements of the ships under his orders, the supply of bread, etc., none of which have any connection with his river expedition. I have, therefore, omitted them from this narrative. Laird Clowes makes no mention of this expedition in his "The Royal Navy. A History".

W. B. R.

EVERYBODY knows that H.M. ships *Shannon* and *Pearl* landed strong naval brigades for service in the suppression of the Indian Mutiny in 1857 to 1858, but the fact that H.M.S. *Pelorus* also landed a naval brigade in Burma during this period is not so well known. In the latter case there was no fighting; but the mere presence of this armed force in the right spot, and at the right time, served to avert consequences which might well have been very serious. Although, as things turned out, the proceedings of this naval brigade came to very little more than a man-of-war's cruise—"there and back again"—yet they provide one more instance of how the Royal Navy comes to the assistance of the military and political authorities on the outposts of the Empire.

On the conclusion of the Second Burmese War in December, 1852, the Province of Pegu was annexed by Great Britain, coming under the jurisdiction of the Honourable East India Company. The King of Ava, taking advantage of the occasion of the Indian Mutiny, had collected in his capital an armed force of 15,000 men, which was considerably in excess of normal requirements, and all reports from Ava indicated

[1] The events herein narrated took place about 27 years before those comprised in "Round Shot" and "A Naval Officer on an Indian Army Staff".

that the " Golden-footed " Monarch was implicated in a desire to excite disturbances in the Province of Pegu prior to invading British territory.

At the beginning of 1858 all available troops were urgently required in India, and the military garrisons in Burma had been cut down to very low limits. The Commissioner of Pegu, Major Arthur Purves Phayre, became alarmed at the state of affairs and asked for naval assistance. Accordingly, the senior naval officer of the East Indies Division, Commodore Rundle Burges Watson—the Commander-in-Chief, Rear-Admiral Sir Michael Seymour, was then conducting the operations in China—ordered Captain Frederick Beauchamp Paget Seymour[2] (*Pelorus*, 21) to proceed to Rangoon and place himself in communication with the Commissioner of Pegu. He arrived there on the 27th of January, and on the 30th received a letter from the Commissioner, stating that

> " I am of opinion that it would be expedient for you to proceed to the frontier, attended by a portion of the men under your command, with artillery. The present European force upon the frontier is below the usual complement, and while the King of Ava keeps up an armed force at his capital above the ordinary strength, his intentions cannot be relied on as honestly pacific. I think, therefore, that the presence of your force would tend to preserve the security of the frontier and be productive of the best effect upon the minds of the people beyond our territory . . ."

Five days later Captain Seymour—who was no stranger to Burma, having served with distinction as a volunteer in the Second Burmese War, he then being a commander on half-pay—left Rangoon for the frontier. His force consisted of 14 officers and 162 men with the ship's field pieces, and they proceeded up the Irrawaddy River in the flat *Bhagarattie,* which was towed by the Bengal Marine river steamer *Damoodah,* a vessel of 200 tons and 90 h.p.; the *Pelorus's* launch, barge and other boats were also taken up the river. His destination was the frontier post at Meaday, where he arrived after a passage of ten days; and now we get his terse description of an extraordinary state of affairs which, at this period in what proved to be the last year of the long reign of " John Company ", seems to have been not altogether unusual.

In his first report of the proceedings, dated H.M. Ship *Pelorus's* Barge, at Meaday in the Irrawaddy, 15th February, 1858, he says:—

> " . . . The barracks [four well-ventilated wooden huts, furnished with iron bedsteads, but inadequate to accommodate all his men]

[2] Afterwards Admiral Lord Alcester.

were in so filthy a state that I at once informed the brigadier commanding at Thayetmyo that, until I had had them cleaned and properly fitted for the reception of our men, and until we were furnished with the proportion of bhisties [water-carriers] and native sweepers which every European force is allowed in this country and in India, and whose services, as will presently be seen, are indispensable at Meaday, I declined to take up our residence on shore.

It will hardly be credited that, within the walls of what is called the Fort of Meaday, in which at present upwards of 600 men are quartered, there is not a drop of water to be had, excepting what is brought from the Irrawaddy, which flows 400 feet below the hill on which the fort is situated; the path leading to the river being entirely exposed, and the fort consequently perfectly untenable in the event of hostilities occurring, unless a naval force is maintained on the river sufficient to hold its own against any force likely to be brought against it.

The magazine, in which all the ammunition, etc., belonging to the garrison is kept, is situated 200 yards outside, on the frontier side of the fort; it is surrounded by a brick wall and unconnected in any way with the fort.

Any remarks upon such defensive arrangements as these are superfluous.

It soon became evident to me that, with every wish on the part of the brigadier and the officers under him to assist us, things have been allowed to get into such a state here that nothing can be done under a week or ten days. My demands were simple, and confined to what is absolutely necessary for the cleanliness and health of the barracks. I, therefore, landed the men, cleaned out and whitewashed (entirely with our own means) the barracks, and sent the steamer under my orders down to Thayetmyo to bring up what we required. She came back with nothing excepting a civil letter, by which I was informed that all my demands had been long ordered to be complied with, as they to a great extent are comprised in what are called 'Annual Repairs' here, which, it appears, are sometimes executed, sometimes not; and in the course of the afternoon I was visited by the superintending engineer from Thayetmyo, who gave orders to his staff-sergeant that all these defects should be made good—the cook-house or galley put into working condition, etc. On his leaving I requested him to renew my application to the brigadier for bhisties, as, by being exposed to the sun in bringing up

water from the river during the morning, some of my men had suffered, and more were likely to suffer.

I should mention here that orders to supply us with bhisties had been sent up from Rangoon on 3rd February, and that we are still without them.

Finding this morning that nothing was being done, I determined to execute everything that could be done by our own resources; and having discovered there were six bricklayers among our crew, I sent to the ordnance stores for tools and mortar for them, when I was informed ' that it was customary here, when repairs were wanted, to send into the jungle and get some Chinamen who, in the course of two or three days, would come in and see what was to be done '.

I only mention these facts to give you an idea, Sir, of the state of affairs in the frontier post of the British territory in this country.

As for ourselves, I am only delayed by the want of bhisties from landing at once. With our own resources we have already made the barracks not only thoroughly clean and sweet but comfortable for the men, who have worked with a will. We are making mortar and will show the authorities here that the British Navy can do without having to ' send into the jungle for Chinese bricklayers ' to execute repairs in the Hon. East India Company's forts.

The communication by electric telegraph between this and Rangoon is, for the moment, suspended; but yesterday the Commissioner again repeated his orders for us to be supplied with the bhisties, etc. I must, therefore, believe that the resources of the Madras Army in the Province of Pegu are inadequate for the supply of 4 bhisties and 4 sweepers—8 individuals in all.

We are well supplied with beef, bread and vegetables of excellent quality; the men are healthy and their conduct most satisfactory ever since they embarked."

By his next report, eight days later, we find the naval brigade in garrison in the fort, and that one bhisti and four sweepers had, at last, been supplied to them. The arrangements for water supply were " by means of sacks [*sic*] carried up the hill on the backs of bullocks, a measure which will answer sufficiently so long as we have not to take the field ". Telegraphic communication with Rangoon was still interrupted and direct news from Ava was unreliable.

The presence of the naval reinforcements, with artillery, had the desired effect on the Government of Ava, for the Commodore at Calcutta was able to continue his reports to the Admiralty—" All quiet in Burma ". On 6th April the naval brigade, having been relieved by a

detachment of 4 officers and 166 men of H.M. 29th Regiment[3], marched out of the Fort at Meaday and left next day in the same vessels in which they had come up the river; in addition, they now had the *Luchia,* a roomy cargo boat which had been fitted up as a hospital for their sick.

Two days later they fell in with Major Phayre, who was on his way up the river, when the Commissioner expressed to Captain Seymour his entire satisfaction with all his proceedings, and added that his presence on the frontier at a critical moment had undoubtedly saved the situation. The return journey was uneventful except on the 10th, when " we encountered so heavy a gale of wind, while at anchor in the Irrawaddy, that although the steamer was using her engines at full power, and she and the flats had four anchors down, nothing but a change of four points in the wind saved us from going on shore on the right bank of the river ".

Rangoon was reached late in the evening of 13th April, and the expedition got back on board the *Pelorus* next day. During their absence from the ship five men had died of dysentery, of whom two expired before they left Meaday; twelve more were sent to hospital at Rangoon, nine of them suffering from that disease, but no fresh cases occurred after the return of the expedition.

Captain Seymour terminates his final report, dated H.M.S. *Pelorus,* Amherst, 25th April, 1858, with:

> " In conclusion, Sir, while acknowledging the receipt of your orders of 1st April, allow me to express my deep sense of gratitude for the manner in which you are pleased to approve of my proceedings. It is impossible, almost, that an officer can err when he knows that, if he acts to the best of his judgment and for the benefit of Her Majesty's Service, he is certain of the support of his commander-in-chief; but it is doubly gratifying when his efforts to meet his superior's wishes are approved of in the manner in which you have honoured me by approving of mine."

On receipt of the complete report of these proceedings the Admiralty directed Commodore Watson to " convey to Captain Seymour their Lordships' satisfaction at the able manner in which the duties in which he was employed were carried out ".

Before this report had been received—all that was then known by the Admiralty was the bare fact that yet another ship on the East Indies Station had been put out of action for an indeterminate period—their Lordships had addressed more than one letter to the Board of Control (i.e., the Hon. East India Company) on the subject of the long absence

[3] 1st Bn. The Worcestershire Regiment.

of the officers and men of the *Shannon* and the *Pearl* from their respective ships. On the 19th of March the Admiralty

> " disapproved of the efficiency of H.M. Ships being impaired by detaching their crews for land service, unless under circumstances of pressing, urgent necessity; and expressed the hope that the military force in Pegu may be as soon as possible strengthened to the requisite extent, and the crews of H.M. ships on that service be thus enabled to return to their proper duties."

And again on the 19th of April,

> " My Lords deem it necessary to renew the expression of their earnest desire that the officers and men comprising the naval brigades may be returned to their respective ships as soon as the exigencies of the Service will admit. My Lords are fully aware of the reasons which have led to their detention in India previous to the fall of Lucknow, but adverting to the landing of seamen in Burma as well as in India, and considering the pressing nature of the duties of H.M. ships in all parts of the world, my Lords deem it necessary to advert again to the expediency of not employing these crews on services of this description, except only under temporary emergencies."

The fact was that the military authorities in India had been caught unprepared by the insurrection, and were only too grateful when the Navy, both Royal as well as Indian, came to their assistance, more especially with trained artillerymen. Once having got them up country they paid them the compliment of keeping them there.

As a matter of general policy the expensively-trained, long service seaman should not be employed merely as an infantryman, or even as a field artilleryman, on shore except as a temporary expedient. This always has been the Admiralty policy, but circumstances over which they have had no control have, on several occasions, arisen to render the landing of a naval brigade on a foreign station a matter of urgent necessity. Fortunately for this Empire, these periodical incursions into the soldier's domain of activities have always occurred when the fact that one or more ships of a fleet or squadron have been rendered immobile by the landing of most of her personnel has not materially affected the situation at sea, although naturally providing a cause for anxiety on the part of the Lords Commissioners of the Admiralty.

BOOKS.

"BRASSEY'S NAVAL ANNUAL," 1938.

(William Clowes. 25s.)

A REANIMATED Navy again supplies plenty of material for Admiral Thursfield, as editor of "Brassey," and he makes good use of it.

In his own *Introduction*, "The Progress of Rearmament. The Naval Treaties in Operation," he notices what may be behind the Japanese rumours: battleships of over 35,000 tons in consequence of mounting guns bigger than 16-inch or of carrying an increased number of guns of that or smaller calibre—in either case more powerful than corresponding ships built under Treaty limits which "must perforce forego many features making for fighting power which the unlimited ship could embody without difficulty"—or, cruisers falling within the "non-construction zone"—which "would present a difficult problem to those Powers which have a great sea-borne trade or extensive commerce to defend."

His picture of the international situation is that:—

> In the Far East, where "relations of the dominant Power with all Western Powers and with this country, it would seem, in particular have seriously deteriorated" the probability seems to be that the course of events "will be governed by the principle that might is right"; in the Mediterranean it remains to be seen whether the improvements in relations with Italy now being sought will result in it "reverting to the status it once occupied, from the British point of view, of an unlikely theatre of hostilities"; while as regards Germany, though, "in the naval sphere at least, the friendly conclusion of a second agreement . . . seemed to indicate the possibility of future co-operation . . . the events of March, 1938 in Central Europe point once more to the improbability . . . that the course of events in the world will be swayed by anything beyond naked force."

NAVAL SECTION.

The editor's survey in *Chapter I* of "Naval Events in 1937," a year distinguished for the coronation of a truly naval king—one who has served and fought in his senior Force—is as thorough as usual, but calls for no particular comment.

Much the same might be said of *Chapter II* with its customary review of " Foreign Navies " by Captain Altham, but a few items here may attract special attention :—

" In all the heavier classes, speed has asserted its claim strongly as against those of gun-power, armour, and watertight subdivisions," and it is of interest to see how the various countries have treated these different claims. France, for example, appears on the contrary to be stressing armour, and this extends to her *La Galissonnière* class of cruisers with their remarkable degree of protection.

Other outstanding items as regards France are the projected building of two aircraft carriers, the development of a new naval base on the Bay of Oran, and the curious re-organization of the High Naval Command with its suggestion of our bad example in the military sphere when the General Staff abandoned the War Office for the front in 1914.

For the United States, parity with us seems now to be less a question of rivalry in antagonism than in mutual, if unadmitted, support as safeguards of the peace of the world.

As regards Germany there is the adherence to steam machinery in the new battleships, in spite of the Diesel engines of the *Deutchlands*, and the heavy armament and protection of the new aircraft carriers at the expense of aircraft carrying capacity.

For Italy, the striking increase in submarines, as noted again later, and an even more notable increase in the same ascribed, in some quarters, to Russia: though here, as pointed out in Chapter I, Russia regards her Far Eastern and European forces as quite distinct, which is perhaps judicious if precedents hold good.

The notes on Spain notice how sea-power passed from the hands of the Madrid Government to Franco, and " all that followed therefrom."

The trio of these regular features is completed with Mr. Hurford's quantitative survey of " Relative Naval Strength " in Chapter III, with a new addition in a qualitative examination by Commander Grenfell. The former does not make very encouraging reading in spite of the rearmament programme; our supremacy, where it exists at present, is described as a " wasting asset." The latter is an interesting attempt to assess the relative values of the different ships of each type of the various navies. Commander Grenfell reaches his estimates in the case of capital ships by a series of admittedly arbitrary assumptions, which, even if they do leave the assessments as mere expressions of individual judgment, are probably more accurate than anything obtained by a scientific analysis of various factors, which would be too complicated to be practicable. It may have some significance that here again the results are discouraging. In a detailed comparison, ship by ship, of our capital

ships with their American opposites he arrives at index figures which give equality or, more usually, superiority to the latter, except in one case. The totals are 177 for America against a British 154, with a normal index figure of 10 per ship. He comes to the conclusion that we have sacrificed offensive and defensive power for speed.

In a tabular comparison of the total strength of the British and American fleets of 15 ships each and the Japanese of 9, in which he reduces the total index figures to a standard of 100 for the British, he assesses their respective fighting powers on the same basis as 100, 115, and 62; which gives an average per ship of 6·7, 7·7, and 6·9 respectively. While the comparison with American ships serves as a criterion of constructive or designing ability, the comparison of total strengths would have more object if applied to our possible opponents, and Italy might well have been included as well as Japan, as an addition or in substitution to America.

His survey of cruisers and other craft is on more general lines. The comparison for cruisers is again on the whole unfavourable, in particular for the 10,000 ton ones; but for the *Southamptons*, though with a weaker armament than corresponding foreign vessels, " it may well be that a twelve-gun salvo represents the economical limit " for avoiding confusion in spotting. " On the whole, there is no reason to think that our destroyer fleet is other than satisfactory," but our " Escort vessels . . . are neither one thing nor the other. They are not large or powerful enough to deal with reasonable surface attacks, and . . . are hardly fast enough to protect a fast convoy against submarine attack." A note is added, however, that this was written before it was known that the new escort vessels were to have a larger number of 4·7-inch guns.

To these standing features may be added the annual examination by Captain A. C. Dewar of some aspect of current international affairs which directly affects the Navy's work. In 1937 he described " The Road to Rearmament " in which, after discarding sanctions by the wayside after trial during the Abyssinian war, he brought us to another effort at collective action with the Spanish civil war and non-intervention, whose Committee was " still labouring in shoal waters." This year in *Chapter IV* he discusses Spanish affairs from the aspect of " Neutrality or Non-Intervention." He observes that in the phenomenon of a civil war there is nothing new, while " the practice of intervention, too, has many precedents," but non-intervention is " a new procedure . . . intended to meet the circumstances of the present civil war in Spain."

Beginning with a historical survey of cases of declaration of neutrality and the consequential recognition of belligerent rights, he proceeds to trace in detail the stages of the policy of non-intervention in the present

circumstances. His extensive historical knowledge and accurate presentation with his power of arresting phrasing always tempts to liberal quotation. So much does it do so in this case that I delete all my copious extracts to allow later space for Air matters, as holding the front of the naval stage at present, and confine myself to his summary of the results of the non-intervention policy :—

> " A form of what may be termed ' limited belligerency,' in which operations of blockade and search have been restricted to territorial waters. . . . A limitation of belligerency to particular areas or particular acts may . . . become a recognized principle of international law . . . but it is desirable that any such practice should be based on definite juristical grounds and be kept distinct from the idea of abolishing war by placing restraints or restrictions on the operations of war by sanctionary methods."

The foreign navy which receives particular attention in this Annual is that of Italy. Its growth recently and the enlargement and changes in its task which result from the acts of the Fascist Government in the last eight years are described in *Chapter V* by one of its own officers, Rear-Admiral Luigi Sansonnetti, R.I.N. He refrains from sabre-rattling, and if he does seem to follow the example of his " beloved and far-seeing chief " in a certain measure of boastfulness there is justification, if his description of Italy's industrial and economic achievements and of the state of its Navy are reliable.

Claiming success for the measures for freeing Italy from dependence on others for fuel, grain and many essential raw materials under the spur of, and tested by, the sanctions imposed during the Ethiopian war, and that, by the conquest of Abyssinia :—

> " Italy has also acquired for the first time, even if in an indirect way, a real outlet to the open sea," he goes on, " The Italian Empire has sufficient resources to be self-supporting and can furnish men and materials along its coastline sufficient for all eventualities : but if this fact means that the problem set to the Italian Navy can be solved, it means also that the task of the Italian Navy has been considerably augmented." The consequent " expansion of the Italian Fleet should cause no surprise ; this expansion does not indicate aggressive or provocative intentions, but is only the logical consequence of the greatly increased defensive necessities."

By 1941 Italy will have eight serviceable battleships. The modernization of the four pre-war ones is said to have been unusually thorough and its result very successful. It is also claimed that the carrying-out of this modernization before starting the new ones served as a valuable try-out in planning the latter. Admiral Sansonnetti notices that the Italian Navy has remained faithful to the motor torpedo-boat (the " M.A.S."). " It is customary to build every year a number of these motor-boats . . . while the specialized dockyards are always ready to

produce them in great number." The expansion is general in all types of vessel but is most striking in the submarine, of which :—

> " Very soon she will have in commission a number . . . greater . . . than that possessed by any other Navy ; that is, about 100. . . . If anti-submarine devices have made great progress, the same can be said of submarine construction, of their machinery, of their armaments, and their equipment." Should one ask, " And what of their operation and employment ? " one finds a cryptic reply that " The particular characteristics of the zones in which Italy may have occasion to defend herself from outside attacks are suitable for the employment of submarines according to modern conceptions."

If, by this is meant the German conception of twenty-one years ago, they certainly constitute a serious threat to a very important but not indispensable trade artery, should we be her opponent. But would they be of much help in protecting Italy's own vital sea-communications if we retaliated in kind ? Against Germany we had no targets for such retaliation and could maintain an attitude of shocked reprobation ; it is an interesting speculation whether in a case like this, with an opening for retaliation, we should repeat this attitude or follow instead the precedent of gas attacks.

Describing the growth of personnel and the satisfactory supply of officers and conscripts (whose selection of the sea entails an extra year's service), Admiral Sansonnetti remarks on :—

> " The desire and longing to serve the country on the high seas " and " the study of old glorious achievements " which " fill with enthusiasm the Italian youths who, under the Fascist regime, are educated from the earliest age to the unlimited cult of their country. The natural consequence of all this is a strong militaristic spirit, a deep desire and a deep longing, that can only be controlled but cannot be suppressed, to have the opportunity to prove that our new generations are worthy of the old ones."

A study of her more modern history may suggest to her in time, that, with her new over-sea commitments, an all-world sea Power may be better as a friend than as an opponent, and lead her to control and guide that militaristic spirit accordingly.

Chapter VI, " Lower Deck to Quarter Deck, 1818 to 1937," by " Historicus," gives in detail the story of lower-deck promotion. For nearly the first century of this period the cause had no history, but could not say with a country in the same position that it was happy in consequence. There were practically no promotions and no attempt to make them. The story therefore becomes an account of the efforts of the last twenty-five years to solve this problem. The reminder it provides of the number of schemes which have been tried gives a measure of its difficulties. " Historicus " is of opinion that :—

> "Each scheme has been an improvement on the previous ones, but it has yet to be seen whether the latest arrangements now in force will meet all the objections to the earlier schemes which experience of their working revealed."

The truth probably is that perfect satisfaction is unattainable from any one scheme. There are too many aims to be satisfied, and many of them are mutually contradictory. It is noteworthy that each successive scheme departs further from promotion for the lower deck towards entry through the lower deck. " From Powder-monkey to Admiral " calls for a difficult leap at the lowest rung rather than a steady but agile climb of the ladder.

Chapter VII, by Captain J. W. S. Dorling, deals with " Naval Signalling." A very interesting sketch of signalling from the ninth century is followed by a description of the present-day training and organization of the communications personnel. It appears that while the first signalman seems to have been rated only after the Napoleonic wars, one out of every seven executive ratings is now engaged in communications, while wireless, a thing only of this century, employs a majority of these. In an analysis of the influence of wireless on strategical direction, Captain Dorling points out that :—

> " Difficulties at the present day are chiefly caused by a multiplicity of rather than a paucity of reports. The strategist of old seemed to be endowed with a quality of intuition . . . [of which] close study and accurate knowledge of the enemy's mentality were all part . . . and though the same attributes may be found in the strategist of to-day, he is likely to be able to base his deductions on far more concrete facts. So much so that he must also possess a great power of discrimination to sift the wheat from the chaff in a mass of purely contradictory reports. Rapidity of decision . . . is even more necessary to-day than ever before."

The Merchant Navy again provides the subject for the last chapter of the Naval Section with " Men of the Merchant Navy," by Captain Taprell Dorling. The *motifs* of his article are indicated by the following quotations :—

> " The Merchant Navy, with the Fishing Fleet, is every whit as important a component in the scheme of National Defence as is the Navy, the Army, or the Air Force."
>
> " The matter of whether or not our available strength in merchant seamen is sufficient for a modern war is a matter which the Government, and the Government only, can properly decide. If the number is inadequate, the necessary steps should be taken to supplement them. Is our sea-going man power sufficient at present to meet the demands of a war fought on the same scale as that of 1914–1918 ? The answer, if we are to believe those in a position to know, is an emphatic negative."
>
> " The war shortage in our cargo-carrying fleet. . . . We are living in a fool's paradise. The Merchant Navy is insufficient to meet the strain

of a possible war for which we are building up our other Defence Services. Yet it is also a Defence Service upon which our security depends. Is it too much to ask that . . . it should be organised in peace. . . ."

" Taffrail's " suggestions include a Ministry of Shipping, preliminary nautical training, abolition of the apprentice system with regulated junior training afloat and partially regulated courses in nautical schools before passing for second mate as regards officers: and similar preliminary training for men with " various trainings and instructions before reaching the equivalent rates of A.B. or petty officer "; with many suggestions for raising the status and permanence of the Service as an employment.

The problem of the Merchant Navy is as urgent as any in our questions of Defence. It is probably far the most intricate and difficult to solve, and readers may justify the editor's comment in his preface that while most of us will " agree with the need for improvement. . . . There may not be so great a measure of agreement on the merit or practicability of the particular manning plan which he suggests."

Naval Air Section.

The Naval Air Section opens with the customary review of " British Naval Air Progress " which, as last year, is written by the editor. Writing before the several announcements made from March onwards on the methods of obtaining pilots, his forecast as to these arrangements proves, as a rule, to be correct.

As a measure of the large increase of naval pilots which will be required —greater in proportion than the material expansion of the Fleet Air Arm because of the ultimate withdrawal of the 30 per cent. of the existing pilots supplied by the R.A.F.—he estimates a strength of some 400 machines in three years' time compared to the present 176; while the writer of Chapter XIV gives 240 in 1940; and another in Chapter XII estimates " something well over 600 first-line aircraft within the next few years."

A very important point which he makes more than once, in reference to pilots and again to mechanics, riggers and, as it will be later, naval artificers, is that the liaison, which will be to some extent automatically supplied during the transition period, should be established intentionally when the new régime is in full working, by interchange of officers and ratings between the two Services:—

" Much is heard . . . of the need for inter-Service co-operation and collaboration: the chief obstacles to the full achievement are lack of experience of each Service by the other, and consequent lack of mutual understanding. There is no better way of improving the mutual understanding from which co-operation springs than by providing the experience.

> . . . There is no surer guarantee of sympathy between the Services than ensuring that some officers at least in each shall have that knowledge of the other's difficulties which comes from sharing them."

Admiral Thursfield reminds us that the cause of a large part of the difference of opinion between the Admiralty and the Air Ministry was that the latter, due largely to low strength, maintained the principle that every pilot must be prepared to undertake any form of flying duty, while the former insisted on the necessity for full-time specialization for naval or naval co-operation work. But, with expansion, the Royal Air Force has been able to adopt specialization, and :—

> " Less should be heard of the naval demand for full control of all shore-based squadrons that will operate at sea in war, now that the personnel of those squadrons are to devote their whole time to their special work, without the liability to be suddenly removed for other duty and replaced by those who have no knowledge or experience of it."

The same grounds, however, might surely be used by those who consider that shore-based squadrons should be naval, for other reasons which still remain, to argue that since these squadrons are now able, and going, to concentrate on naval work the last excuse against making them naval has gone.

In his review of new developments when dealing with the progress of auto-gyros and helicopters he reports that :—

> " Several of them have already reached the stage at which there should be little difficulty in using them from a ship with no special fittings beyond a not very clear space of open deck. . . . The ability to hover . . . and the ability to operate from the deck of, say, an escort vessel or 'armed boarding steamer' are qualities which in certain conditions might make them exceedingly useful in anti-submarine operations. . . . Though it is improbable that much will be done at present to adapt them to naval use [owing to other preoccupations], the Admiralty will no doubt keep a watchful eye on their development with a view to their utilization, if the circumstances should arise, in war."

This has an unsatisfactory sound. War with its urgencies is not an appropriate time for trial or experiment, unless its surprises make them unavoidable.

This chapter ends with an account of the various exercises in which "Air " had a part, and of long cruises of R.A.F. units in the past year.

Chapter X treats with fullness of " Foreign Fleet Air Arms " under the heads of General Policy and Organization in Detail. Items which invite attention are the following :—

> The appointment of a committee, in the United States Navy, to report on the advisability of continuing the policy of carrying aircraft in battleships

and cruisers since these could be operated on only two days during the 1937 manœuvres in the Pacific, with a suggestion of building small carriers as their alternative.

The great importance attached by the U.S. Navy to the shore-based squadrons of large patrol-bomber flying boats intended to patrol the vast strategical triangle between Hawaii, the Aleutian Islands, and the Canal Zone, and its high opinion of their capabilities shown by their transference from the Base Force to the Scouting Force of the Fleet.

That though Italy's naval co-operation squadrons can be used for attacks on very weakly defended targets they are primarily for reconnaissance duties, and " Italy must rely mainly on the bomber squadrons of her metropolitan air force for offensive action against sea-borne forces."

A proposal by Rear-Admiral Cook before the U.S. House Committee on Naval Affairs—opposed by the Chief of Naval Operations—for large airships as aircraft carriers to carry nine bombers each at 70 m.p.h. for 15,000 miles; with a claim that seven could be built at the cost of one carrier, the range is the same, and they would be no more vulnerable to attack.

Chapter XI, " Naval Aircraft Production," by E. Coleton Shepherd, discusses the limiting characteristics of naval aircraft imposed by considerations of restricted landing space, stowage, heavy landings on carriers, landings on water of non-carrier borne planes, and catapulting stresses, with the unsuitability of single-seaters owing to the need for an independent navigator to meet the high standard required over the sea.

He suggests that with the advent of the Blackburn Skua, with high wing-loading associated with trailing edge-flaps, and other modern devices, " the price which has to be paid in naval craft for higher strength factors may tend to become less important," and " upon its success may largely depend the future policy . . . in respect to ship-borne aircraft." With its high stressing for large terminal velocities and high speed—" something well over 200 miles an hour "—dive bombing becomes practicable and " is officially added to the tactical training of the Fleet Air Arm."

Another view he puts forward is that new fast aircraft having a range of 1,000 miles and a safe radius of action of 400 miles offer " the Navy a good opportunity to add land-based forces to its strength in ship-borne aircraft."

A brief description of each of the types of aircraft in use in the F.A.A. and in the general reconnaissance squadrons of the R.A.F. ends this chapter.

To your reviewer the next three chapters seemed the most interesting in this year's " Brassey," perhaps because they do not impose a strain on his technical ignorance. *Chapters XIII* and *XIV* both deal with

the effect and place of air power in naval operations. The latter, after tracing the development of the use of aircraft in the Navy, deals with their place in it as a whole, while the former, as indicated by its title, is confined to the " Influence of Air Power upon the Control of Sea Communications."

" Observer," in *Chapter XIV* gives an interesting balance of the advantages and disadvantages of the methods of attack upon ships, as one of the problems to be solved. It seems to suggest that the solution will be generally in favour of the ship. Hits in high bombing, effective but hardly ever made; hits in torpedo bombing, effective when made but attackers easily shot down; hits in dive bombing, effective in performance but ineffective in results.

His broad summing up is that trade benefits upon the ocean but is increasingly menaced in harbours; cruising fleets can probably defend themselves fairly efficiently with their own anti-aircraft armament; and courage and determination will play at least as great a part as ever in naval warfare since, with better equipment on both sides, the results from air operations may well prove similar to those of Spanish Civil War, where aircraft have shown themselves frightened of ships, and ships of aircraft, while neither did much damage and the fear was unjustified.

He notes that attacks on aerodromes in Spain have been surprisingly successful; which has a bearing on the proper objectives for our Home " Bombing Force."

" Securus " in *Chapter XIII*, in a carefully considered examination of the control of sea communications, reaches conclusions not notably different, except that he specifically includes the occasion when shipping passes within range of shore-based aircraft as one when the attack is more likely to be effective than the defence, and suggests that the use of certain routes, even the Channel, may have to be abandoned. He also suggests that concentration in convoy, which may be imposed by submarine threats, greatly simplifies the problem for attacking air forces. In a summary of the influence of "Air " upon trade protection, he considers that :—

> " The Navy's ability to safeguard sea-borne trade suffers in the following ways :—
>
> (1) from the power of aircraft to reduce the security enjoyed by existing naval bases;
>
> (2) from their power still further to circumscribe the freedom of action of battleships which provide the cover for the operations of cruisers;
>
> (3) from their power to ignore control exercised by surface forces and to attack merchant shipping at sea anywhere within range;

(4) from their power to attack harbours, seaports, and docks within their range in spite of all that the surface fleet can do."

" The most direct method of dealing with aircraft attack is to destroy the air organisation upon which such attack is based " ;

and from this he arrives at a conclusion which shows the absurdity of the idea, which existed in some quarters, that recent differences of opinion between the two Services could have been due to a belittlement or begrudging on the part of the Navy of an overwhelming Air Force :—

" Predominant air power . . . is an essential to the control of sea communications, for without the cover provided by such air power the naval organisation for exercising control cannot function any more effectively than it could in the past if the Battle Fleet was unable to provide the necessary cover."

While the subjects of these two chapters have been discussed frequently, that of *Chapter XII*, " The Influence of 'Air ' upon Life in the Navy," by " Volage," has to me the added attraction of novelty.

Considering the question :—

" To what extent in practice does this ' air ' development alter the outlook of the naval officer of the future ? "

he decides that,

" The object of the Navy is unchanged, to secure a safe passage for our shipping ; but from henceforth . . . it is a profession actively concerned not only with all that passes upon the surface of the sea and underneath it, but also with many kinds of activity . . . which take place in the air above. . . ."

and asks the questions :—

" How far is the average naval officer of the future likely to become personally involved ? What new technique will he have to learn ? What will be his liability to fly ? What new responsibilities involving a knowledge of ' air ' matters will fall on his shoulders ? Will all this mean a new kind of specialization within the Navy, or will it have to be included in the stock-in-trade of every general service officer ? "

The intensity of adulteration—if the word may be forgiven—of the officers' list can be judged by comparing the figures, given by him, of a present 250 naval pilots and observers in a list of under 2,000 lieutenants and lieutenant-commanders, say 12·5 per cent., with a probable future of 1,000 air specialists in what would presumably be a total of little more than 3,000, and certainly less than 4,000 since much of our ship rearmament programme is replacement, a percentage of 25 to 33 per cent.

He arrives at the conclusion that :—

" A real change in the nature of his future duties is now in store for a considerable number of those who will henceforth join the Navy " ; not so much an alteration in the conditions of life or service, or existing

duties, but the addition of " some responsibility of a newer kind more or less directly connected with air work, flying, or some control of those who do those things."

The literary sections of the Annual close with *Chapter XV*, in which Lieutenant-Colonel Burchall, who last year reviewed the initiation of the Trans-Atlantic flights, gives an account of the experimental flights of 1937, and discusses coming developments. A tabular statement of the eighteen flights indicates how much was done, and the very interesting detailed report by Captain Wilcockson of the first flight, which accompanies it, shows how much was involved in each.

Reference Section.

The Reference Section retains its familiar form. There is no additional information of importance to hand to add to the particulars, in the tables, of ships under construction. In the plans of ships the *Warspite* is now shown as reconstructed. The text includes the " Nyon " agreements, and the German and Russian Naval Agreements of 1937, and new features are lists of British shipbuilding firms, British boat-builders doing naval work, and British manufacturers of Service aircraft.

The standard of " Brassey," like that of similar institutions of which " Punch " supplies the classic example, is bound to fluctuate. In the hands of its new Editor it is well up to the many opportunities offered by the present state of naval affairs, and can confidently be expected to keep there. To the layman, as to the professional, it provides a useful summary of the best of current naval thought, and to the latter, by the high standard of its articles, should serve as stimulus to further thought.

The Editor may be congratulated on or, perhaps it should be, thanked for his selection of contributors, including, not least, himself.

B. H. S.

"THE GREY DIPLOMATISTS."

By KENNETH EDWARDS (Lieutenant-Commander R.N., Retired.)

(Rich and Cowan. 15s.)

THIS book gives an interesting, exciting, and—if it obtains the readers it deserves—instructive account of the important part played by our Navy in international affairs in Europe in the post-war years.

Present affairs in the Far East, by the way, are not mentioned except for a passing reference to the *Panay*.

Those who know what the Navy does in peace-time towards maintaining that peace will see that the work has been in no ways out of the common in its nature, though perhaps remarkable in its intensity—particularly for a period when the Navy has been sadly attenuated and frequently belittled from many quarters.

When I reviewed Lieutenant-Commander Edwards' book on the Invergordon Mutiny I felt unable to do so favourably, for reasons which I need not repeat. I am therefore doubly pleased that I am allowed to review this volume, because I can welcome it unreservedly.

As I did not have the fortune to take part in any of the events it describes, I am unable to judge whether the author has written them up or embellished them in any way. If he has it would in no way lessen the value of the book, and might indeed increase it as an artistic emphasis necessary to balance the composition of the picture. We are not in this case concerned with an enquiry into a matter which calls for a judicial elicitation and interpretation of all available evidence, but with the production of a sketch which reproduces the true appearance of a view. This the book does well.

But when I said I could welcome it unreservedly I may have been misleading; for I have one reservation to make, though it does not affect my welcome. This book may over-intensify that blind trust in the Navy which is the normal and which seems to be in process of restoration. That can be almost as harmful in its inability to see what the Navy lacks as the swings to detraction, Cymric or otherwise, which occasionally interrupt it.

The years covered by its story, which begins with the last months of Sir John De Robeck's time as Commander-in-Chief in the Mediter-

ranean and British High Commissioner at Constantinople, falls into three periods. That of the incidents which were the after-rumblings of the earthquake of the war ; the long lull, so far as major naval activities were concerned, during which every step of British policy—diplomatic, domestic or defensive—seemed to be designed to abolish the last traces of any power which Great Britain could once exercise in the interests of world order ; and that inevitable result of the abrogation of influence in the series of closely following incidents which still continue, and which, at least until our recent return to sanity, have suggested the preliminary warnings of another disastrous upheaval.

I can leave Lieutenant-Commander Edwards to tell his own story ; and those who have read his writings will not need to be told that he tells it well. His text is Nelson's saying that "A fleet of British ships of war are the best negotiators in Europe"; and the proof of the truth of that saying in the work of the Navy—the " Grey Diplomatists " of its title—is the main concern of the book. I need not attempt a condensation of its narrative ; but a brief summary of the chief incidents with which it deals will serve as a reminder of how much it has to cover :—

> The Greek occupation and Kemalist victory in Asia Minor ; the evacuation of Smyrna ; the Chanak incident and Mudania ; the calling of the Kemalist bluff to close Smyrna ; the evacuation of Eastern Thrace by the Greeks and its transference to Turkey ; the Janina murders and the Italian retaliation with its bombardment of Corfu. Next, the steady surrender of strength throughout the lull, with its climax in the London Treaty, and then the present series of incidents with the Cyprus revolt ; the Italian tension of 1934 and Alexandria ; Palestine ; and lastly Spain with its successive stages of refugee work, Franco's attempted blockade, attacks on British merchant ships, non-intervention work, pirate torpedoing, air attacks, and Nyon agreements.

The many yarns which enliven the accounts of the incidents will attract the lay reader. They are all probably well known to serving officers ; but I have found many new ones to amuse me. The fact that some of the others are less wholesale than in the versions I knew is perhaps evidence of the author's moderation. The many submarines and depth charge practices of the Italian crisis, for instance, had coalesced into one glorious orgy in the midst of the fleet at Alexandria by the time they reached me, to be passed on to delighted school audiences ; while the two bluejacket nurses of refugee work had become a row of them with their backs to the funnel casings, etc., along the whole upper deck. I think he has been perhaps too moderate in his account of the Smyrna incident and might have drawn on " Naval Odyssey " or the

account which appeared in THE NAVAL REVIEW of August, 1935, to emphasize the dramatic tension of the *Curacoa's* entrance, the prompt effectiveness of such methods of diplomacy, and the physical risks which are imperturbably borne by the naval instruments of that diplomacy. He gives another good example of those risks, as well as the moral ones, with the case of the *Blanche* and her captain, Commander Caslon.

Although the dust-cover disclaims any examination of " The formulation of high policies " (one doubts in some cases if there could have been any formulation), Lieutenant-Commander Edwards discusses and comments on those policies with necessary fullness; without such notice the story of the Navy's activities would have no meaning. His views on these subjects may be described as " Morning Post " ones, which are pleasant to meet again, as the cessation of their daily exposition constitutes a regrettable loss. Governments of all descriptions receive accordingly any castigation they deserve, and very trenchant it is at times.

It is a moot question which deserve it most: those statesmen who deliberately threw away most of our much wanted naval strength, for whom ignorance, however inexcusable, might be pleaded, or those who afterwards continued the resulting weakness and disguised the appalling danger which they knew it involved.

Criticism of Admiralties is moderate and tempered by an appreciation of the practical difficulties of their position in relation to government policies. Here I think the author is wise; not only as a matter of justice, but because they are a very important part of the Navy when it comes to a question of confidence in the latter. He makes, however, what I think are some very pertinent criticisms of the treatment of the *Basilisk* incident, to the effect that it " did singular disservice to British diplomacy "; " was damaging to the Royal Navy " by suggesting that " officers and men . . . were so nervous of submarine attack that they saw torpedoes and submarines in every wave "; " wiped away much of the confidence felt among laymen in the . . . submarine detecting and hunting devices of the Royal Navy "; " threw doubt upon the efficiency of even the British anti-piracy patrols "; " brought world-wide ridicule upon a Service which was performing all manners of tasks under difficult conditions "; and " might well have led to . . . a tendency to make sure before taking action—to court a delay which might well have proved fatal." In spite of " much bitter comment within the Royal Navy," the author is able to refer to the " loyalty to the Admiralty which led to the general acceptance of its statement. . . . The theory that the Admiralty was the dupe of the Foreign Office persisted."

Any lay reader of this book should lay it down with a conviction of the truth of Mr. Duff Cooper's appreciation, as First Lord, of the Navy's performance during the Spanish Civil War and its universal applicability to the other incidents of which it tells :—

> " The difficult and onerous task that has been imposed upon the Royal Navy during the past year has been carried out in a manner that has earned the admiration of their fellow countrymen and of the world."

The Navy is accustomed to wear its halo with an air of amused pride, in which the amusement is far predominant. I may indulge in two quotations which, each in its very different way, explain why it finds this uncomfortable headgear so often bestowed upon it :—

> The lady, who on disembarking from a " ferry " destroyer, burst out : " These men are not sailors ; they are angels."
>
> and the
>
> Officer in one of the destroyers who volunteered to carry an infant down a steep steel ladder while its parents, who knew no English, waited at the bottom. As the officer started to descend the ladder the baby in his arms began to scream loudly. Its temporary " nurse " was heard to ejaculate, " If you don't stop that —— noise I'll wring your —— neck ! " The child, appreciating the situation with a discretion beyond its years, was frozen into a horrified silence. At the foot of the ladder the officer was profusely thanked by the child's mother, who complimented him on his charming and soothing way with children.

I must not omit to notice the last chapter in which the present and future naval position in the Mediterranean is examined ; nor the many valuable, and sometimes pungent, comments on naval policy and naval matters, such as discipline and "Air." But I shall quote none of the latter. If I did so to draw attention to those with which I agree I should nearly rewrite the book, while if I quoted only those of which I am in doubt this review would make my opinion of the book appear as exactly the opposite to what it is.

I am glad to say that I found that all my civilian friends who read the author's " The Mutiny at Invergordon," invariably and completely disagreed with the soundness or necessity of my criticisms, and in each case formed a very high opinion of it. One may therefore confidently anticipate for the present very timely and valuable book the wide circulation which is desirable and its due.

B. H. S.

"THE KING'S SHIPS THROUGH THE AGES."

By LIEUTENANT-COMMANDER ROWLAND LANGMAID, R.N.

(W. H. Barrell, Ltd., Portsmouth. 21s.)

There are two editions of this book, the ordinary edition in quarter-leather and cloth boards priced at one guinea and the de luxe edition in leather at two guineas. The latter edition is limited in numbers and each copy is signed by the author, or perhaps one should say artist, but in so far as the letterpress and pictures are concerned the two editions are identical. I think it may be said without giving offence that the binding of the ordinary edition is unworthy of the style and production of the subject-matter of the book, and also that it is a pity that the reproduction of the watercolours is not better. They are worthy of much better treatment.

How one reviews a book of this nature I am not quite clear. To be fair, it is not a book in the usual sense of the word but is a medium to enable the author, who is no doubt well known to most naval officers for his etchings, to publish a series of his watercolours in collective form.

The inception of the book is not without interest. I am told that the author and his brother, a serving naval officer, were walking round the Wembley Exhibition and in due course arrived at the Empire building, where they saw the display of ship models arranged in chronological order from very early ships up to those of modern times. The author turned to his brother and said, " By Jove, what an idea for a book of a collection of pictures of warships of all periods ". The idea took root ; but, as readers will realize, it required more than ten years to develop the inspiration into reality.

There is a frontispiece of H.M.S. *Victory* which faces a short foreword by Admiral of the Fleet the Earl of Cork and Orrery, who claims the author as an old shipmate and makes some very complimentary remarks about the book, which I humbly endorse.

Each of the twenty-eight plates proper in the book consists of a reproduction of a watercolour (numbers 27 and 28 are actually two separate plates each) mounted on brown coloured paper on the right-hand pages. Facing each plate is a page of letterpress describing the ship or ships depicted and giving some details of their history and of that of other ships of the class. There are also notes on the introduction of new

weapons, equipment and fittings, including the dates of their being introduced, incorporated in the description of the ships to which they apply or which first carried them. Between each plate and the next are blank pages.

The scope of the illustrations can be judged by the fact that the first is of one of King Alfred's galleys and the last includes an M.T.B. and the *Guardian*. In between come pictures of representative ships of every period from Henry III's reign onwards, including such well-known vessels as *The Great Harry*, the *Revenge*, the *Sovereign of the Seas*, the *Victory*, the *Warrior*, the *Benbow*, the *Dreadnought*, and of the present day the *Queen Elizabeth*, *Nelson* and *Hood*. Some of these plates of individual ships are used as a means of illustrating other warships of the same period, the latter being drawn in in the distance, or, in the case of light craft, in the foreground.

Following these come four plates showing respectively the evolution of the cruiser, the destroyer, the submarine and the aircraft carrier. Each of these plates consists of a series of small drawings of typical ships of various dates of the type of ship in question, the cruiser plate starting with a frigate of 1750. There is a minor slip on the destroyer plate which dates the *Rowena* class as 1912, whereas this class did not enter the Service until 1916 or 1917.

The last two plates, the two double ones referred to above, illustrate the fleet auxiliaries, and practically every type of auxiliary and minor warship is there, including such ships as the *Bacchus* and *Kilmun*—the latter being an auxiliary which I would hazard a guess many naval officers would have difficulty in placing off-hand.

Before a glossary of seamanship terms used, and an index of names of ships dealt with, come two pages of silhouettes of the evolution of each class of ship. These are complementary to the plates proper and more or less cover the same ground, but they are shadowy and indefinite and would improve by being reproduced in the conventional manner as solid black blocks.

The letterpress is claimed by the author to be accurate and has been checked by the late Mr. G. S. Laird Clowes. I think this is a fair claim since the only minor errors I noticed were the 1885 *Benbow's* 16·25 inch gun, which is stated to have been 100 tons, whereas it was 110; the *St. Vincent* class, which are stated to have had a secondary armament of 12-pdrs., whereas this class had 4-inch guns; and the comment that torpedo-net defence was discontinued in the *Queen Elizabeth* class, whereas the *Iron Dukes* were the first ships not to have it. There are also minor errors in the details of modern ships which may be owing to lack of published information under the secrecy regulations. At the bottom of

the page describing the *Iron Duke* class is a footnote giving a story of how the name came to be adopted: to distinguish an ironclad called *The Duke* from her wooden contemporaries. Attractive though the story is it won't bear examination for two reasons: firstly because no ironclad called *The Duke* existed at any time when such confusion was possible; and secondly because the Duke of Wellington was known as the "Iron Duke" many years before the advent of ironclads.

Each page is headed with the date in the top right-hand corner and the name of the King or Queen in whose reign the ship was serving in the top left-hand one. Below the ship's name come her tonnage, armament, complement, etc., set out in a manner somewhat similar to "Jane's Fighting Ships". Then follows the description of the inception of the ship, the developments compared to her predecessors incorporated in her, and any other novel features. Where applicable, incidents from her history and that of her sisters are given, and in certain cases footnotes are added drawing attention to any unusual happening or fact in connection with any of the class.

It may be thought that this standard arrangement of each page of letterpress tends to make the book rather like a tabulated work of reference; but the information recorded is so varied that this is not the case, and there are several features included which break the symmetry of the arrangement, of which a very good example is three verses on the subject of cruisers quoted from Rudyard Kipling's "The Five Nations" printed on an extra page inserted after the evolution of the cruiser.

This book is of the type that makes a good present to anybody who appreciates attractive pictures and has the added allurement of containing a great deal of information about the Navy. It is, however, in my opinion, rather expensive considering its general lay-out and the standard of reproduction of the watercolours.

C. C. H. H.

THE NATIONAL DEFENCE SERIES.

Published by William Hodge & Co., Ltd. Each volume 2s. 6d.

THIS series consists of three small monographs, of which the volume on "The Navy", by Admiral Richmond, was reviewed in the February number; of the other two, "The Royal Air Force" is reviewed below, while that on "The Army" has not yet appeared.

The series is intended, according to the particulars on the dust sheets, to make the average citizen aware of the object and composition of the three Services comprising the defence of his country. On the grounds that it is a subject on which the average citizen is very ignorant, it is rightly pointed out that it is one which should form part of the education of every member of the rising generation.

I am sorry that this series does not seem to have been advertised or noticed to the extent it deserves. The books would fulfil their purpose admirably if only the average citizen could be induced to read them. Unfortunately many of those who need the information do not do that sort of thing. Those of us who belong to libraries such as Boots' might put these books on our lists, even if we have read them elsewhere, so as to get them on the shelves of our local branch. But with a modest price of half-a-crown for each and an average of only 120 small pages to read there is no excuse for our politicians or those holding responsible positions in civil life if they miss the chance of obtaining knowledge which it is their duty to have and which they too often lack.

Although ostensibly intended for the layman this series is of value to any one in the Services; more particularly the volumes which deal with the Services other than his own, to remind him how the work of each arm in its own sphere cannot be fully effective unless it is co-ordinated with that of the others in one common strategical plan. As Admiral Richmond says in the opening paragraph of the naval volume:—"Defence is achieved by the combination of all arms, its problem is a problem of combination throughout—combination of the nations of the Empire concerned, and of the three fighting arms which constitute the defence forces of each."

One could wish, since the whole community nowadays has a part to play in any war, that yet another volume could be added to the series,

to deal on the same lines with the many non-combatant services and interests which complete the fabric of national defence. Who could write such a book is a question, but even a mere cataloguing of the multitude of problems or duties which have to be faced by the Government or by the humblest citizen would be of value.

"THE ROYAL AIR FORCE."

By AIR VICE-MARSHAL E. L. GOSSAGE, C.B., C.V.O., D.S.O., M.C.

This volume is of special interest as giving the views of a serving and senior officer of the R.A.F. on air warfare and the functions of that Service.

Each of its four parts is developed from one of a series of lectures delivered by the author under the auspices of the Board of Military Studies of the University of London. They deal respectively with the following subjects: Development of Air Power, Air Power in Conjunction with Naval and Military Operations and Coast Defence, Air Power in Imperial Defence, and Home Defence.

Of these subjects the ones of most direct interest from a naval point of view are those of Air Power in Conjunction with Naval Operations and in Coast Defence; which concern the Navy's own task. But it will be of no use trying to feed the nation if it has already been killed from the air; and it is therefore also of concern to see how the sister Service intends to prevent the latter happening.

In the discussion of the development of Air Power the effects of the distinctive conditions of Air Warfare are stated thus:—

> "(*a*) That evasion is relatively simple and interception of one aircraft by another is difficult, as contact has to be gained in the vertical as well as in the horizontal plane.
>
> "(*b*) Even if contact is gained, aircraft, although capable of hitting hard, possess no actual stopping power, as has a defensive position, for instance, in land warfare. Consequently, a force of bomber aircraft, although engaged by fighters and suffering some casualties, may still be able to keep its course and reach and bomb its objective without incurring decisive loss."

The conclusion drawn is that "air defence, using defence in its literal sense, is unreliable, and absolute security against air bombardment is not practicable. Consequently, we must rely on the offensive as our principal means of defending ourselves."

As to the form which this offensive should take :—

> " Because it is extremely difficult, if not impossible, to destroy or neutralize the enemy's air forces by means of direct attack upon them either in the air or on the ground, we can, and on strategical grounds we should, direct our main air efforts against vital objectives in the enemy country." These targets " may be the centres of production and distribution on which the enemy's armament supplies depend [or] . . . the various services and general amenities upon which the population of large towns depend for their existence . . .";

but in view of the experience in the war that when an objective like Woolwich Arsenal was attacked, work ceased in a radius of ten miles :—

> Indiscriminate attacks on the civil population " would probably prove wasteful and definitely harmful in the eyes of world opinion . . . Since properly directed attacks on suitably defined objectives [would] automatically produce the paralysis and demoralization of the community it would seem that they are advantageous every time, and indiscriminate attacks are uneconomical and to be deprecated ".

It is noted, however, that naval and military objectives may at times become the most important. As examples are given the cases when an enemy may feel it essential to attack our mobilization centres and communications to interfere with the despatch of a military force to the Continent, or when a recurrence of the submarine situation of 1917 might require the diversion of our own air effort against naval objectives and especially submarine bases. But these constitute a " diversion from the main task of reducing the enemy's power of resistance . . . . When the danger has been disposed of or disappears, concentration on the main objectives should be resumed."

Yet,

> " It must not be inferred that fighting in the air is regarded as improbable. The most intense fighting is likely to take place, as the enemy is certain to resist our attacks on the morale of his people, but we shall hope to assert our superiority over the enemy air force through steadfastly pursuing our aim."

When considering which objectives should be attacked the author suggests that they should be " targets of such importance . . . . that the enemy is compelled to take measures for their defence, and will have to devote to the defensive in increasing numbers aircraft which should be used for the offensive ". After his insistence on the importance of concentrating on the offensive this seems at first inconsistent. Why should the enemy abandon what is professed to be the most certain method of achieving victory, to turn to a defence which is supposed to be comparatively futile ? But there seems after all to be something to be said against this acceptance of futility, and the possibilities of defence turn out to be rosier than we are first led to expect :—

" The provision of strong air defensive measures cannot be ignored. Everything must be done that is reasonable and possible to prevent enemy bombers reaching their objectives and to minimise the effects caused by those which do succeed in getting through." " Attackers . . . can generally get past the defence if they want to, but efficient defensive measures will drive them higher and make the accuracy of their aim more difficult. . . . Losses will occur . . . which will tend to lower their morale. And if the defence achieves more than this, there is a strong chance of attacks being prevented altogether. Moreover there are always weak-spirited individuals in every force ready to accept the excuse to turn back . . . or to drop their bombs without aiming them . . ."

Which is rather comforting, coming as it does from the Commander of Number 11 Fighter Group of the Home Command, which is responsible for the defence of London. For I cannot find any reasons put forward for anticipating that our offensive efforts against an enemy's vital and industrial centres will be more successful than theirs against ours, when our centres are within easier reach of an opponent's air force than their centres are of ours, and when the necessity for enlisting the Nation's, and Empire's, support at the opening of a war under our system of government makes it unlikely that we shall get in first blow.

Defence alone, as the author points out,

" would absolve the enemy from any expenditure upon the defence of his own territory and thereby enable him to put his entire effort into the offensive against us."

" Hence . . . provision must be made for both offence and defence, and this has been effected . . . by the provision of an offensive element . . . and a defensive element," the " Bomber Command " and the " Fighter Command " respectively.

Since " we must rely upon the offensive in air warfare . . . . an air force . . . . must consist, primarily, of a force of bomber squadrons ". In two places the author gives this " offensive element as about two-thirds as strong as the defensive element ". An examination of the " Air Force List " suggests that " two-thirds stronger " or " two-thirds as strong again " is what is intended.

The outstanding feature of all this is that contact with the enemy's forces, and even with his air force, is not sought for :—

" The Air Force can, owing to the three-dimensional conditions in which it operates, strike directly at the morale of the enemy nation without having first defeated the enemy air force."

The author remarks that this capacity for striking directly at the morale of an enemy without first defeating the enemy air force

" may perhaps appear surprising, and although a first-class war has yet to prove that the contention is right, there seems little doubt that the claim made will be realized when the time comes."

The outstanding characteristics of air warfare which produce this composition and employment of our Air Force are described as :—

> " The vastness of the medium . . . limited only by height and distance to which aircraft can fly . . . No focal areas or narrow channels as . . . on the sea . . . No physical barriers or rigid lines of communications as . . . in land warfare. The three dimensions in which aircraft operate confer upon them powers of penetration and evasion which the other two arms do not possess. One aircraft . . . can . . . go round, above or below any other aircraft trying to stop it . . . Winds which accelerate movement and clouds and darkness which afford concealment, and aircraft are notoriously difficult to see from one another in the air. A further essential point, though one not generally realized, is that one aircraft cannot hear another in the air."

I wonder if we are inclined to exaggerate this three-dimensional business. The extra dimension, after all, extends only to six miles or so, and the vastness lies in the other two dimensions. Even if in these dimensions the water area is only about 70 per cent. of the air area of the world, a naval unit is able to utilize a far greater area of its element than is an aerial one. While as a set off to the extra dimension is the unique limitation of air forces that they can only remain in their own element when in motion ; between their brief spasms of activity they have to resort to one of the other elements, and only to very specially prepared positions of these ; and while there their power is only potential.

The preceding description of the conditions of air warfare stresses their dissimilarity from those of sea or land warfare. Instead of being impressed with the uniqueness of these conditions and the resulting problems, I am struck rather with the number of points they have in common with some of our own, especially those connected with the protection of sea-borne trade against surface raiders or submarines, and coastal raids by naval squadrons, of which the *Emden* and *Moëwe*, or Hipper and the Hartlepool raid, afforded examples. We have the vastness of the medium, the ease of evasion, the absence of rigid lines of communication, the fogs, darkness and other atmospheric screens, the absence of fixed defensive positions and even to some extent the lack of stopping power against a determined opponent; while the physical barrier of a coast-line is but the counterpart of what the hard earth is to an aeroplane in flight. The emphasis on the powers of flexibility and mobility for air forces, in truth, comes from comparisons with land forces; they are only intensifications of similar distinctive qualities already possessed at sea. In my capacity of an " average and ignorant citizen " so far as air warfare is concerned, this book leaves me much better informed as to the way in which our Air Force intends to fight, but still wondering why, in what seems so very similar a strategic

situation, the solution of the problem should be so opposite to that taught by long experience and reasoning for the other forces. Why, above all, should the one solution which we long to adopt in our case, of attacking the enemy in his bases, but usually have to reject because we cannot reach them, be here ruled out as worthless when they can be reached? If attacks on important centres are so certain of at least partial success, why not aerodromes? One would have thought that the opportunities given by the landing of returning air-raiders would have been superb. Balloon barrages for aerodromes seem impossible; guns would be hampered by the presence of their own aircraft, and the landing of the latter would verge on being compulsory with depleted fuel; furthermore, the enemy's operating aerodromes must be within our range.

The author does admit in one place " that it may, on occasions, be necessary to take measures to defeat the enemy's air force by attacking its aerodromes and bases of supply as a preliminary to attack upon the morale of the nation". But his wording evidently implies that it is not considered desirable.[1] Yet if one can destroy, or obtain superiority over, the enemy's forces the resulting command in the air must leave you free to do what you like with his civil morale or anything else you wish, and your own civil morale is safe once and for all. I cannot help distrusting any theories which hope to evade this necessity; they have always proved illusory.

Turning to the subject of Air Power in Conjunction with Naval Operations, the author notes that as his knowledge of naval operations is mostly theoretical, and that as military operations in the last war gave more examples of the potentialities of Air Power he devotes more attention to the latter; the examination of the naval subject in consequence does not go very deeply.

> " The Coastal Command . . . controls a number of potential bomber squadrons . . . [It] includes flying-boat and general reconnaissance and torpedo bomber squadrons, but being primarily trained in reconnaissance work over the sea . . . [and] being highly specialised, [they] are only to a certain extent suitable for employment in the general air offensive." " They, as circumstances permit, will be available to assist in naval operations."

This at any rate seems to anticipate a mainly naval use, but, as will be noticed later, rather in the way of spectacular engagements than in humdrum daily routine. What control the naval commander will have is not mentioned, but it may be noted that air units allotted to

[1] But *cf.* Sir Thomas Inskip in the debate on Defence in the House of Commons on 7th March, 1938:—"The role of the fighters . . . would be greatly relieved if the raiders could be smothered in their lair. If they attacked them in their depôts and aerodromes, and the places from which they started, they would relieve to that extent . . . and so supplement the coast defence in preventing the bombers getting through.

participate in military operations, above the specialized co-operation units, " will be placed in strict subordination to the military commander and under his direct orders for operations ", while in home defence all units and civilian elements are under the supreme operational control of the Air Officer Commanding-in-Chief, Fighter Command, since " maximum efficiency can only be obtained from all these defence components when they are united in a single organization ".

The author considers, and assumes, that the opening act of a war will be the " intense struggle in the air ". " A naval war with air force support " is presumably to come later. One form of suggested support in this is bombing the enemy fleet in harbour to destroy it or to force it out to a fleet action. (Surely tackling an aerodrome would be child's play in comparison to this.) Using land-based aircraft for this the attack can be " heavier and more sustained ", and the fleet aircraft will be left " available to the naval commander to co-operate closely with the fleet when the hoped-for naval battle takes place ". It is noted that in an Eastern theatre—and presumably any distant one—the naval aircraft would have to do their own bombing of bases.

With the enemy fleet at sea, the air co-operation suggested as being required is reconnaissance, spotting, submarine detection, and bombing and torpedo-bombing participation in the operations. The three first will presumably have to be performed by the fleet's aircraft. The opinion is expressed that bombing attacks " as is the case with bombing land operations, require careful timing if the psychological moment for action is not to be lost ". It seems doubtful if the comparison holds good. In a land battle it may be possible to judge the appropriate moment in the development of an offensive when intervention will most effectually allow the attack to develop further with success; but in a naval battle, when once the action has opened there is no regular progressive development of this nature. There is no pre-arranged zero hour and naval battles have hitherto, as a rule, suddenly happened. Everything is " all out " at once and there is no fixed position to hold an enemy to its defence; contact may be lost at any moment. The appropriate time for air intervention would seem to be as soon as possible. At Jutland there was roughly an hour and a half's warning of a battle and less than two hours of actual battle. But, with air reconnaissance now available to both sides, they may each, given favourable weather conditions, get more warning of each other's presence. The stronger fleet should have less difficulty in discovering and locating an inferior fleet, but the inferior fleet should have a far better chance of evading contact and bolting for safety. This, though it is not noticed in the book, is where air co-operation might be very effective in " fixing " the reluctant enemy.

Other suggested forms of intervention in a naval battle are to harass an enemy's retreat if things go well for us, or to relieve the pressure of a pursuit in the opposite event.

The author does not wish to enter into the aeroplane *versus* battleship controversy, but as there " seems little doubt that bombers can damage battleships seriously enough to influence the plans of a naval commander . . . . the presence of bomber aircraft in fleet action . . . . would seem to be justified". " About the effect of bombs upon unprotected and valuable ships, like aircraft carriers and cruisers, there is no doubt", but he does not examine the chances of hitting them or of their hitting back. The question here seems to be whether it would pay. The bag of an aircraft carrier would be very valuable, but the loss of a cruiser or two when once battle has been joined would not affect the issue. If the coastal command aircraft have to be counted on for subsequent use in home defence their chance of losses would probably make it unjustifiable.

Another suggested form of co-operation is in blockading an enemy country, when aircraft will enable the blockade to " be extended to the destruction of shipping in ports and to the dislocation of [inland] communications ". We, unfortunately, seem the most likely to suffer from the result of this power of aircraft; but, curiously, the question of air co-operation in the protection of sea-borne trade in home waters receives no attention beyond the inclusion of assistance in maintaining sea communications as a function of the R.A.F., and a mention that food ships approaching ports could be attacked. This is perhaps the most important duty which air co-operating units could perform. Whether aircraft can serve a useful part in this, and what form it should take—escort, patrol to cover a continuous flow of unrestricted traffic, or a screening reconnaissance to cover periodical grouped sailings—seem questions that should be considered under the heading of co-operation with the Navy.

Another important subject which is omitted is the possible use of flying-boats in co-operation with naval units protecting trade on the high seas.

A short section of the chapter on Co-operation with the sister arms deals with Coast Defence at home and overseas, and compares " mobile defence by aircraft, preferably in conjunction with naval forces " with " static defence " by troops and guns at certain places, to the advantage of the former. Although this is perhaps correct, static defences are indispensable at vital points; the very mobility that allows of rapid concentration increases the possibility that mobile defences when wanted may be elsewhere engaged on other pressing duties.

The chapter on Imperial Defence is interesting but disappointing, since it is confined almost entirely to what may be termed domestic work—Aden, Iraq, India, etc.—rather than with the role of R.A.F. or Dominion air units in war.

By confining my review to the portions which professionally concern the naval officer and especially by dwelling on those points which seem disputable, I have not given a fair picture of an excellent and useful book, which is primarily aimed at the lay reader.

Air Vice-Marshal Gossage concludes with a strong plea for proper co-operation between the three Services, and writes throughout in a spirit of such co-operation.

The book worthily earns its place on the cabin bookshelf alongside its naval companion of this series.

B. H. S.

"GRAN CHACO ADVENTURE."

THE ADVENTURES OF A BOLIVIAN AIR CABALLERO.

By T. WEWEGE-SMITH. (Hutchinson. 12s. 6d.)

THIS book is the story of a rolling stone, and, like the proverbial stone, no moss has grown during the thirty years of the author's life. He was born in Manchester in 1908, of South African parents, and is evidently one of those people born under the curse of Ishmael who find their fortunes in strange places doing strange things.

If for no other reason than learning something about the way the "other half" live, this book is worth reading; for in these days of well-ordered routine lives it is good to recapture something of what must be the same spirit that sent Drake round the Horn, Captain Scott to the South Pole and Rhodes to Africa.

The first few chapters are, rather unfortunately, devoted to the narration of a number of amorous experiences which, at the most, could only be of interest to the author. At the age of about 25 he joined the French Foreign Legion, and his description of life in that Service is interesting; for the author, though always frank, does not seem addicted to the habit of drawing a long bow, and his descriptions are good. But as he says, "All my life has been littered with half-finished jobs, and I cannot imagine myself settling down indefinitely to any new one." We therefore find him obtaining his discharge from the Legion and returning to England.

He found life at home unsatisfactory and determined to join up with either side in the only war that was then in progress—that between Bolivia and Paraguay, over the disputed territories of Gran Chaco. Needless to say he had no patriotic leaning to either side; he merely wanted to fly, and he wanted to "bomb". It appears that his slight leanings towards Bolivia were decided by the spin of a coin. The author's efforts to thwart the passport office and Foreign Enlistment Act are amusing; but he overcame these administrative difficulties and, with the aid of certain influential Bolivian friends in England, finally managed to present himself at La Paz, the capital of Bolivia, as a volunteer for the Bolivian Air Service.

Again he had his troubles, for foreigners were not always so welcome, and at that particular time their shares were somewhat low due to the delinquence of a certain foreign general in the Bolivian service who had suffered a severe defeat. But the wheel of fortune was good to him, and on the 13th of September, 1934, he become a lieutenant—a teniente—in the Bolivian Air Force.

The rest of the book is devoted to the personal narrative of the war in the Gran Chaco as the author saw it. The heat, the flies, the thirst, the shortage of war materials, description of bombing raids, of air duels, of amours and duels and parties, all follow, and intermingle with each other to make a vivid story of a full nine months. The reader gets a very good idea of the normal outlook on life prevailing in Latin South America, and the author seems to confirm Kipling's line that—" single men in barracks don't grow into plaster saints ".

Recent events in China and Spain have perhaps supplied a good deal of material upon which we may begin to form an opinion on that burning question, the real effect of aircraft in modern war. Nevertheless there are many incidents in this book which deserve notice, and the following expressions of opinion are of interest.

> " We were doing all our bombing at that time from at least 2,000 metres—which is rather more than 6,000 feet. Even our fighters did not go lower than 1,500 metres. It was far too dangerous to attempt anything like the converging bombing attacks which I had so often seen practised when I was with the Auxiliary Air Force at home. Both armies in the Chaco were heavily equipped with Vickers machine guns, Schmeizer automatics and Erlinkons, Swiss quick-firers of big calibre. We were told, and I think it was probably true on that front at the time, that the front line troops had one automatic, sub-machine gun or Vickers, to every ten men. It was terrific. Every time an observation 'plane or fighter took any liberties, it was an odds-on chance that it would get back with a hole or two if it got back at all. Our own R.A.F., it seemed to me, must be wasting its time in practising low altitude dive bombing. That kind of attack always means presenting a fairly steady target to the enemy, and, as troops in any future war will be lavishly equipped with " Subs " and Vickers, or even better anti-aircraft weapons, I am certain it won't pay."

And again :—

> " This double fatality strengthened my belief that low altitude dive bombing will be economically impossible in any new war. The eternal race between attack and defence seldom shows a dead-heat in the actual running and, unless some new invention is successfully adopted in the near future, modern defence against low flying leads modern attack by several lengths. I fancy, however, that high altitude bombing is not only more accurate than it used to be, but also less vulnerable to anti-aircraft fire."

The above opinion would seem to run somewhat counter to our present beliefs; but it must be remembered that the deductions were

drawn from air forces operating with small numbers of obsolescent aircraft.

In most writings on war now we read far more about the effect of the bombs and the point of view of those bombed than we do of the feelings and experience of those who do the work. For obvious reasons there are not many people who have this experience. So the following extract from the author may be worth quoting :—

> " When we were not drinking or gambling or indulging in one of our everlasting sing-songs, we constantly harked back to the question of bombing civilian towns far behind the enemy lines. All of us were longing for the Condors to arrive, and all of us, I think, would have been glad to use them against defenceless Paraguayan towns.
>
> " It is rather difficult to recapture that particular attitude of mind. I am no sentimentalist, but I read of the ruthless bombardment of Guernica with indignation. Nevertheless I *still* feel that in modern war it is quite ridiculous to swallow this brutality and strain at that. All war—and particularly all war in the air—is inhuman and bestial and barbaric, but I do not see how one can logically draw the line between one massacre and another ; this outrage or that.
>
> " Of one thing I am quite certain ; the Bolivians would have bombed Asuncion but for the League of Nations. They were afraid to forfeit the good will of ' civilization '."

Also :—

> " This may be quite unimportant as a personal record of an ' unimportant ' South American war. I do not think it is so easily to be ignored as a clue to the psychology of modern fighting men in general and modern flying men in particular."

For the reason that the author gives above, if no other, this book is well worth reading.

Some remarks on the subject of the League of Nations which the author makes seem to ring a note of practical reality :

> " As to the juridical rights and wrongs of this quarrel (between Bolivia and Paraguay) which had lasted on and off for over a century, I do not pretend to offer an opinion. The ownership of the disputed territory—that is to say the triangular wedge between the rivers Paraguay and Pilcomayo—may have been determined by the original Spanish invaders of South America : but even that is a matter of dispute, for Bolivia and Paraguay were both armed with documents and title deeds of conflicting and dubious merit. It is my own opinion, for what it is worth, that the war would not have been given more than a third of the publicity it actually achieved in the world's Press had it not been for the fact that both countries were members of the League of Nations. The Old World and the New chose to consider this conflict as an important test of the potentialities of the League of Nations in determining world peace."
>
> " In this connection I think it is at least possible that the war would have ended sooner than it did but for the League of Nations, which was for

ever trying to end it. There is certainly no doubt that in its closing months, when we were being driven back almost to the foot of the mountains, the authorities in La Paz, if not the High Command in the field, were stiffened to a more stubborn resistance by the knowledge that the League had finally pronounced Paraguay the aggressor."

Later :—

" There can be little doubt that, but for the League of Nations and the attitude of ' Civilization '—Oh, blessed word !—the Argentinians would have made common cause with the ' Pilas ' and Bolivia would have lost the war."

Altogether this is a very readable book about a little known war, and would be read with special interest by those whose duty it may be to fight in the air when the next war comes.

G. A. F.

"SEVERN'S SAGA."

By E. KEBLE CHATTERTON. (Hurst and Blackett. 18s.)

THE *Severn* was one of the three monitors completed in 1914 for the Brazilian Government and taken over by the Admiralty at the commencement of the Great War. This book gives an account of her career and the part she played in making naval history.

The first chapter describes the commissioning of the monitors and the sensation caused by the appearance of these unusual looking ships, with their low freeboard and broad beam. A desperate fight against strong winds and tide in an attempt to round the Smalls is vividly described, and gives some idea of the difficulty of navigating these unwieldy craft. Their inability to keep a steady course and the fact that they were so unlike any other vessels then in the Service nearly got them into trouble very early in their career; it was only Providence that prevented them being fired on by our own shore batteries when on their way into Dover.

On the 31st of August, 1914, the monitors were ordered to Ostend to assist in the re-embarkation of the Marine Brigade, but on their arrival, as their services were not required, they were ordered to Sheerness. After a short period of patrol work in the estuary of the Thames, the *Severn,* and her sister ships, the *Mersey* and *Humber,* were sent to the Belgian coast to assist in the bombardment of the enemy. In one day alone the *Severn* and *Mersey* together expended three hundred rounds of six-inch shell, doing tremendous damage. In the early phases of the bombardment they had little respite for many a day, and the *Severn's* experiences in the mine-fields and her narrow escape from U-boats make a thrilling story.

After undergoing a short refit in Chatham—during which time their six-inch guns, which had been badly scored, were replaced by new ones —we find the *Severn* in the North Sea weathering, or attempting to weather, the November gales. The author gives a description of an occasion when the three monitors left Lowestoft Roads and proceeded to sea through the Pakefield Gat. He says: "Heavy seas broke over each monitor forward above the gun and even so high as the bridge . . . heading into this boiling white mass it took the ships an hour to do less than a mile."

Chapter VI brings us to the period when the monitors prepared for a " mystery voyage ". They were " going foreign " across the ocean and not under their own steam, but in tow.

What preparations! The strengthening of the ships below, the building of substantial breakwaters on the fore deck, the removal of boats and light guns, and finally the battening down of hatches, left the monitors resembling three plain steel hulks. All officers and men were accommodated in the Royal Mail steamship *Trent,* which was to act as mother ship and depot for the squadron.

Speculation as to whither the squadron was bound was rife; almost every place was mentioned, but it eventually arrived at Malta; and after some weeks' stay, the *Severn* and *Mersey* put to sea eastward bound, leaving the *Humber* to go north.

Chapters VII, VIII, IX, are mainly concerned with the *Königsberg;* her bold attack on the *Pegasus* in Zanzibar harbour, and her escape up the Rufiji River. Thrilling accounts are given of the sinking of the *Newbridge* to block the main entrance of the river, and of the German attempt to relieve the *Königsberg* by sending ammunition and supplies in the steamer *Kromborg.* This ship succeeded in escaping the 10th Cruiser Squadron and running the East African blockade.

The towage of the *Severn* and *Mersey* through the Suez Canal, down the Red Sea, and into the more open waters of the Indian Ocean, was no small undertaking; and this period of the *Severn's* career was one of great anxiety to her commanding officer, who was in charge of the squadron. The tussle against wind and current, the scattering of the squadron in fog, the discovery of leaks in the *Severn,* and the grounding of one of the tugs, which nearly led to the loss of the *Mersey,* are fully recorded in Chapters X and XI, and they give the reader a vivid picture of the great difficulties experienced. The author writes: " This voyage, apart from any operations performed by monitors off the Belgian coast or any other coast, will long be regarded as notable in naval annals and illuminative as regards future undertakings ".

On the arrival of the monitors at Tirene Bay, 120 miles south of Zanzibar and near the mouths of the Rufiji River, the work of dismantling heavy timber baulks, which had been so necessary for the voyage out, and the refitting of the ships was commenced, and went ahead at a great pace in preparation for the attack on the *Königsberg.*

> " For be it remembered this matter of refitting was carried out only 20 miles from the enemy in an open roadstead; almost it seemed to invite the *Königsberg* forth from her lair and perform a quick desolation, wiping out the *Severn* and *Mersey* with the same rapidity that she mortally wounded *Pegasus.* Thus every hour was suspenseful, eyes were frequently turned

towards the direction of the Rufiji mouths, but what might happen between sunset and dawn was always a riddle."

During this period the *Königsberg's* officers were not lacking in enterprise; for it is revealed in Chapter XIII that they planned to destroy the British ships under cover of night. A couple of dug-outs were lashed together as a torpedo carrier, and a steam launch was fitted with dropping gear.

" On a certain night she chose her tide, stole forth across the intervening ten miles of sea, was not observed, crept towards Tirene Bay . . . but alas! for her, the best laid plans sometimes go wrong by sheer coincidence: this happened to be one of those rare occasions when the big cruiser had weighed anchor and got under way."

The final preparations being completed, the eventful day for the attack on the *Königsberg* arrived. At the break of dawn on the 6th of July, the two monitors passed into the river and a terrific bombardment of coast defences ensued. They anchored in pre-arranged positions, and the first duel with the *Königsberg* commenced, aeroplanes spotting fall of shot. After ten hours' almost continuous engagement the monitors retired, successfully running the gauntlet for the second time. This action, in which the monitors narrowly escaped destruction, and the subsequent action on the 11th of July, are vividly described in detail in Chapters XIV and XV.

The *Severn,* now needing structural attention, proceeded to Zanzibar for refit. This, however, was to be of brief duration, for within five weeks she was again in action. The scene was Tanga, a port of some importance to the Germans and from which a railway communicated with the interior. The *Markgraf,* of the German East Africa Line, was known to be in the port, and a second supply ship was expected to arrive shortly, and an expedition was planned to destroy these ships. The attack took place at daylight on the 19th of August, and an attempt to board the *Markgraf* by means of scaling ladders, under cover of the *Severn's* guns, was gallantly made, but the enemy's concentrated fire forced the boarding party to retire. The *Severn* had been heavily engaged with shore batteries, but now turned her attention to the *Markgraf* and, having destroyed her, left the Bay.

In Chapters XII-XX accounts are given of further expeditions in the Rufiji delta, and a second attack on Tanga, when the *Severn* found herself once more up against the *Königsberg's* guns, which had been salved and transported to different parts of the coast. In the last of these chapters we also read of the arrival of a German store ship in Sudi Bay, and a stirring account of a gallant dash into the Bay against strong defences including two of the *Königsberg's* 4.1-inch guns. The

members of this expedition suffered heavily and displayed the greatest heroism. Although by this time the *Severn* was showing signs of wear and tear in both engines and hull and a refit was badly needed, she was still required for further operations, and we see her next taking part in the occupation of Bagamoyo and Dar-es-Salaam. This, however, was to be her last active service; for some time at the end of 1916 she received orders to proceed to Durban for refit and the crew at last were to have a richly deserved respite.

Much is crowded into Chapter XXIII, the last in the book: the seizure of the coastal towns in the southern area, the capture of many prisoners and the surrender of Captain Looff of the *Königsberg,* and also an account of the tragic loss of that fine sailor and gallant gentleman, Commander the Hon. R. O. B. Bridgeman, in a reconnaissance flight.

The author says: " Thus by the first week in December, 1917, the whole of German East Africa had been conquered, and hostilities ceased." This statement is, however, not wholly correct; for although in November, 1917, the enemy crossed the Ruvuma River (the boundary between German and Portuguese East Africa) hostilities continued on Portuguese territory. The enemy again crossed into German East Africa in September, 1918, and from thence into Rhodesia, where they were when the armistice was signed on the 11th of November. Only a few lines are given in this chapter to the subsequent career of the *Severn* after leaving East Africa in April, 1918. She went back to the Mediterranean and up the Danube and finally returned to England in 1919 to be broken up. The *Severn* certainly achieved fame, and her history is recorded for all time.

A very good book, full of interest and adventure, and well illustrated with original photographs and maps. The author has been fortunate in obtaining first-hand accounts from eye-witnesses, both British and German, which add greatly to the historical value of the book. It is well worth reading.

L. G. G.

"BRITISH CONSUL".

By ERNEST HAMBLOCH. (Harrap. 10s. 6d.)

THE author was in the British consular service for a matter of thirty years or so, most of them spent in Brazil, Switzerland and the Balkans. He says that he wrote this book of memoirs because he realized that, like an archdeacon whose duties are described as archidiaconal, a consul is said to discharge consular duties, and the average person has little conception of what these duties are. I can only say, after reading the book: touché! And I thought I had a fairly good idea of many of the activities of a consul.

There is, however, rather more to the book than mere memoirs. There is a definite attempt to indicate some of the faults of Englishmen in foreign countries, the most important being that exemplified by the last sentence in the book :—

"The illusion is that we are too proud to want to be understood."

Another is the fact that, as a nation, we are not good at learning other people's languages; so that the Englishman abroad, apart from being at a disadvantage, is often rather avoided as being too proud to try and speak the language of the country he is living in. A further language trouble is that so few Englishmen speak their own tongue really well; consequently, the English language when heard abroad is often badly pronounced and spoilt by dialect. With Frenchmen abroad the reverse is the case, so that French cultural ideas are being disseminated everywhere, but never English ones—assuming that there are such thing

The book opens with a description of Zurich thirty years ago, which serves as a background for the author, whose position at Zurich is never made clear, to introduce various features of the consular service. He explains the difference between the career consuls, i.e., members of the consular service, and the honorary consuls, who are local men of standing, appointed to act as consuls or vice-consuls in the places in which they live. They are not unnaturally frequently foreigners. He also goes fairly deeply into the consular service's responsibilities in the commercial sphere,

and describes how slowly, compared to Germany, we have built up a system for assisting our foreign trade, and how curiously illogical some of the steps were. One, for instance, was the control of the commercial activities of consuls passing from the Foreign Office to " a hybrid department, the paternity of which is denied by both the Foreign Office and the Board of Trade, which are jointly responsible for it".

I like Sir Henry Wotton's definition of an ambassador, " an honest man sent to lie abroad for the good of his country", which comes in this part about Zurich ; but beyond some rather amusing stories and one or two remarks of that kind there is not much more to it.

The interview for consular service candidates appears to have been not unlike that for naval ones, and is amusingly described. Having passed it, and done a short spell at the Foreign Office learning the ropes, the author was sent to Belgrade, in 1908, to relieve the vice-consul who was going on leave.

By way of putting his reader in the picture Mr. Hambloch gives a concise but complete review of the Balkan situation at that time, particularly stressing the influence of Germany in pursuing her policy of " Drang nach Osten " (the push to the East). It is an unpleasant thought that the recent overrunning of Austria may well be the recrudescence of this policy and not merely a further manifestation of Nazi policy *per se*.

While in Belgrade he has much to say of Serbia and its society, and makes many shrewd comments about the various personalities. The British Minister, Sir Beethom Whitehead, evidently made a great impression by his genuineness, and the author comments " Genuineness does not flourish in diplomatic circles. Diplomatists, even those who start honest, often finish vain." There is also an unpleasant story of a Serbian officer who had taken part in the murder of King Alexander and Queen Draga and who carried in his pocket book a piece of the latter's skin as a memento.

Early in 1910 a change of appointment took place, and Mr. Hambloch was sent to Rio de Janeiro to relieve our Consul-General, Roger Casement, who wanted to go on leave. As he went out in a German ship he had plenty of opportunity of hearing views on " Der Tag " and on Germany's position in the world, particularly from the captain, who mistook him for a German owing to the fluency with which he spoke the language. How similar Hitler's policy is to Bismarck's in so far as his dealings in foreign affairs are concerned !

In Rio he found an indifferent consulate-general and a very strange man in Roger Casement. He describes the latter, who even then he felt

for various reasons was very probably earmarked as an agent by Germany, and sums him up by saying :—

> " As it was, he was the saddest of God's creatures : an Irishman without a sense of humour."[1]

Life in Rio in those days was evidently varied if not definitely unusual, and the author gives an account of many of the main occurrences during his term of office. These stories show up one point at once, that most of a consul's duties are connected with trade, and, in the case of a consul at a seaport, with ships and seamen as well. Mixed up with these stories of his normal duties are the accounts of a mutiny of the Brazilian fleet and of dealings with a Brazilian politician, Pinheiro Machado, which make entertaining reading, particularly a description of the latter's fortress-like house.

It was during his time here that the Navy first comes into the picture in the shape of two ships, the *Argyll* and the *Amethyst*, the first commanded by Cecil Lambert and the second by the present honorary editor of THE NAVAL REVIEW. Both evidently left lasting impressions and were welcome visitors to the port.

Visitors of a very different stamp were a murderer escaping from justice, although this was not known at the time, and a man who styled himself " Baron Jones". This latter individual had received his rank from the Portuguese government under false pretences. He had volunteered to write a refutation of a series of articles attacking the Government which had appeared in the Lisbon press signed by " an Englishman", and it was not till after he had won a wordy battle, and had been rewarded, that it was discovered that he was the author of the original letters as well.

In January, 1914, the author left Rio for Ragusa, and he starts this part of the book with an excellent thumbnail sketch of the Balkans from 1912–14. This practice of giving a brief synopsis of recent events is adopted with each new part of the book and is greatly to be praised. Much had happened since he left Belgrade. The Balkan wars had taken place and intrigue was the order of the day, which leads to many shrewd remarks, the gem in my opinion being :—

> " It is remarkable how many prominent people inimical to Italian and German interests come to a violent end."

As August approached the pace grew hotter; but there was still the rather ridiculous episode of the Prince of Wied in Albania to be played out, which called into being the international squadron off Durazzo in the summer. This Prussian prince, who had been put on the throne of

[1] Casement always called his office the Consulate General of Great Britain and Ireland, and rendered a separate report of Brazil's trade with his native country.—Hon. Editor.

Albania with the intention of stabilizing the situation there, only remained on his throne by sufferance and the support of the international squadron, while " the Albanian business had now degenerated into the hopeless inconsequence of a comic opera ".

In June Durazzo was forgotten with the murder of the Archduke Ferdinand. Mr. Hambloch was returning from leave in England at the time and took a gloomier, and in the event more accurate, view of the situation than most of the people he met on the journey. English ships were still at Durazzo, and in describing one or two incidents he takes the opportunity of praising naval officers in general more perhaps than we really deserve.

In recalling these few weeks before the war it is clear that he blames the Hungarian elements in the Austro-Hungarian Empire for forcing their easy-going Austrian partners to take the various steps that led up to its outbreak. His account of the views of the Croats are also most interesting, particularly as many of this unhappy race were arrested, and in many cases executed, in a sort of preventative clean up by the Austrians towards the end of July.

One of the troubles he experienced in common with some British newspaper correspondents who were out there was the inability to get any reliable information from the outside world, and he tells a delightful story of the Austrian prefect asking him, after he thought war had been declared against Great Britain, what was the correct procedure if a British squadron came into Ragusa !

On the 12th of August the author was recalled to Venice, war having been declared, and spent an unpleasant period assisting to repatriate unwilling British tourists from Italy. In November, 1914, he was sent to Bâle to replace an honorary vice-consul, and found himself faced with a situation which needed all his tact. Switzerland was violently neutral, if that is not a contradiction in terms, and the Bâle area being largely inhabited by German-Swiss was very pro-German. Consequently his duties, which very largely consisted in regulating and checking the import and export of contraband into Germany, in so far as that can be done in a neutral country, naturally earned him the opprobrium of many of the local inhabitants. While at this post, which he occupied till November, 1915, he made the acquaintance of all the devices developed to tighten up the blockade, of which the best known were the consular certificate system and the Black List. His comments on the latter are interesting. He considers it should have been a White List, on which only the names of firms whose integrity was proved should be allowed to appear, rather than, as it was, a list on which the names of all firms known to be, or suspected of, dealing with the enemy appeared. It is

also interesting that the French had no similar list of their own but used ours, and the Americans, when they entered the war, produced a far more formidable Black List than we had ever dreamt of !

In January, 1916, a further change of venue took place when the author returned to Rio, *via* London, as commercial attaché to our Embassy. This was a new post created partly in an endeavour to seize the opportunity, while German rivalry was less acute, of extending our trade in Brazil and partly because our Legation had been raised to an Embassy. Before turning to Brazil some very interesting comments on Roger Casement's end are given, including a letter from Sir William Haggard, who had been our Minister in Brazil while Casement was there.

While in London the author had several interviews at the Admiralty with old friends of his, and it is patent that he shared the Admiralty's views about the way supplies were allowed to slip through the blockade owing to Foreign Office regulations, or the lack of them. He also made the acquaintance of the Goat Club, which lends an intimate air to this chapter !

Rio he found unchanged as regards its general appearance, but the atmosphere was different. The Brazilians did not appreciate the real issues of the war. They saw and understood the reasons for Serbia, Russia, Austria and Germany participating, but they could not appreciate why Great Britain and France had joined in. The author had decided that it would be a good thing to set up British Chambers of Commerce in Brazil, and in preparing the ground for this he had plenty of opportunities of appreciating the Brazilian reactions to the war.

First and foremost he found, not unnaturally, an overruling desire to sell goods to anybody who would buy them, with the inevitable result that he once more found his old friend the Black List causing him much trouble and embarrassment. Secondly he found no lack of news but a lack of knowledge, since the Brazilian newspapers printed every telegram they were sent but made no attempt to analyse them in leading articles, which are such a standard feature of our papers. Thirdly he found the German banks were still so strongly established that they controlled much of the trade of the country, their strong position being, ironically enough, partly due to the backing given to their bills by London firms in pre-war days. The description of how this vast banking and agent system was built up by methods which were considered unsafe by " sound British banking standards " concludes as follows :—

> " The circle was a vicious one. It involved over-trading, but that was not chance : it was policy. It meant, however, that German banks were financing an ever-increasing volume of business with insufficient capital resources. In 1914 German credit was strained to breaking point. German leaders saw to it that the breaking of the economic strain should

be merged into an outbreak of war. Success was held to be a foregone conclusion, and the weakness of the financial structure would be more than compensated by territorial gains and political advantages."

Be it noted that Germany in 1914 is being discussed, not Italy in 1935, but the similarity of the case is remarkable, though the latter country can, I suppose, claim success.

The author was also implicated in the convoy system in minor ways, and evidently thought the unnamed admiral who arrived there to organize it was extremely capable.

A chapter follows giving descriptions of some of the leading personalities in Brazil and describing journeys made into the interior to visit our honorary consuls, who were doing yeomen service under somewhat trying conditions. One of their worst sources of opposition came from enemy propaganda disseminated by the religious orders, who largely recruited their personnel from Germany.

In this chapter there is an amusing description of a hill railway where the engine first of all stopped owing to lack of steam and the passengers had to collect wood for it, and then failed to get a grip on the wet rails, so the complete train slithered backwards down to a level part of the track again!

Turning back to trade once more the author considers that our weak point then, as it is now, is our lack of minor agents. Most of our nationals out there work in the utility companies and banks, whereas the Germans work on their own in the commercial field.

With the armistice came a series of missions on one excuse or another all aiming at increasing British trade in Brazil. The author comments :—

"It is sometimes forgotten that it is not the function of good government to create trade. Sound trade is still created by the merchant adventurer."

He also thinks that our reputation in Brazil has never really recovered from the blow it received when Mr. Wickham, many years before the war, smuggled seventy thousand rubber seeds out of the country and thus enabled us to start our great rubber plantations in the East which wrested the world's rubber markets from Brazil's control.

Some little while later, in 1927, the author retired, to start coffee planting up country in Brazil. This proved a failure, and the book ends with a few pages about Japanese influence in South America, occasioned by a trip to South Africa and back in Japanese steamers, the only direct line running between Brazil and the Cape. On the return trip a Japanese who was going to Brazil as a consul-general for the first time replied to a farewell speech of the captain's, and the author remarks how similar in ideas and tone it was to the words spoken in 1910 by the German captain of the steamer he went out to Brazil in for the first time.

The only difference was that it is now Japan's day which has come, whereas before it was Germany's.

I gather from the dust cover that Mr. Hambloch now lives in London.

There is an adequate index, but I wish maps of the various countries described were provided. They would be a great asset to an otherwise attractive book which by no means consists of reminiscences only.

C. C. H. H.

"THE BARRINGTON PAPERS." VOLUME I.

Edited by D. BONNER-SMITH. (Navy Records Society, 1937.)

LORD BARRINGTON has been so good as to place at the disposal of the Navy Records Society such papers relating to Admiral the Hon. Samuel Barrington as survive in his possession.

Born in 1729, Barrington went to sea in 1740, got his first command in 1746, and became a post captain in 1747, at the age of 18. Keppel reached the same rank at 19, Howe at 20, and Jervis at 26. Barrington's early rise can hardly have been unconnected with the fact that his brother, Lord Barrington, was a member of the Board. We have good reason to be grateful for the circumstances which placed an officer of his courage, experience and activity in charge of the successful operations against St. Lucia in 1778.

The present volume covers the career of Samuel Barrington up to the top of the captains' list, which he reached in 1777, and leaves him awaiting his promotion to flag rank and appointment to the Leeward Islands command. The papers consist of the Admiral's early Order Books, a Private Letter Book, and certain of his Public Letters from the Public Record Office. They have been ably edited by the Admiralty Librarian, Mr. D. Bonner-Smith. With a few exceptions they are formal and impersonal. What they give, however, is a picture of the official life of the captain of one of H.M. ships over a period of thirty years of peace and war. There are few exciting incidents, but much hard service. From 1740 to 1763, including time out of commission, Barrington had but nine months' leave.

The chief feature of this volume is the series of orders issued by a senior officer to a junior officer on taking him under his command. These include not merely a formal order similar to sailing orders, but also a line of battle, a list of distinguishing signals, private signals, rendezvous, and generally a list of Additional Signals for sighting, reporting, chasing and sometimes action. It is hard for us, brought up as we have been on signal books, to understand the difficulties with which our forebears had to contend; unless local signal orders had been issued, a senior officer could not communicate with particular ships except by hail or boat, unless his desires fell within the scope of one of the General Fighting and Sailing Instructions.

Some of these sets of Additional Instructions are referred to by Sir Julian Corbett in the Navy Records volume " Signals and Instructions ", Appendix A ; but he did not give them in full and enable us to study them in detail, as has been done in the present volume.

There is no need to look for a common origin for all these additional signals. They were evolved by a process we all know very well. A captain on taking junior officers under his command had only to look in his own order book for specimens to use, with additions and variations to suit individual requirements and tastes. It may seem odd that the British Navy should have got on so long without a proper signal book, but it will be remembered that the victories of Hawke and Boscawen were chases in which much could be left to individual judgment. Thus the Seven Years' War gave little demand for signals, except in the case of the unfortunate Byng, who did not manage his affairs very well. (His injured ghost, they say, still walks the corridors of the Admiralty.)

On page 325 of the present volume, however, the desultory fusillade of additional signals and instructions is interrupted by a tremendous broadside from Commodore Lord Howe—83 additional signals, duly numbered and codified, and a list of amendments to the General Printed Instructions. Though the flags are not yet known by letters or numbers, this set of orders is the foundation of the modern signal book. And more than that, it marks the first great step towards the continuous control of a fleet by its commander-in-chief.

The " Barrington Papers " contain many other points of interest. Barrington's first service as a post captain was to look into Brest. Although he went to sea so early he seems to have understood French. Within six days of sailing he fought his first action, and took his first prize, a French East Indiaman of the same force as his own ship. After the peace of 1748 we find him attending the service of the garrison of Gibraltar, carrying remittances for the British factories at Cadiz, complaining of his beef and pork weighing short, and looking for a Dutch ship with plague on board. He was fortunate enough not to find her, for his orders were to see her clear of our coasts, and then to perform a strict quarantine of six weeks at the Islands of Orkney—perhaps in Scapa Flow.

In 1753 Barrington was sent to inspect the forts on the West Coast of Africa—the first of the services that were to take him out of the ordinary run of duty. Most of them, he says, were in very bad repair.

From 1757 to 1762, Barrington commanded the *Achilles* 60, belonging to the Western Squadron but employed mainly in detached squadrons. He had the misfortune to miss the battle of Quiberon Bay. A few weeks before it the *Achilles* was sent to attempt the destruction of the French frigates and transports in the Morbihan river, in charge of French pilots

in whose honesty Barrington thought he could confide. They repaid his trust by putting him on a rock.

In 1762 Barrington came for the first time under the command of Lord Howe, to whom he was to be second in command in 1782.

In 1768 Barrington was made tutor to Henry, Duke of Cumberland, the King's youngest brother. Barrington was appointed to the *Venus* in June, superseded by the Duke in November, and reappointed in command in the following May. Next month the Duke hoisted his flag in the *Venus* and carried out a series of exercises. He issued a set of Additional Instructions and Signals, which provide for manœuvring in bow and quarter line, and insist on strict station-keeping. This suggests that the Duke or Barrington had been studying the works of the French tacticians or perhaps listening to Lord Howe. Sea life evidently did not suit the Duke of Cumberland, for in 1770 Barrington writes advising him to leave the Service.

On the same date Barrington writes indignantly to Sir Edward Hawke, then First Lord, who had offered him the command of a guardship. Apparently Barrington made his peace, since a few months later he received a colonelcy of marines.

At the end of 1770, on the occasion of the Falklands Islands dispute with Spain, Barrington took command of the *Albion*. He got into trouble with Their Lordships for rating his landmen A.B. as soon as they could hand and reef, as a reward for getting the ship fitted out quickly, although they had not been at sea three years. Most of the correspondence from this ship deals with desertion. In his last letter from her, Barrington asks the Secretary of the Admiralty by what authority the purser was allowed his "eighths". It would be interesting to know what answer he got.

In 1770 Barrington began a friendship with Jervis, five years his junior in age, which was to last their lives. They visited St. Petersburg together in 1774, and the coast of France in 1775. There are no letters of this period. It would be interesting to know more—was it merely coincidence that these two officers should have conducted the most successful combined operations in our history?

In 1776 Barrington was appointed in command of the *Prince of Wales*, in which ship he afterwards hoisted his flag for the Leeward Islands command. He writes to the First Lord, now Lord Sandwich, "I shall . . . think myself excessively ill-treated should you dispose of the Leeward Islands, or any other Command, to a junior officer to myself." Lord Sandwich gave way.

The next volume should prove even more interesting than the present one.

A. H. T.

"WAR AT SEA UNDER QUEEN ANNE, 1702-1708."

By COMMANDER J. H. OWEN, R.N.

(The Cambridge University Press. 21s.)

BETWEEN the Dutch Wars, on which the Navy Records Society and others have thrown a great deal of light, and the War of the Austrian Succession, so adequately dealt with by Admiral Richmond, there has existed a gap over which most of our naval histories have been inclined to pass somewhat lightly. Although neither Mr. Churchill nor Professor Trevelyan has overlooked the part played by the Navy, Marlborough's victories have continued to overshadow the less spectacular events at sea and in other theatres of war. As a result it is doubtful whether many of us could give a satisfactory account of the Navy in the War of the Spanish Succession.

Fortunately there is now no excuse for ignorance of an important chapter in the history of British sea power. Though Commander Owen has not attempted to cover all the ground, preferring to dwell particularly on the combined operations and the defence of communications, he has done a great deal to bridge the gaps left in such narratives as Sir Julian Corbett's "England in the Mediterranean". "War at Sea under Queen Anne" also gives us a most interesting, well-documented and illustrated account of the Navy and its seamen, their ships, their problems and their methods in the opening years of the eighteenth century. In addition to presenting an enlightening picture of the Navy of the period, these studies foreshadow the course of later developments and are not without some application to events within our own memories. Thus, while Commander Owen's work forms a valuable contribution to our naval history, it is also of more than academic interest to the student of war.

During the first half of Queen Anne's reign, her husband, Prince George of Denmark, was Lord High Admiral. King Charles may have found nothing in him, drunk or sober, but at least Prince George had the wisdom to obtain good advice from those qualified to give it. In the Council which he appointed soon after assuming his duties, Admiral George Churchill, Marlborough's younger brother, played a prominent and continuous part. It was naturally said, then and later,

that he was a mere "flag by favour"; but on Churchill's administrative record Commander Owen finds reason to support the opinion of Lord Peterborough, "the Great Earl", who wrote: "I find Admiral Churchill has a very just and quick apprehension of naval affairs; and though Admiral Mitchell is a very good man, I can find nobody as able to assist the Prince and the Queen as Mr. Churchill in cases of dispatch and difficulty." Among other notable members, the Council at various times included Sir George Rooke, Sir Cloudisley Shovell, Sir John Leake and Sir Stafford Fairborne, whose memory this book does much to revive. In addition to giving character sketches of the principal flag officers, Commander Owen mentions some of the coming men, such as Vernon, who saw early service under Queen Anne. In this connection he remarks:

> "Two of Vernon's young men were Richard Kempenfelt and Richard Howe, whose service ancestry thus traces back through Norris and Shovell to the splendid Commonwealth and Restoration sea commanders John Narbrough and Christopher Myngs."

It would be very interesting to extend this idea to the pursuit of the Service pedigree of great men down to the present day.

While admitting that interest may have promoted some inexperienced young men of birth and breeding, and that some tough old seamen's ideas on "the more sublime part of naval war" may have been on the same plane as those of Marshal Saxe's mules, Commander Owen suggests that too much has been made of the theory that naval officers were sharply divided into "gentlemen" and "tarpaulins". Thus:

> "Was Byng no seaman, nor Fairborne nor Aylmer? Were Dursley and Vernon, Philip Cavendish and Philip Stanhope, mere adventurers? They were officers and seamen, made so by early education and wide views, as were many other young gentlemen-captains."

As shown in an appendix, the strength of the Navy between 1702 and 1708 ran between forty and fifty thousand men. Many of these, of course, were raised by impressment, but only because there was then no other method. The hardships imposed by this system were generally recognized: Vernon remarked in his *Seasonable Advice from an Honest Sailor* that seamen were "the only persons in this country that appear to have no liberty at all". But the remedy, which rested ultimately in the hands of Parliament, was not provided for another century and a half, and in the interval the Navy, as usual, had to make the most of the means available. An interesting point is that many seamen who entered voluntarily objected to a continuous service system since it meant that they could not choose their ship. Officers and men were frequently bound by ties of personal association, and the men dis-

liked changing ships for this reason, apart from the fact that it made their pay more difficult to obtain. As regards pay in general, Commander Owen considers that, though it was less than in merchantmen and privateers, it was relatively better than at the end of the century, and leave was a great deal better. He also deduces that discipline depended less on severe punishments and was more effective than in later years.

On the material side, the strength of the Navy rested largely on the third and fourth-rate ships, which mounted 70-80 and 54-64 guns respectively. The big first and second-rates were unsafe to handle in narrow waters, they lost much of their force in bad weather, and were generally laid up for six months of the year. Although commonly referred to as frigates, the 50-gun fourth rates were not yet reckoned as being " under the line ". They did good work in both capacities and formed the most numerous class. There were frequent criticisms of the quality of our ships as compared to the French, but if we had something to learn from them in the building of small frigates, it must be remembered that, as the raiding rather than the defending force, they often had the advantage of acting at their selected moment, when their ships were clean. The French at least did not undervalue the ships they took, which frequently became flagships of their cruising squadrons. In weight of metal and numbers of men, however, French ships at this period were stronger than ours of the same nominal class.

In the strategy directed towards " reducing the exorbitant power of France ", the defence of trade and the security of sea communications with the Continent were primary considerations, since the wealth derived from trade formed the main support of the Alliance and all our troops and stores had to be carried by sea. Queen Anne's Cabinet Council directed policy, in far more than outline. Commander Owen says :

> " Queen Anne's ministers handled the fleet and framed instructions for officers at sea. This was indeed the practice all through the century. In those days statesmen recognized and undertook their full responsibility for the conduct of war. They found no great perplexing anxiety in their relations with soldiers and sailors, nor did they shift their burdens to military shoulders, while pouring contempt on the military mind. Naturally they consulted the sea officers, both Admiralty staff and commanders afloat, who often drew up the instructions in draft ; but in all large matters and in many points of detail the orders and instructions that went out to commanders at sea had Cabinet sanction, even when they went by way of the Admiralty. Queen Anne's war is sometimes spoken of as Marlborough's war. The great Duke was the leading spirit in the Grand Alliance in many things, perhaps most things, military and political ; and his sailor brother was the most constant and most influential member of the executive staff at the Admiralty for most of the war. Yet it is hard to say whether Marlborough had a larger share in the direction of the war at sea than some of his colleagues in the

> Cabinet Council, such men as Godolphin or Sunderland or Nottingham. It is certain, however, that he was the chief interpreter in sea matters to the Land Powers, the Emperor and the Duke of Savoy. He was forward in urging in all its stages the active Mediterranean policy eventually decided on, but he never forgot the practical requirements and disabilities of service at sea, patiently explaining the difficulties and uncertainties to the Allied Courts, and at the same time shielding the sea commanders from entanglements their professional judgment disapproved."

At first sight the implied criticism of our political rulers in 1914-18 is a little surprising, since the most usual military complaint is that Mr. Lloyd George assumed too much, rather than too little, of the conduct of the last war; but further consideration may suggest a difference between the situation obtaining then and full control, with full responsibility, on the part of statesmen who were both trained and ready to bear the burden.

As Lord Dartmouth had foreseen twenty years earlier, France's position gave her great advantages in a naval war, particularly in the absence of a British base in the Mediterranean. It was necessary to provide strong forces to counter possible French concentrations in both Atlantic and Mediterranean, and at the same time provide protection for British trade against raiders. For the most part, our ships did not keep the seas as long as they were to do in later years, but in spite of what Commander Owen terms "the mild standard of cruising at that period" ships were allocated for duties corresponding closely with the distribution adopted in subsequent wars. The main fleet, or fleets, endeavoured to mark the French squadrons at Brest or Toulon or both, while convoys were provided for the more important trades, including coastwise traffic, and "stationed ships" and cruising squadrons guarded the focal points both abroad and nearer home. It was frequently very difficult to provide ships to meet all requirements; communication was slow and administration unpunctual by modern standards; and weather often upset the best planned arrangements. Perhaps, as Commander Owen suggests, too many ships of the line were allocated to the Mediterranean when the French, after the battle of Malaga, had abandoned the attempt to maintain a big fleet. The French raiders' practice of cruising in squadrons, under such distinguished and enterprising leaders as St. Pol-Hécourt, Duguay-Trouin and Forbin, added considerably to our difficulties. British merchants were not slow to complain when a trade fleet had been delayed or raided, or a few running ships had been snapped up by the enemy privateers. Nevertheless, British trade as a whole survived and even, towards the end of the war, flourished and increased, so that a generation later Vernon was able to write:

> " Look back to the latter end of the reign of Queen Anne, when we had well-conducted Western squadrons, with a proper latitude in their orders, and it will be found the trade was well protected, the enemy's privateers suppressed, and some [ships] detached to proper stations that distressed the enemy's trade at the same time, and were in the best stations with the main body for protecting these kingdoms from invasion."

This was not achieved without dust and heat, and Duguay-Trouin and Forbin took their toll of our cruisers, particularly when a strong fleet in the Mediterranean stripped the ships available for the Soundings, the Channel and the North Sea. Commander Owen's narrative of their successes, sometimes under circumstances not very creditable to us, is as interesting as his detailed account of the measures taken to meet their *guerre de course* and " the alarm from Dunkirk " in 1708, when Forbin's attempt to land the Old Pretender in the Forth was foiled by Byng's vigilance and the rapid assembling of a force to meet it.

Besides the defence of communications, the war demanded offensive action against France and Spain. The situation offered a choice of policies not unlike those which have been presented more than once since then. The principal naval effort might have been directed against the enemy's possessions overseas, or to operate on the flank of the main armies in the Mediterranean and on the coast of Flanders, or finally they might cover a landing to divert French forces from the Continental theatre. The first policy offered the advantages of a " limited " war, of gain without too heavy commitments or loss. Against a major Power the disadvantage of this form of war is that it is likely to be limited for the enemy too. In our own time we have been told that it was a great mistake to have sent any troops to the Western front, but the alternative strategy which would have prevented the collapse of the French lines has not been demonstrated to everyone's satisfaction. In Queen Anne's time, as in 1914-18, pressure of circumstances called for direct support of our allies, and at various times all three policies were adopted. Commander Owen refers only in passing to operations in the West Indies and North America, which had few important results; and such minor " descents " as were attempted with the object of creating a diversion were, as usual, mostly fruitless. But the operations of the fleet in the Mediterranean in support of the Allied armies exerted a considerable influence on the course of the war and would have been even more effective if a base had been available, so that the fleet could have refitted on the spot instead of returning to winter in England or, after the Portuguese alliance, in Lisbon.

The need of a base was felt at once, and the attack on Cadiz in 1702 was largely directed towards this purpose. But Rooke was not

at his best; and the Duke of Ormonde, in command of the land forces, was ineffectual. On the ensuing failure, Commander Owen quotes Admiral Colomb: "If we ask why [the expedition] was abandoned, we can but be answered that it was not persevered in." The raid on Vigo wiped out the stain of defeat, besides reducing the French Navy by fifteen ships, but it did nothing to provide a base. The resources of Lisbon became available in 1704, but Leake thought little of "this hellish place" and his opinion of "our gallant allies, the Portuguese" anticipated that of the B.E.F. in 1918. Gibraltar, whose capture was due chiefly to the weakness of its garrison, was then unable to support a fleet, and it was not until 1708, when Port Mahon fell to Rear-Admiral Whitaker and General Stanhope, that a satisfactory Mediterranean base was obtained.

In the meantime had occurred the battle of Malaga, and, in later campaigns, the great expeditions to Barcelona in 1705 and Toulon in 1707. Malaga was the only occasion on which the main fleets met during the war. The fleets were equal and the immediate results indecisive. The British and Dutch gained a local advantage in van and rear, but in the centre lack of the ammunition expended in bombarding Gibraltar forced four ships to leave the line and our losses in men were heavy. Both fleets broke off the action after dark and did not attempt to renew it next day. The French claimed a victory, but made no effort to recover Gibraltar, so the fruits of their victory were of the Dead Sea variety, and they did not again seek a fleet action.

Commander Owen's account of the capture of Barcelona and the failure at Toulon, which do not appear to have been described in detail before from the naval point of view, is of great interest. The attack on Barcelona began badly, with many delays and much indecision. Lord Peterborough, though conceding Shovell's bravery, complained privately of his obstinacy and wrote: "I shall ever be of opinion, though I know the good qualities of some few of the sea officers, that in general (out of their way) there is not a more ignorant, worse-judging set of men in the world, and yet none more positive." On the other hand, Norris, Shovell's first captain, was to assert that "the sea contributed more than my Lord's land [forces] to the taking that place"; and certainly the Admiral's determination and energy in landing guns and men and in bombarding the enemy's works did much to prevent the attempt from being abandoned. Peterborough was largely responsible for the final success, once he was committed to the attack, but he himself tacitly admitted the dependence on the fleet—and in turn the dependence of the fleet on a convenient base—which was emphasized in the following year when Barcelona narrowly escaped recapture before Leake's arrival in April.

The failure at Toulon may be traced to delays, divided councils, failure to concentrate on the main object and consequently insufficient force. No blame can be laid on Sir Cloudisley Shovell, who continued to urge haste and did all in his power to forward the enterprise as he had done at Barcelona. Complete success would have been a fitting end to his last campaign, but strong French reinforcements reached Toulon before the Allied troops could carry the defences. Shovell's effort was not in vain, however; for, as Marlborough told him, " This diversion has been of great use to the King of Spain, and likewise put a stop to the successes of the French in Germany by the detachments they were obliged to make from all parts to Provence "; and only a small part of the French fleet in Toulon was ever fit for further service.

As long as wars are fought by men, there are lessons to be drawn from the records of former wars, if they are written with understanding and knowledge. Unluckily, in the nature of things, naval history, as distinct from reminiscences, is all too seldom written by naval officers. The rare books which combine the fruits of research with a practical knowledge of naval affairs are therefore to be gratefully received and deserve every encouragement. My only complaint with " War at Sea under Queen Anne " is that I should like to have more, but perhaps Commander Owen will give us a complete history of the war at a later date. One must regret that the price of the book is likely to put it into the luxury class for many of us, since it fills a place hitherto unoccupied in the study of the development of British sea power. It is, however, very well produced, with valuable references and appendices and some interesting old charts and portraits of leading characters. Commander Owen has been at great pains to identify the men and ships concerned; and his excellent index will be useful to anyone engaged in this line of research. His book should be included in the technical library of all H.M. ships and establishments.

P. W. B.

"THE THREE VOYAGES OF MARTIN FROBISHER."

Edited by Vilhjalmur Stefannson. Two volumes.

Argonaut Press. 84s.

DISCOVERY and adventure in one or another form have at all times formed admirable schools of training, for they develop those qualities of resourcefulness, self-reliance, familiarity with danger, and leadership, which are the pre-eminently necessary characteristics of a commander in war. An Elizabethan writer summed up the advantages of Polar exploration in the words: "Shipping and sea-faring men have been employed; navigation and the Navy (which is the chief strength of our realm) maintained; and gentlemen in the sea service, for the better service of their country, well experienced": advantages which countervailed the costs of the adventures.

It was a good doctrine. It encouraged the adventurous men. It was a training in peace which fitted men for war. But it was not the only training of the Elizabethan seaman. Open to him also was the adventure of piracy, a profession undertaken by men of the best families, particularly in the West Country, which came under condemnation only when the activities of piratical gentlemen either caused difficulties with the foreigner or injury to British merchants: for the pirate was not always particular in his choice of a pocket to pick. As a profession, provided it were practised within bounds, it was respectable; and the pirate of one day, who had even suffered imprisonment for his incautious behaviour, in a later day might find himself basking in the smiles of the Court. Some of our neighbours abroad seem, perhaps, to adopt this Elizabethan view to-day, and to make a free use of such opportunities as the situation in Europe affords to give training to their people on land, at sea, and in the air: while we on our part are afforded a certain amount of useful experience in the counter-measures.

In naming our Elizabethan cruisers of a few years ago the names of Hawkins, Raleigh, Effingham, Frobisher and Cavendish[1] were selected. Hawkins, Effingham and Raleigh—their services are broadly understood, but wherein lies the distinction of Frobisher over various

[1] The *Cavendish* was renamed *Vindictive*.

other of the seamen of that great period: Sir William Wynter, Lord Henry Seymour, Cumberland, Thomas Fenner, Grenville, Borough, Carleill and others?[2]

Few of these seamen had a wider, more varied, or more adventurous life than Frobisher. Those experiences were of three kinds—exploration, piracy, and naval command: and it was in the two first of these that the Yorkshire seaman served his apprenticeship.

The present volumes, most nobly produced by Mr. Stefannson, deal with the period of exploration. They give all the accounts of his voyages that are known—Best's, Willes's, Hall's and Lok's from Hakluyt, Settle's, Ellis's and Sellman's. They include a learned introduction covering the earlier periods of Polar exploration and a series of papers giving the expenses, contracts, petitions, and other matters concerning the expedition. No more complete a work has appeared, no more exhaustive a description or annotation of the early discoveries in Iceland, Greenland, and the regions off the mainland of North-Eastern Canada.

Frobisher began his adventures young, younger indeed than any of his contemporaries. Born in 1539 he made his first voyage at the age of fourteen, sailing to the pestiferous waste of Benin in search of gold. A hundred died out of a hundred and forty with whom he sailed, and of the remaining forty who returned others died in England after their return. Young Frobisher's sturdy constitution, presumably, enabled him to resist the ravages of the climate, and the sufferings he had experienced proved no deterrent: for in the following year when another expedition, stimulated by the profitable sales of the gold and pepper brought home, was sent to the same parts, Frobisher went with it. This time bad luck befell him: for being sent ashore, or going thither by his own desire, he was taken prisoner by the Portuguese and lay for nine months in the castle of Mina, from whence, it appears, he was released as one of the conditions of an attempt to settle the disputes between the English and the Portuguese.

There is a gap in the records of his life at this time. He is next heard of five years later when he returned from a voyage on the Barbary Coast. At some part of this period he had again gone to sea, exchanging the search for and traffic in gold and pepper for preying upon the Spaniard and the Portuguese. He served under a noted pirate of the name of Strangeways, who, under the guise of a trading venture, made an attempt to capture that castle where Frobisher had spent three-quarters of a year—an attempt which ended in the arrest and trial of the venturers.

[2] *Cf.* A list of gentlemen and captains of the sea *circa* 1577 *Papers relating to the Spanish War*, 1585-7. Navy Records Society, XI, 293.

Now he became fully engaged in the piratical profession. From 1563 to 1573 he was "associated with the two Hawkyns, Killigrew, Erizye, Lane, Morgan, Chichester and Vaughan . . . busy capturing ships and cargoes which belonged, or were supposed to belong, to Catholics". How the word "piracy"—a word about which there appears to be some difference of opinion to-day—is applicable to the activities of these worthies may be a question: for Elizabeth was at war with the Catholic party in France, and English privateers were licensed to go against ships belonging or supposed to belong to Catholics, and bail had to be given by those who fitted out such vessels for correct behaviour. Martin Frobisher became captain of the *Anne*, one of three ships fitted out by a fellow Yorkshireman of the name of Appleyard. His brother John commanded the *John*.[3] The brothers Frobisher brought five French ships into Plymouth in 1563 and were arrested: but why is unknown, and the charges, whatever they may have been, failed, for the Frobishers were released and obtained possession of their prizes. Martin Frobisher's activities in this industry appear then to have continued without interference and with paying results, though he got into trouble in 1565 and was arrested for piracy and imprisoned until 1566. Curiously enough, his ship—the *Mary Flower*—had been fitted out with ordnance by the Queen's ordnance at Newcastle, so that there was at least authority for his action: possibly he overstepped the line and was less particular in his captures than he should have been; on one occasion certainly he brought in a rich Flemish ship, a neutral to whom his licence unquestionably did not extend. His master, one Wolfall, was arrested for piracy at the same time, convicted—and pardoned by the Queen.

Frobisher was no sooner a free man than he was at sea again, this time with a commission from the French Cardinal Chastillon to capture French Catholic vessels, enemies of the Protestant Prince of Condé. He was doing well in his business in 1568, still apparently with the Cardinal's commission, in command of a bark, working with a squadron of another four ships in the North Sea and bringing many prizes into Aldeburgh. In 1569 he was active with a couple of "tall ships" off Rye, his commission extended to the capture of Spanish ships: and there his appearance gave no small alarm to the merchants of Rye, whose goods were carried largely by French Protestant ships, and who feared that Frobisher was not very discriminating in his choice. In that same year he got into trouble once more over the seizure of a cargo of wine, the property of a London merchant, carried in a French ship, who sued him. He was once more arrested in August on a charge of

[3] The three ships were the *John Appleyard*, *Anne Appleyard*, and *Elizabeth Appleyard*.

piracy and had to surrender both ship and cargo and pay a fine of £900, lying in prison until it was paid by a friend at Court, under circumstances suggesting Royal assistance: and the Royal favour remained with him, for next year he was at sea again, in the Queen's service, hunting both French and Portuguese ships.

Employment of a more regular character came to him in 1571 when he was engaged in operations concerned with the subjugation of Ireland, and so seems to have been employed for two or three years, though not without an occasional return to his old habits, for in 1573 he was once more arrested. Of his doings in the ten years Mr. R. G. Marsden[4] remarks:

"It is difficult to say how far his operations between 1563 and 1573 were legal or how far piratical. Though arrested three or four times upon a charge of piracy, he never seems to have been put upon his trial upon the critical charge. Usually, if not always, he was provided with a commission, either from a foreign prince or from his own sovereign, to capture ships, stay pirates, or search for prohibited goods, and although several of the ships he brought in as prizes were returned to their owners by the proper tribunals, it does not seem that Elizabeth or her Council can have looked upon his proceedings with disfavour. Though often arrested he never stayed long in prison: arrest seems to have been merely a move in a diplomatic game . . ."—much as the Queen, speaking later of Drake and his South Sea depredations, said that if needs be she could disavow the gentleman.

This phase of Frobisher's career ended in 1575. His career as an explorer then began. But it was not a new interest to him, for it appears that he long pondered over the question of discovering a new route to China by the North-West Passage. His adventures in search of gold on the Guinea Coast, his contact with Portuguese seamen, the extant knowledge of the value of the Eastern trade, cannot fail to have aroused in him the same thoughts which were exciting the minds of many of his older contemporaries concerning the possibility of a shorter and a safer route to China and a share in the rich Eastern trade.

The principal mover in this enterprise was one Michael Lok. An enthusiast for this undertaking, he seems to have brought together a company of men, geographers, seamen and merchants, to discuss ways and means, to examine all the available information. There were in this company Dr. Dee, Steven Borough, Christopher Hall and others; and Frobisher. Money had to be raised and investors were shy. The Muscovy Company refused to finance the expedition, and all the enthusiasm which Lok and Frobisher threw into the business resulted only

[4] "The early career of Sir Martin Frobisher." English Historical Review, July, 1906. Vol. XXI.

in raising, by private subscription, the meagre sum of £875. Lok's conviction of the soundness of the enterprise was however so great that he guaranteed to meet whatever extra costs might arise. It cost him £738 19s. 3d.

In 1576 Frobisher made her first voyage for the discovery of the North-West Passage. He sailed with three vessels—the *Michael* of 20 to 25 tons, the *Gabriel* of 15 to 20, and a pinnace of 7 to 10 tons. In these diminutive craft Frobisher, admiral and pilot, and his comrades sailed from Radcliffe on 7th June and passed down the River, the Queen and her Court waving them farewell from the old Palace of Greenwich.

Frobisher's fortitude was put to the test early in the voyage. The pinnace was lost in a storm and before he reached Greenland one of his ships, discouraged by the ice, turned back and arriving in London in September reported that Frobisher in the *Gabriel* was lost. Left though he was with this one small vessel and eighteen men he was undeterred and continued on his way determined " rather to make a sacrifice unto God of his life than to return home without the discovery of Cathay except by compulsion of extreme force and necessity ". He pushed on for the coast of Labrador, discovered "Frobisher's Strait" and, in the end of August, sailed for home encouraged in the belief that the way to China by the North-West could be found.

The course of events was affected by the discovery of a stone, picked up on Hall's Island, which appeared to contain gold. Michael Lok, undeterred by contrary reports by gold refiners, was convinced there was gold in the ore, and his enthusiasm so infected others that some £4,700 was raised, of which the Queen subscribed £1,000 and to which she added the loan of one of her own ships, for a second voyage. In May, 1577, Frobisher set out once more. The results added nothing to the discovery of the North-West Passage. Two hundred tons of ore were brought home, the reports upon which were so favourable as to induce speculators to finance a third voyage. In May, 1578, fifteen vessels sailed. Hudson Strait was found, Greenland was taken possession of in the name of the Queen and called West England, more ore was brought home; but the way to China was brought no nearer to the knowledge of the explorers. Gold had in fact deflected the enterprise.

Unsuccessful either geographically or financially as the three voyages were, they greatly added to Frobisher's experience as a seaman and to his reputation. He returned to warlike operations in Ireland in 1578, almost immediately on his arrival home, and took part in the siege of Smerwicke in company with such notable men as Earl Grey, Raleigh and Edmund Spenser. That service done he was out of employment, and it seems probable that he resumed his other activities as

a pirate. For some years little is known of his doings until, in 1585, he was appointed Vice-Admiral to Sir Francis Drake in his great and renowned expedition to the Indies which, after the taking of San Domingo and Cartagena and sacking many another settlement, returned to Portsmouth in July, 1586, with £60,000 worth of spoil.

So far there had been no definite state of war with Spain. But Drake's expedition and the sending of an army to the Netherlands to assist the revolting Seven Provinces were more than Philip II could stand. Hence came the preparations for the invasion of England in 1587, to meet which Drake was sent to " impeach the joining of the King of Spain's fleet " and Frobisher to command the Channel Fleet. His duty was to gather information and capture everything that savoured of a Spaniard. The experienced pirate was a fitting and efficient person for these duties.

Frobisher's experience was certainly as extensive and varied at this time as that of any English seaman, even if he had not the renown which Drake's voyage of circumnavigation, his command in the Indies voyage, and his exploit in 1587 at Cadiz brought that brilliant commander. Frobisher had now twenty years of almost uninterrupted sea service from the age of 14—interrupted, at least, only for short periods of imprisonment—three Arctic voyages, two military expeditions to Ireland, service as second-in-command to Drake in 1585-6, command of the Channel Squadron in 1587. Small wonder that Lord Howard should have judged him as one of four men " of the greatest experience that this realm hath, which are these: Sir Francis Drake, Master Hawkyns, Master Frobisher and Master Thomas Fenner."[5]

It is needless here to recall Frobisher's part in the Armada fight, for which he received his knighthood. The victory brought no pause to his activity. In the following year he was cruising in the Azores and the West Indies.

Throughout Elizabeth's war with Spain she was never able to decide whether she should concentrate all her efforts upon stopping the Spanish treasure or whether she should send military forces to the Netherlands and France. It was no easy choice. It was a choice which nearly all our rulers, Kings and Cabinets, have had to make, and have had difficulty in making. There was a strong school of thought, mainly held by seamen and some such soldiers as Norreys, in favour of making the greatest possible effort at sea. It was the view of Walsingham,

[5] Ought we not to remember the name of Fenner? George Fenner " One of the finest of the Elizabethan captains and certainly one of the first to demonstrate the superiority of English tactics and seamanship " in 1567: and Thomas Fenner, with Drake in 1585-1587 and 1588; also William Fenner and an Edward—all of the Chichester family of the name, shipowners and seamen. (*Papers Relating to the Spanish War*, 1585-7. Navy Records Society, pp. 297-9.)

Drake and Hawkyns; and Frobisher was of the same school. He believed Spain could be brought to abandon her attempts to suppress Protestantism, conquer the Seven Provinces and England, and to admit the English merchant to the Western trade, by the pressure resulting from the loss of her treasure. His command in the expedition to the Azores, though it did not succeed in intercepting the treasure fleet, did bring the capture of the single great ship *Madre de Dios* with a cargo worth £150,000, pillaged though she had been by the seamen.

Frobisher's last service was an expedition to Brest in 1594. Since 1590, when the Protestant claimant to the throne of France, Henry of Navarre, had had to contend with the Catholic League for his crown, Elizabeth had given him support: for she had seen that in his resistance lay her own safety. France, conquered by Spain, would be a perpetual danger. Brest was in fact of no less importance to England than the Netherlands. Hence when a Spanish force, moving up from Blavet, attacked Brest, assistance was sent from England to prevent that naval base from falling into the hands of our principal enemy. Frobisher was in command of the squadron, Norreys of the army. The fort of Crozon was attacked, stormed and taken: but Frobisher fell with a bullet in his side, from the effects of which he died a few days after his return to Plymouth on 22nd November, 1594.

In the forty-one years of his active life, from the day when he went to sea at the age of fourteen, he was in almost continuous active service at sea. The periods he spent on shore were short, yet he seems to have had some time occasionally to lead the life of a country gentleman. If he was neither the strategist that was Drake, nor the administrator that was Hawkyns, he was the true example of a leader of men.

"Oure generall shewing fyrste a good president of a painfull labourer and a good captaine in himselfe, gave good examples for others to follow him: whereuppon every man, both better and worse, with their best endevors, willingly laide to their helping handes." As he thus worked with his men in the Arctic, so he led them through their dangers in the ice fields, and met his death-wound leading them, in the storming of the fort at Crozon.

H. W. R.

"THE WHISPERING GALLERY OF EUROPE"[1]

By MAJOR-GENERAL A. C. TEMPERLEY, C.B., C.M.G., D.S.O.

Foreword by THE RT. HON. ANTHONY EDEN, M.C., M.P.

(Collins. 15s.)

MAJOR-GENERAL TEMPERLEY has written a somewhat uneven and occasionally illogical book, and yet one which is full of interest and ideas. Here is a soldier who wields his pen with skill and shares his professorial brother's gift of making diplomacy readable. "The Whispering Gallery of Europe" is in the main a record of the author's experiences as military adviser to the British Foreign Office and League observer to the War Office in connection with the Preparatory Commission for Disarmament which was established in 1925 and the Disarmament Commission itself, which first met under Henderson's presidency in 1932. The earlier part of the book is pleasant if discursive, but later, as the workings of the conference are described, it becomes of first-rate value to all who are concerned with international affairs and especially to those who try to discover why every general disarmament project so far has failed. Finally it is not easy to overrate the considered opinions on the future of the League and on the most hopeful methods of disarmament of a man who—as Mr. Eden says in his brief foreword—became by reason of his "patience, experience and impartiality . . . something in the nature of an arbiter at Geneva" in his own sphere of duties.

DISARMAMENT DEFEATED.

In General Temperley's view there were two occasions during the Disarmament Conference when a firm move might have resulted in agreement. The first was in April, 1932, when Mr. Stimson, the United States Secretary of State, visited Geneva. He established himself in a chateau on the opposite side of the lake to Geneva, whence he could see but did not approach the dreary building in which the delegates met, and was there visited by a succession of the leading statesmen of Europe, MacDonald, Tardieu, Brüning, Grandi. Brüning privately interpreted equality of rights at that time as meaning an increase of the Reichswehr by 150,000, a reduction of the service period from 12 to 6 years and a militia army of 50,000 men with three months' service. These moderate demands (General Temperley's version of them does not, however, square

[1] Reproduced from "The Times Literary Supplement" of the 16th of April, 1938, by kind permission of the Editor.

exactly with Mr. Wheeler-Bennett's) were heartily commended by Mr. MacDonald and Mr. Stimson. But M. Tardieu went off to take part in the French election campaign (and contracted laryngitis) and no serious effort was made to bring him back. His Government were beaten in the election, but, although a moderate French Government which genuinely sought a settlement with Germany was formed, within a month Brüning was in turn replaced by Von Papen and the chance was lost.

A Second Chance.

The second opportunity is held to have come in March, 1933, when the British Government presented their draft convention which General Temperley largely framed so far as the armies were concerned. The French view that there must be short-term armies in continental Europe was accepted and definite figures were with some hesitation embodied in the draft by Mr. MacDonald. In spite of these concrete details and a somewhat incoherent speech by the British Prime Minister the convention was "most favourably and even enthusiastically received". Although the air clauses included a qualification of the abolition of bombing by an exception in favour of "police purposes in outlying regions" and the internationalization of civil aviation was omitted, the British Government were prepared, if necessary, to compromise on these points. Every delegation accepted the proposals "in principle". General Temperley thinks that the draft ought to have been put on the table with the words "this is the last chance and you must take it or leave it as it stands". Ten days should then have been allowed for the delegates to consult their Governments. But there is a saying that "Geneva touches nothing that it does not adjourn". Precious time was wasted; Herr Hitler had just attained power in Germany, the Storm Troopers and other para-military formations were growing in strength and the Third Reich was known to be secretly arming. The French became more and more nervous; there were whispers of a "preventive war", and instead of being willing to seek agreement while it was still possible the French and British Goverments proposed that Germany should not be allowed actual equality for eight years and that there should be no disarmament for four. General von Blomberg warned General Temperley in the autumn that the new terms were quite unacceptable. But, partly because some American journalists thought the Germans would crumple up, the British and French (in all senses) stuck to their guns. The German Government thereupon withdrew from the Conference and the League.

There was still a faint chance of agreement left, for soon after this Herr Hitler announced certain terms (including a conscript army of

300,000 men) to which he would agree, although these were of course in excess of Dr. Brüning's terms eighteen months earlier. But now M. Barthou—Poincaré *redivivus*—was in power in France and without any niceties of language and without any gratitude for previous British support he delivered his " knock-out blow " in the spring of 1934.

The ultimate failure of the Disarmament Conference was due of course, as General Temperley emphasizes, to the failure of France and Germany to come to terms. There was the unfortunate coincidence that when a moderate Government was in power in Germany an intransigent Government ruled in France and *vice versa*. But looking back we can see that Germany's offers were very good, and General Temperley has little but praise for the German representatives at Geneva. They had, he thinks, " an unanswerable case ". France clung to her demands for security and to her army. After the National-Socialists' triumph the French would trust no German offers and believed that Herr Hitler would fall before Germany could by her own efforts attain equality of status. The blindness of these views is clear to-day.

General Temperley writes :—

> " I could understand this attitude, which was in accordance with French mentality, even though I disagreed with it. Events have proved that their optimism was misplaced. In any case it seemed to me that a Germany controlled was safer than a Germany uncontrolled by any convention, which in the long run might be fatal to France. Could the British Government have done anything to avert the catastrophe ? I do not think that any measure would have availed, as the French mind was made up."

Nevertheless, he deplores the British attitude to air bombing and holds that Sir John Simon might have taken a firmer line with the Cabinet. He adds, too, that guarantees of sanctions by us in the case of a serious breach of the Convention would have satisfied the French ; but the British Government—although he himself pressed for guarantees—were unable to promise anything more than " consultations." There seems to be some inconsistency in this argument. It is fair to remember too, as General Temperley appears to forget, that we had already committed ourselves pretty directly in the Locarno Agreements.

Plea for an Arms Truce.

The Disarmament Conference was doomed to fail, in General Temperley's view, because political conditions were unfavourable. It is suggested that economic chaos was an important factor. But it is open to argument that financial difficulties would have made Governments more ready to disarm than they were later, and it is hard to believe that political conditions are more favourable to-day than they were in

1932 before Herr Hitler's victory. But it is his belief that "the only hope for saving Europe from the armaments race now in progress is to approach disarmament in stages" and first of all to secure a "gentleman's agreement" for an arms truce. In the second place, since the race is aggravated by secrecy, the publication of armaments programmes might be pressed for, and finally (this appears to be the author's opinion, although he is a little difficult to follow here) would come budgetary limitation. On air disarmament several alternative solutions are offered. The only one which is held to offer complete security is entirely to abolish the air as a means of communication, since civil machines can be converted into bombers in a few hours. But as this solution is clearly impracticable the alternative is the abolition of bombing. If no bombing aircraft were constructed and no training in bombing permitted the aggressor would be incapable of delivering a "mass attack at zero hour". Yet even this scheme presupposes international supervision, and what nation would agree to that at present?

As for the League of Nations, General Temperley insists that for all its good works it must stand or fall by its ability to prevent war. After the failure of the League to restrain a Great Power from aggression he, like many others, was in favour of removing sanctions from the Covenant altogether. At the time he had been in favour of military action against Japan and Italy when they committed acts of aggression; he would have closed the Suez Canal to stop the war against Abyssinia; had a "short and sharp action" to save Manchuria; and even approved a French march into the Rhineland in 1936. And now he hopes for a return some day to the doctrine and practice of at least limited collective security—a system "which though in temporary eclipse may yet preserve civilization from destruction". As an immediate British policy, however, "a supreme effort" should be made to reach a settlement with Germany, whose claim to colonies is regarded as equitable.

Faith in League Ideas.

Thus, like many to-day who possess real knowledge of how and why the League has failed and how and why efforts to attain disarmament came to nothing, the author yet feels that the ideas which were embodied in the failures are the only ideas that promise enduring peace. Though the League may be put in cold storage, though the conception of universal collective security may seem inacceptable to the present European dictatorships, and though the future of our civilization is dim and impenetrable, yet it is significant that a man who has witnessed the mistakes and fumblings of the past keeps his faith that our broad aims, if not our methods, were right.

Apart from the wider argument General Temperley defends the official class which he represented at Geneva, for the expert commissions have often been attacked. The chief difficulty about the representatives of the Services in dealing with disarmament questions appears to have been lack of co-ordination. The Ministries gave their instructions and the "soldiers, sailors and airmen", who "are not trained as debaters", " being wed to discipline, are apt to adhere more rigidly to instructions than politicians are accustomed to do". On the other hand, the politicians " were rarely confronted by the men who knew."

Sketches of Statesmen.

But soldiers, if General Temperley be a fair example, are shrewd judges of their masters, and an admirable feature of this book is the frank opinions, sketches and anecdotes of the leading statesmen with whom the author came into contact in the course of his official duties. Stresemann is seen as a genial, convivial spirit who gave his life for peace but whose depths have not been plumbed; M. Herriot is thought to be one of the greatest living Frenchmen; Barthou is described as a very likeable man with abundant vivacity but an instinctive distrust of British policy. As to British statesmen General Temperley suggests that Lord Londonderry was perhaps over loyal to the Air Ministry and made a mistake in arriving at Geneva in a large Air Force bomber which the Disarmament Conference contemplated abolishing. Tom Shaw, on the contrary, when Secretary of State for War told General Temperley that he was " a pacifist and did not want to have anything to do with war or military operations". Lord Cecil was " perhaps the most striking of any of the great men I have ever met". Sir John Simon is found baffling and "almost inhuman" in his efficiency, but unlucky and, in the Manchurian affair, over cautious. MacDonald for all his virtues was at the end a tired man losing grip. Most interesting of all is the judgment on Henderson. General Temperley discloses that MacDonald had intended to propose General Smuts as President of the Disarmament Conference and thinks that he would have been a better choice as being more quick-witted with wider horizons. Henderson became isolated at the Conference and was too optimistic. His position is judged to have been unhappy and at times pathetic, though he was " a brave and simple man who gave his life in the cause of international peace".

"OURSELVES AND GERMANY."

By THE MARQUESS OF LONDONDERRY. (Hale. 5s.)

"GERMANY. WORLD EMPIRE OR WORLD REVOLUTION."

By GUNTHER REIMANN. (Secker & Warburg. 10s. 6d.)

THESE two books are reviewed together as they offer such complete contrasts in the points of view expressed in so far as the political aspects of the question are concerned.

The author of the first book needs no introduction; but Mr. Reimann requires a few words. He is a German Communist, whose present whereabouts are not disclosed, and who makes no bones about the fact that he loathes the Nazi regime and all it stands for. Whether the book was written in English or has been translated is not stated; I think the former. It is claimed that his views are expressed without bias, and I agree that this is a more or less fair claim as far as they are political; but a great part of the book deals with the economic situation in Germany and, without putting too fine a point on it, can only be regarded as a typically communistic attack on the capitalist system and only incidentally directed at Germany in particular. I need hardly say there is no counterpart to this in Lord Londonderry's book, which accounts for my remark in the opening paragraph.

The method of treatment of the subject in the two books differs in principle. Mr. Reimann traces the development of the capitalistic State in Germany with its reactions on the various sections of the populace, the effect of the war and post-war period leading to the Nazi rise to power, all with a view to discussing the present economic conditions and the feelings of the various classes under the Nazi regime. Lord Londonderry, on the other hand, gives an historical survey of the political developments in Germany since the war with the object of explaining, if not of justifying, the various steps Hitler has taken to help himself to what he wants since his rise to power.

The main theme of Mr. Reimann's book is the discontent of the middle and working classes with the existing regime, owing largely to

the non-fulfilment of promises made in its early days. From this he concludes that the morale of the people is not good, and that the militarists are seriously disturbed as to what would happen in another long war. I find it difficult to swallow many of his statements. If they are true he must be out of his senses to publish them, as putting them in black and white can do those who share his views no possible good and, on the other hand, gives his opponents information which, if they do not possess it already, may be of value to them.

His theories as to the reasons for the non-fulfilment of early Nazi promises are interesting and are led up to by a short historical survey of German capitalism. After the Napoleonic wars the Prussians purposely made changes in the feudal system of land-owning with a view to making the State a comparatively independent but centralized entity. Nothing much further happened until Bismarck's time when this far-seeing man took great care to ensure that the State remained non-bourgeois, while at the same time, though in no way due to him, the industrial development of the country followed the somewhat unusual line of the feudal land-owners being transformed into capitalistic proprietors. As in Japan this feature arose largely from the very rapid industrialization—in England the slower rate of industrial development, which started much earlier, did not produce the same consequences. When 1914 came the German militarists, who were now extremely powerful, were faced with the need of doing all they could to obtain the willing collaboration of the working classes, which inevitably meant considerable democratic concessions at the expense of the industrialists.

During this period Germany, as is well known, had acquired colonial possessions which enabled her, in Mr. Reimann's opinion, to achieve a moiety of the capitalistic structure of England. A rentier middle class and a labour aristocracy began to arise, who, by their savings, largely achieved by exploiting the colonial populations or from the profits of international monopolies, formed a strong element in the country which in any period of internal emergency stood for the maintenance of the *status quo*.

With 1918 and the subsequent period of inflation came the disappearance of this class; but they lasted long enough to prevent a proletariat revolution after the war. Germany had by now no colonial empire, so that the financial structure of the capitalist regime had changed; and the author suggests that, in the absence of colonies to exploit, or international monopolies, the basis has inevitably become one of national monopolies in which it is the country's own working classes who are being exploited.

Meanwhile in the years after the war the Reichswehr, still officered by many of the old Junker type of officer—who, be it noted, were, according to the author, bound up with the capitalists—took pains not to be used to suppress internal troubles so as to avoid losing the support of the people and thus lowering the morale of the rank and file.

Gradually, however, the danger of a revolution of the proletariat became more and more serious, with the result that the National-Socialist party, which had been struggling for power for several years, received the support of almost all classes at once. The author assesses their reasons for giving this support as follows: the big capitalists because they saw in the rise of National Socialism to power the last hope of their regime surviving; the minor capitalists and the middle classes because they believed the Nazi slogans that they intended to try and promote the economic welfare of the individual producer and prevent the increase in power of the big trusts; and, lastly, the workers because they saw in the promises made a hope of improving their wretched conditions which, as it happened, were at the time at their lowest ebb owing to the world economic crisis.

In the event both the latter groups have been disappointed. Herr Hitler was faced with the need to raise and maintain the prestige of the movement by showing the German people how National Socialism had brought them back to their erstwhile important position in Europe. This involved, *inter alia,* rearmament, which, for a country in Germany's economic condition, meant very special measures. Here the financial wizard, Schacht, is brought in and apportioned the blame for having decided that, in order to cope with the situation, a policy of increasing the power of the big industrialists, who are the mainstay of rearmament, and the size of their trusts was necessary, as also was the transfer from state control to the control of these trusts of all banking and manufacturing institutions which had passed to the State, by the assumption of liability by the State, during the economic blizzard. In practice this meant the slow squeezing out and suppression of the lesser capitalists and middle classes, who cannot be allowed, for their own private ends, to use raw materials, plant and facilities which the big trusts require for rearmament. Hence their grievance that the promises to better their conditions have not been kept.

From the working class point of view the disappearance of the rentier class and labour aristocracy—owing, as has been said before, to the loss of Germany's colonial empire—had already removed the chief classes who were interested in the preservation of the *status quo.* The working classes proper, who were desperately badly off under the unstable pre-

Nazi regime, and whose plight had been made even worse by the economic crisis, were only too ready to listen to Hitler's specious promises to improve their conditions. Since his rise to power, however, the author suggests that the conditions of the workers as a whole have deteriorated, despite greatly increased employment. This he attributes to prices having risen without a corresponding rise in wages, the Nazi organization being such as to rule strikes and collective bargaining out of the question. Added to this is the dislike of the increasing power of the industrial magnates which the workers, like the middle classes, understood to be contrary to Nazi policy. In these two main points you have the explanation of the workers' dislike of the present regime.

It is easy to see from all this that, provided the facts are true, a strong case can be made out to show that the military leaders have good reasons for doubting whether the morale of the country is adequate to support the army in a war, particularly if it is a long one. That there is bound to be a war in the long run the author more or less takes for granted, since he endeavours to show that Nazi policy has led the country into a vicious circle out of which war offers the only possible chance of escape. The capitalists, having obtained a new lease of life by backing and being backed by National Socialism, have, as a further insurance, made the military desire for rearmament possible. When rearmament shows signs of completion they will be faced either with an extremely severe internal economic crisis involving them in great losses of both power and money, or with the need for altering the financial structure of their own organization by a policy of territorial aggrandisement so as to give them new lands to exploit. The implications of this theory scarcely need comment; but I will turn to the question of colonies again later.

I feet that the argument that the morale of the rank and file of the army is not good owing to the discontent of the working classes is not borne out by what little evidence we have. Such a theory does not seem to fit in with the fact that there is a large number of German troops fighting in Spain, apparently willingly, for a political ideal in a foreign country, and that many of these troops are technical ones who, according to Mr. Reimann, belong to the least satisfied class of all. If they are not fighting willingly, then I can only say that the German military discipline must be really remarkable.

After reading nearly three hundred pages in this strain, much of it written in terms of the jargon of economic theory, it is a relief to turn back to Lord Londonderry's much simpler and more modestly sized

book. He has no complexes to air or abstruse theories to put forward; he is merely concerned with the plain fact that he thinks that our policy as far as Germany is concerned has been ill-judged since the war. For a nation whose size and importance makes it essential that she must take her place in the council chambers of Europe she was left in an impossible state after the war. Since then there have been many occasions when we could have extended a sympathetic, if not a helping, hand; but on practically every one we missed our opportunity mainly, in Lord Londonderry's view, due to our habit of always following France's policy, which was, and is, dictated by unreasonable fear of aggression. There is rather too much stress on the League of Nations; but apart from that the argument is a legitimate one, if not acceptable to everybody. I seem to remember a saying about " Lord Haldane's spiritual home " in the days before the war; the same catch phrase is equally applicable or unjust to Lord Londonderry, according to which way you like to look at it.

In Hitler's rise to power the noble Lord sees the natural outcome of a desire on the part of the German people to follow a strong man who promised to do for them by force, or shall we say forceful persuasion, what the victorious Powers of the war would not allow to occur by international agreement. His promises in this respect have been fulfilled.

Lord Londonderry's only major complaint against Nazi policy is that none of the leaders is prepared to state what their aims really are, and he emphasizes this point again and again. Whether one agrees with his views or not it is axiomatic that it would be quite impossible to attempt discussions for an international arrangement to satisfy Germany's aspirations without first having some idea of what they really are, leaving aside the cry of " Danegeld " that would arise from all Germanophobes in this and other countries.

The other point which he stresses in his book is the fact that Hitler and his followers make so much of the importance of their regime as an anti-Communist crusade. Needless to say no mention of this appears in Mr. Reimann's book, who only touches on Communism incidentally, although he is courageous enough to offer a theory as to why the mass Russian executions of recent years have taken place when he says :—

> " In the Soviet Union the former leaders of the Red Army, whose military strategy was based on the support of the workers and peasants, were not trusted by the ' authoritarian ' dictator who feels that he cannot always rely on the support of the workers."

On the other hand his castigation of various Nazi institutions such as the Gestapo, the S.S. and S.A. storm-troopers, and his remarks on the restriction of personal liberty in Germany, can only produce one thought in the minds of impartial readers, and that is that if the Ogpu is substituted for the Gestapo and Russia for Germany the comments remain equally valid. In passing it struck me that many of the quotations from Nazi publications indicate great courage on the part of the authorities in allowing statements drawing attention to weak features of their policy to appear in print—or else I entirely fail to understand their object.

It is interesting to compare the different constructions put on certain events by the two authors. These give a fairly good indication of the views of their writers without further comment.

Of the Weimar Constitution Mr. Reimann says :—

> " It cannot be denied that under the Weimar Republic the German people enjoyed many rights and liberties of which they had hardly dreamed under the old monarchial regime. But these rights and liberties had not been won as the result of a successful democratic revolution. They were concessions made to the workers with the object of splitting the working-class, and so preventing them from seizing political power at a time when the capitalist State was very weak and the working-class very strong."

whereas Lord Londonderry says :—

> " The unhappy condition of Germany under the so-called Constitution of Weimar was largely a matter of international indifference. No one seemed to care to what depths of degradation a strong and virile race might sink."

Again, when discussing General Schleicher's position when Herr Hitler came to power, Lord Londonderry says :—

> " But Herr von Papen was really the mouthpiece of General Kurt von Schleicher, who had been Minister of Defence under Brüning . . . Schleicher was an able man but given to subterranean intrigue, and from the impregnable Reichswehr Ministry he hoped to be able to manage . . . the country as a whole."

Mr. Reimann says :—

> " Those army leaders in particular like Schleicher, who wanted a ' War of Liberation ' backed by the entire population, were against a Nazi ' party dictatorship ' because they feared the opposition of the workers whose support is needed for a totalitarian war."

which is not quite the same thing.

Of the shooting or murder of Roehm and his followers in the summer of 1934 we again have divergent opinions. Mr. Reimann considers that :—

> " Roehm, the chief of the S.A., was preparing a *coup d'état* in Austria with the idea of establishing with his Brown Shirts a Nazi dictatorship in that country. If this plan had materialized France could not have failed

> to intervene and war against Germany would have been inevitable. The army leaders would have refused to enter on a war which Germany would have had no chance of winning. Hitler sacrificed Roehm and his associates."

Lord Londonderry's explanation is entirely different:—

> "Captain Röhm, the head of the Storm Troops, wished to amalgamate his corps with the Reichswehr and so make himself leader of the whole of the German armed forces. Herr Hitler saw in the proposed international supervision of the Storm Troops a means of checking his recalcitrant subordinate's aspirations. When the proposal was turned down Herr Hitler was accordingly driven to adopt the desperate but effective expedient of killing off Röhm and a host of disaffected followers."

I should hesitate to say if either were correct in toto.

These examples could be multiplied *ad lib.*; but the only major one is the question of colonies. Both writers agree that there is a very real danger of Hitler taking violent action to obtain a colonial empire. Lord Londonderry quotes the remarks Herr Hitler made in an interview the latter gave him in Berlin early in 1936:—

> ". . . and for England perhaps the time will come when she will have to consider the question whether an active friendship with Germany, or whether the possession of a couple of colonies which for the British Empire are not of great value, is the more important."

and while agreeing that Germany has made out no valid case for colonies on economic or other similar grounds, she can, he considers, justify her claim for reasons of prestige as a major world Power. This theme he develops at considerable length when giving accounts of his interviews with Herr Hitler, General Goering and other Nazi leaders. Mr. Reimann, on the other hand, bases Germany's demand for colonies on grounds which I suppose can best be described as capitalistic when he says:—

> "A country without a colonial empire, and under the dominance of finance capital, cannot 'divide the population'. Only the dominant capitalistic groups and the State bureaucracy can be assured of security and wealth; the mass of the population has neither property nor security, and must live at a very low standard if the profits of finance capital are to be maintained."

and later:—

> "The conditions for bourgeois democracy only exist where finance capital can exploit the colonial peoples and draw huge revenues from foreign investments."

This strikes me as an original line of argument, and if it is in any way capable of vindication it seems to be the only cogent one I have seen advanced to justify the German claim. Be that as it may, there is no doubt that German aspirations on this question are a potential source of fricton in the future, although I am unable to agree with Lord

Londonderry that we should make our minds up now to satisfy her wishes, at any rate to some extent. I hold the view that British rule, aiming as it does at the education of the ruled to be capable of self-government, exemplifies the great ideal of democracy, and it would be sheer weakness on our part if we were to stop the experiment in certain cases in order to hand the peoples in question over to an authoritarian rule which we are convinced is neither correct in theory nor in practice.

It will be noticed that I have not mentioned naval affairs, chiefly because they are hardly mentioned in either book. Lord Londonderry holds up the Anglo-German Naval Treaty as an example of what should be done in all spheres, conveniently ignoring the fact that Germany has at present no great aspirations in this direction; and Mr. Reimann unintentionally makes it quite clear that he has no conception of what sea power is or means. Beyond that nothing is said.

I could not wind up this review without quoting a most startling remark from the preface of Mr. Reimann's book when he says that a leader of the German Communist Party, who is also one of the founders of the Communist International, when asked why he would not let the working-classes of the world know his opinion of the mistakes made by the Comintern, said: —

> " I cannot do as you suggest on account of the existence of the Soviet Union. I do not want to set myself against the leaders of the Soviet Union. I know very well that we sacrificed the German movement to avoid a struggle with the Moscow leaders. It is possible that we shall sacrifice the movement in other countries for the same reason. In the end Fascism will be established over the whole capitalist world. Then there will be a final struggle between the Soviet Union and Fascism."

The possibility of the great democracies surviving, you will notice, is not even considered.

Lord Londonderry's most courageous undertaking is his postscript, written after the occupation of Austria by Germany, in which he attempts, unconvincingly to my mind, to justify Hitler's action. I am glad, however, that he does make it clear that he does not think similar action with part or all of Czecho-Slovakia is justifiable under any conditions.

Both books are worth reading; but Mr. Reimann's is heavy and takes time to assimilate, unless the reader's knowledge of economic theory is above average.

C. C. H. H.

"JAPAN OVER ASIA."

By WILLIAM HENRY CHAMBERLIN. (Duckworth. 15s.)

TWELVE years in Moscow as correspondent for the "Christian Science Monitor" gave Mr. Chamberlin a distaste for Soviet Russia, and his outspoken opinions made him *persona non grata* in that country. He was transferred to Tokyo, and, since 1935, has been the "Monitor's" chief correspondent in the Far East. His views on Japan will command attention from readers of his books on Russia and those who know the high reputation enjoyed by his paper's foreign news section. Some may put down "Japan Over Asia" with a feeling that another writer—say, Commander King-Hall—might have made his points more effectively and set out his material in a somewhat more orderly fashion; but the book can be recommended as a moderate and interesting study of Japan's position at the end of 1937.

The main factors underlying Japan's urge to expansion are thus catalogued by Mr. Chamberlin:—

> "There is the explosive pressure of rapidly increasing population in a land that is already overcrowded. There is the feeling of being unfairly treated in the world distribution of territory and raw materials. There is the exceptionally strong position of the fighting services *vis-a-vis* the civil authorities. There is the high-flown sense of nationalism, which for many Japanese has all the force of religious conviction. There is the mystical idea of Japan's Pan-Asian mission, very popular with retired army officers and nationalist theoreticians, which envisages Japan as the leader of an Asia from which 'white imperialism' has been banished. Finally, there is the great difficulty, not to say impossibility, of turning back from the imperial road on which the country has started, no matter how great the difficulties and obstacles which may be encountered."

The result has been an advance in three directions—northward in Manchukuo, westward in northern and central China, and southward towards the Pacific islands, the Philippines and the East Indies—together with a trade offensive in all the markets of the world to which Japanese goods can gain access.

In Manchukuo the Japanese Army, which created that nominally independent State, has gained a new training ground, a source of supply, and a point of vantage against Russia. Economically, it provides an important market, and its development keeps the wheels of Japanese

industry turning busily. As a field for emigration, however, Manchukuo has so far proved disappointing, and on the debit side must be set the military and administrative cost which has done so much to unbalance the Japanese budget. It has also increased the friction between Japan and Russia, but Mr. Chamberlin does not consider that war between these countries is an immediate danger. Japan's time to strike would have been in 1932 or 1933 : since then, Russia has greatly strengthened her position, particularly in the new weapons. " A kind of deadlock has been reached . . . which is only likely to be broken as a result of the injection of some radically new factor into the situation." A general European war, giving Japan opportunity to use her skill in fishing in troubled waters, is the most serious threat to equilibrium in the Far East.

For some years, " nibbling at China " has been the accepted policy of Japan towards her neighbour on the mainland. As Mr. Chamberlin shows, this policy has followed a zigzag course since the Twenty-one Demands were presented in 1915, but after the Japanese Army took the bit between its teeth in 1931, it has gone forward more steadily. On the other hand, the last two years have seen increased resistance from China under the influence of Chiang Kai-shek's leadership, western education, improved communications and other new factors. Mr. Chamberlin does not consider that Communism on the Moscow plan is a promising export to China, but the local variety has played a part in stiffening Chinese resistance. Japan is still greatly superior in the field, but her aims in China are not easily reconciled and may be very difficult to attain, if only because, in the words of General Sadao Araki, " the Japanese are a people of clay, the Chinese a people of sand ".

> " The fear that Japan may swallow China whole and swell to the greatest empire in the world in the process is based on a gross underestimate of Chinese subtlety and Chinese capacity for evasion, procrastination, sabotage and passive resistance. The Japanese clay may break if there is too reckless an expenditure of men and money in pursuit of ambitious dreams of overlordship in China. But the Chinese sand will never run in Japanese moulds."

Japan's Chinese policy has raised issues and sharpened friction with the Occident. In 1932 it brought her within measurable distance of war with the United States ; but the lead given by Mr. Stimson in opposing Japan was not quickly followed by the other interested Powers, and since then America's attitude has been distinctly passive. Britain, on the other hand, with much more to lose, has since been doing what she could to lend China diplomatic and economic support. From a materialistic standpoint, America's stake in China is far from being great enough to make a war with Japan " inevitable " ; such danger as

there may be derives far more from the streak of Don Quixote in the American character. In the face of competition in armaments arising from the lapse of the Naval Treaties and the limitations on fortification, America would do well to decide whether to abandon the Western Pacific entirely and regard a line from Alaska to Hawaii as her outer line of defence, or to fortify her outlying defences, including the Philippines, and seek a close understanding with Britain. The latter " cannot afford the luxury of choice as to its Far Eastern policy " since, if Britain's position in China is lost, still greater British interests will be jeopardized.

After China and naval rivalry, Japan's most important issues with Britain and America are the restrictions on her emigrants and trade competition. Japanese relations with the other Western Powers are of minor significance, except for the anti-Communist pact with Germany. This

> " is almost certainly more than an innocuous agreement to co-ordinate police measures against Communism. It is almost certainly less than the full-fledged military alliance which is envisaged in Moscow."

Mr. Chamberlin regards it as a demonstration of sympathy between the two countries, but holds that it does not mean that they will necessarily support each other in a major war.

While the Japanese Army stands for expansion in Manchukuo and on the mainland, the Navy sponsors an advance towards the south. Actual achievements in this direction include the development and fortification of Formosa, some successful colonization in the South Seas and the beginning of penetration into the Philippines—notably in Davao, sometimes sarcastically referred to by Filipinos as " Davao-kuo "—whose ties with America are being somewhat hastily but uncertainly cut. Japanese activity has aroused suspicion and nervousness in the Dutch East Indies and Malaya. The position of Singapore would be imperilled both economically and strategically if the Kra Canal[1] should materialize under Japanese auspices, but it still remains a proposal only. The southward line of advance has the attractions offered by suitable fields for emigration, some much-needed raw materials and some valuable markets ; but it brings the risk of serious conflict and would greatly add to the claims on Japanese capital which is already being drained by Manchukuo. Again, in the absence of a European war or an understanding with Soviet Russia, the southern front is at present likely to be of more importance commercially than politically.

Japan's trade offensive has been based on the combination of an oriental living standard with an occidental standard of production. The

[1] The proposed canal across the Malay Peninsula about 650 miles north of Singapore.

wages of employed workers in Japan are often less than our dole. In consequence, although the quality of Japanese goods is apt to be low, they have captured many markets. On the other hand, their success has raised trade barriers against them and this, together with shortage of raw materials and funds, will not make it easy for Japan to maintain her rate of progress in the future. Lack of resources and capital play an equally important part in agriculture, which is " at once the social foundation of Japan and its greatest economic problem ". The farmers, who form 40 per cent. of the population—and provide the best recruits—live for the most part in dire poverty, and the chronic agrarian crisis is a serious liability.

> " It is one of the bitter contradictions of Japan's race for empire, justified by nationalist economists as the sole remedy for over-population and natural poverty, that the immense economic and financial sacrifices which it demands for military and naval armament seem to exclude any large-scale rehabilitation measures for the benefit of the peasants who, from the nationalist view-point, represent the best type of loyal Japanese subject."

In the Japanese political world, Mr. Chamberlin considers the struggles and compromises between the fighting services and big business—" the struggle of the lions and the foxes "—to be of vastly greater importance than " the shadow boxing of the parties in the Diet ". Communism is severely repressed, trades unionism is very weak, and parliamentary control of policy is limited. The question naturally arises, What are the prospects of Japan adopting Fascism *in toto?* She already shows some of the symptoms—a Press which, though not controlled in the sense that it is in Germany or Italy, is yet by no means free, strong militaristic tendencies, a natural leaning towards collectivism. Against this, however, is the lack of an individual dictator or even a single party.

> " Curiously enough, it is just the semi-Fascist characteristics of present-day Japan that place obstacles in the way of development of Fascism of the standardized European type. In super-policed Japan a Fascist leader would in all probability be checked before he could build up a huge personal following. The imperial tradition which is so cherished by the military and conservative classes militates against the emergence of an individual who would concentrate the entire national spotlight on himself."

There is thus reason to doubt the rise of a Japanese Fascism, in spite of the " unmistakable gradual drift toward greater state control of everything, from ideas to import licenses ", concurrently with a drift toward a war-time economy in which industry booms while orthodox finance is thrown overboard; 49 per cent. of a budget which has doubled since 1932 is devoted to the needs of defence. The obvious methods—taxation, bond issues, controlled inflation, an attempt to achieve the maximum

economic self-sufficiency—have not yet succeeded in solving Japan's financial problems.

> "The diversion of an ever-larger part of the state revenue to essentially unproductive ends encounters more and more serious obstacles; the lack of essential minerals and raw materials, the dependence on foreign imports for the export manufactures, the small reserves of gold and limited possibilities of additional production of the yellow metal."

But :—

> "Japan's difficulties, though serious, should not be over-estimated. The Japanese people have not as yet been compelled to endure an ordeal remotely comparable with what the Russians suffered between 1929 and 1933. In two respects, at least, Japan's position is still more favourable than that of Germany. There is no absolute shortage of the foodstuffs on which the Japanese masses live . . . And the financial situation, while it has steadily become tighter, has not yet reached a point where it is a criminal offence to take small amounts in yen out of the country."

In summing up Japan's strength, Mr. Chamberlin is careful to point out the difficulties which beset the foreign observer—the jealous national secrecy, the repressed and reserved nature of the people, the intricacies of the language and the intangible nature of such factors as morale and solidarity—but he does not shirk the attempt. He believes the Japanese Army to be behind the European Powers in its equipment, but it is, of course, immeasurably superior to that of China, and its main centres are nearer than those of Russia to the prospective scene of hostilities. On the human side, Japanese morale, courage, discipline and endurance are likely to be of a very high order. These virtues are shared by the Navy, which possesses also more up-to-date armaments and occupies a very formidable defensive position. In the air she is less strong, since the Japanese are not natural pilots and the aircraft industry is not very advanced or efficient in its methods. Economically she is "confronted with grave difficulties which would become almost insurmountable in the event of a protracted war with one or more first-class Powers". Materials, finance and, in the long run, food would all become serious problems. Mr. Chamberlin considers, however, that the political structure of the country is sufficiently stable to withstand all but the most crushing defeat.

With regard to Japan's present struggle in China, Mr. Chamberlin believes that she has three principal objects :—

The creation of a regime in North China (including Peiping, Tientsin, Mongolia, Shantung and Shansi) that will be entirely subservient to Japanese wishes.

A government in Nanking which will be only a little less subservient than the new regime in North China, to the extent of wholesale economic penetration and a military alliance.

A change in the status of Shanghai.

Her chances of achieving these are held to depend to a large extent upon the time factor. If effective Chinese resistance could have been crushed within six months, the venture would have been a military and political success. " On the other hand, if China after a year still has forces in the field, perhaps armed from Russia, Japan's ultimate victory is likely to prove a Pyrrhic one." And even if her resources can stand the strain, military occupation will not put an end to her difficulties. " The unrivalled Chinese capacity for sabotage may make the fruits of conquest turn sour."

P. W. B.

"CHINA AND JAPAN."

Published by the Royal Institute of International Affairs, Chatham House, St. James's Square, London, S.W.1. (Price, 2s. 6d.)

THIS memorandum has been produced by the Information Department of Chatham House with the object of providing the public with "a concise and objective statement of the facts essential to the understanding of the issues", leaving the reader to draw his own conclusions.

Part I reviews the principal factors in the Far Eastern situation. It points out that the present armed conflict is an extension of the "Manchurian Affair", and that Japan's encroachment on the Asiatic mainland from 1931 onwards can be attributed to any or all of three distinct causes—the economic urge, strategic security, and the prestige motive.

The economic urge is due to the fact that the farming population of Japan is too great for her arable land to support; light manufactures have been developed, but Japan lacks many of the essential raw materials, while Manchuria, North China and Inner Mongolia offered a potential source of supply.

Strategically, Japan's position—analogous in many respects to that of the British Isles—made it her vital interest that no hostile Power should establish itself too firmly on the seaboard of the neighbouring continent. Japan saw her strategic frontier as lying deep in the continent of Asia.

Thirdly, there is the feeling that it is the "manifest destiny" of Japan to become the dominant influence in Eastern Asia. This ambition was openly displayed in the famous Amau declaration (given in Appendix IV of the memorandum), which has been described as a Monroe Doctrine for East Asia.

None of these factors have special reference to China. One view is that China is simply providing a battleground for Japan's struggle against Russia and the Western Powers. How far can responsibility for the present conflict be rightly attached to Japan? To what extent is there justification for the charges which Japan has brought against China? These are, in brief, that the Chinese Government has permitted if not encouraged the cultivation of anti-Japanese feeling, and that it

has been unable or unwilling to maintain that degree of domestic order and political stability which an adjacent State can rightly require.

Japan claims that she is entitled to have her interests treated with special respect and to intervene on the mainland when she sees developments taking place which she considers to be a menace to its political stability—in the words of Mr. Hirota, her late Premier, to " stop the Communist invasion of the Orient ". The moderate element in Japan which favoured a policy of persuasion in China has dissolved in the heat of the war fever.

The Chinese view is that Japan has brought her to the point where she must take up arms or renounce her existence as an independent State.

As internal solidarity is an element of great importance in war, Part II summarizes the political situation in China and Japan as they affect national unity.

China is still in the aftermath of her revolution, the course of which is briefly traced. By the middle of 1936 Nanking had at last secured a large measure of authority in the south, in Kwangsi and Szechuan, while Shansi and Shantung were showing signs of a more constant loyalty. The Red armies had been dislodged from the south, but in a remarkable march of 6,000 miles had established themselves in Shensi. In December Chiang Kai-Shek went to Sian in Shensi to visit the troops of the former army of Manchuria, who had been sent against the Reds. The Manchurians seized the Generalissimo as a hostage. He was released, apparently by the mediation of the Red leaders, and a reconciliation followed. (In the reviewer's belief, it was this reconciliation which prompted the Japanese to take their next step forward.)

Early in 1937 another obstacle to solidarity was removed by taking some of the " intellectuals " more closely into the counsels of Nanking.

Finally, there was a Fascist wing of the Kuomintang itself, which differed from the majority of the party in regard to the policy towards Japan and towards the Reds. When Chiang Kai-Shek was seized by the anti-Japanese " rebels " at Sian, the Fascist element pressed for military action against them, but failed to carry it through. The memorandum continues :—

> " The weight which should be attached to these inter-party schisms is, however, extremely difficult for foreign observers to determine, and in estimating the effect upon the prospects of national unity it is always well to remember that in Chinese politics divisions generally depend upon personal feuds and jealousies to a considerably greater extent than upon political creeds and principles."

(The reviewer believes, but has been unable to confirm it, that the leader of this Fascist wing has since been "liquidated," with Han Fu-Chu, the war lord of Shantung).

> "The evidence of the months following the outbreak of the hostilities in China may, in any case, be said to support the general conclusion that these hostilities brought the discordant elements in China to a state of greater cohesion and strengthened greatly the nascent spirit of nationalism."

It remains to be seen whether the business community will stand the strain of seeing the destruction of the property of its members in the areas exposed to the brunt of war. (Recent information seems to show that though they might be ready for an arrangement with Japan, the fear of assassination keeps them loyal.)

The memorandum next reviews the elements which actually control policy in Japan, and concludes that the "power behind the scenes" is twofold. It is an oligarchy with two wings, one military, the other industrial and financial. The industrial wing consists of the great family businesses, whose usual method has been the financial control of members of the House of Representatives and—partly at any rate—of the Government also. The Fighting Services draw their power from the principles that the Ministers of War and Marine are directly responsible to the Emperor and must be appointed from the generals and admirals on the active list. This enables the Services to veto the appointment of a Prime Minister who is unwelcome to them, and even to bring about the resignation of the whole Government.

The political system of Japan may thus be regarded as a meeting ground or channel of compromise between the two wings of the oligarchy, while the Emperor's personal advisers attempt to hold the balance.

The fundamental problem for all Japanese governments of recent times has been to provide livelihood for a rising population without altering the social *status quo*. The solutions attempted have been: war with China and Imperial Russia, colonial development in Korea and Formosa, and commercial expansion in world markets. On the whole, conquest and colonial development have been favoured by the Army and some industrialists, while the remainder of the business world preferred commercial expansion, but was by no means averse to conquest, provided that it gave quick returns at reasonable cost.

The forward policy was in the ascendency from 1914 till 1921, when the failure of the Siberian expedition gave the moderate party the lead. In 1931 the tide turned once more, due to repercussions of the world economic crisis and other causes. The spearhead of the new forward policy is the Right Wing movement among certain groups of junior army officers, the majority of whom to-day are drawn from the farming

class. Its motives are the increasing distress of the farmers and the desire to free the Army from control by the business wing, and it is saved from becoming subversive by its fanatical patriotism and devotion to the Emperor. A series of murders of Ministers culminated in the rising of February, 1936. It led to the appointment of a civilian Prime Minister and a drastic purge of the officer corps. The liberal elements won a partial victory in the elections of 1937; but by this time the Japanese Army had started fighting, and a backward step became impossible. The memorandum continues :—

> " It is still impossible to-day to say which groups in the country are exerting most control over the Government, though all would appear to be co-operating to the utmost in their efforts to overthrow the Chiang Kai-Shek Government and to start the development of North China under Japanese supervision. This apparent unanimity should, however, be considered in the light of the fact that open opposition would be interpreted as lack of patriotism—a charge few Japanese would dare to face."

Part II gives an outline of the principal events in the Far East and their international reactions, to the end of 1937. It ends with a statement made by the Japanese Prime Minister, Prince Konoe, on the 28th of November, of the future lines of Japanese policy. Japan's aims, in substance, are a fundamental adjustment of Sino-Japanese relations, and she will not accept the participation of a third party in negotiations.

Part III deals with the economic factors in China, Japan and Manchukuo which are relevant to the present conflict. The figures given cover population and migration, the supply of foodstuffs and raw materials, foreign interests and finance. They cannot readily be summarized, but there are some points which well deserve attention. Only half a million Japanese live outside Japan and the area she has occupied. They have been excluded from countries with a higher standard of living, and cannot compete as agriculturalists in territories with a lower standard of living. The actual number of agricultural emigrants to Manchukuo since 1931 is only 5,000. Nearly eight million Chinese live abroad, most of them in Siam, Malaya and the Dutch East Indies. It has been said that but for the restrictions on immigration " by this time the population of the western seaboard of North America would have been largely Asiatic ".

> "It appears", the memorandum states, " that both Japan and China are suffering from agricultural over-population. There is room for settlement in Manchukuo. It might be argued, however, that the natural immigrants are not the Japanese but the Chinese. In any case no more than a fraction of the growth in the Japanese population can possibly be counter-balanced by emigration. The only real solution of the Japanese population problem lies in industrialization. But industrialization can only be undertaken if adequate supplies of foodstuffs and raw materials are available."

In foodstuffs Japan is virtually self-supporting. Sugar she gets from Formosa and soya beans from Manchukuo. As regards raw materials her situation is a serious one, but its difficulties are frequently exaggerated. She has sufficient ordinary coal and nearly sufficient copper and timber, while the majority of industrial countries share her lack of cotton, wool, petroleum and rubber. Her deficiency in iron ore and coking coal, however, is a serious matter.

An economic bloc of Japan, Manchukuo and China could be fairly self-sufficient in many materials, though completely dependent on outside sources for oil, wool, rubber, potash and certain ingredients of steel. The position of the bloc, though not incomparable with that of the United States, the British Empire or possibly the U.S.S.R., would be definitely weaker.

Part IV deals with the international status of Shanghai, and with the series of emergencies through which it has passed.

The Appendices give summaries of the Twenty-one demands presented to China by Japan in 1915, the Nine-Power Treaty of 1922, the Tangku Truce of 1933, the Amau declaration of 1934, and the Three Points of Mr. Hirota of 1936.

The writers of the Memorandum have carefully avoided statements for which there is no full authority, and deductions for which there are no sure grounds. The reviewer, however, is tempted to step a little from their sure ground into the realm of prophecy. Both sides have "screwed their courage to the sticking place" and it looks as though they would fight one another to a standstill. The Japanese are fighting an expensive kind of war; the Chinese, if they stick to their Fabian strategy, a cheap one. Their endurance is no less than that of the Japanese, their patience probably greater. As long as barbarians remain within the Great Wall, there is an argument for fighting on which every Chinese peasant understands; and as long as the Japanese drop bombs on those they say they have come to liberate they are not likely to forget it. What is quite certain is that the Western Powers will have the job of hauling both parties out of the economic pit into which they will have fallen.

A. H. T.

"IF WAR COMES."

By R. ERNEST DUPUY and GEORGE FIELDING ELIOT.
(MacMillan [New York.] $3.00.)

MAJOR DUPUY, of the Field Artillery, U.S. Army, and Major Eliot, late of the Military Intelligence Reserve, U.S.A., and once of the Australia and New Zealand Army Corps, are both more modest and more moderate than many of the authorities who have given us their forecast of a large-scale war under modern conditions. Their book, they explain, "is neither a prophecy nor a professional treatise".

> "It is an attempt to examine and co-ordinate the lessons to be learned from the Spanish and Ethiopian campaigns and from the progress of the military art and of scientific research in this country and abroad, with the view of determining the characteristics which may be expected of the war of the immediate future—if war comes."

By thus restricting their field, and by trying to follow the principles of military writing advocated and practised by Admiral Mahan, they have avoided an appeal to the lovers of the sensational, and their book should be of some value to the professional as well as to the civilian student of war.

An introductory chapter gives an outline of the war in Spain, up to June, 1937, which is seen not merely as a struggle between two opposed "ideologies" and a rehearsal for a greater war but also as a fight for positions of the utmost strategical importance. Apart from her mineral wealth, Spain's geographical location makes her a vital factor to all the Powers in an only too possible European war.

The authors' exposition falls naturally into two parts. Part I, entitled "The Game", discusses in general terms war as a whole, the weapons and methods of aerial, military and naval war, such factors as propaganda and espionage and the effect of war on the citizen. Part II—"The Players"—is an examination of the military position and probable strategy of the more important countries in the light of the conclusions reached in the preceding chapters.

As a preliminary, the principles of war—a list differing from our own only in detail and the addition of a "Principle of Simplicity"—are enunciated and explained. The views of the authors follow conventional lines :—

> "War is not a science with fixed rules and formulæ, but an art based on a few fundamental principles. It should be remembered, however,

that—in the words of Colonel W. A. Mitchell—it is ' an art which employs nearly all of the sciences in its service '.

" The principles themselves are not to be too rigidly applied; they are to be obeyed rather in the spirit than the letter . . . .

" While modern weapons and methods have not changed the basic principles which guided the great commanders of all ages, profound changes in their application have been brought about."

The authors are no subscribers to the contentions of the " scientific school " which " emphasizes above all else the importance of weapons, of means of transportation and communication, of what they call ' scientific warfare ' ". The assertions of the air-minded, that air power has abolished armies and navies, and of the mechanization enthusiasts that their weapons have revolutionized war and made infantry obsolete, are considered to be based not upon the lessons of history but upon mere rationalization. One of the great dangers of these theorists is that they discount the human element to an almost negligible value. Major Dupuy and Major Eliot do not fall into this error, and their chapter on " The Soul of the Warrior " is a stimulating one. It is, however, possible to argue that in their reaction from the views held by Captain Liddell Hart, among others, they have gone too far in the opposite direction. Thus of a statement that Franco is winning a military victory " because such victories are won, not by men, but by machines ", they remark :—

" Nothing could be farther from the truth. The more complicated the device, the less its value in untrained hands. A tank is but a death-trap for its crew if that crew is not trained and trained thoroughly in handling their vehicle and its armament; a machine-gun is merely a noisy nuisance unless a cool, disciplined and efficient gunner is behind its sights."

This, of course, is entirely true as far as it goes, but it is not the whole truth. There is some reason to think that the Spanish government's lack of aircraft and artillery has played as great a part in their more recent defeats as the superior training and organization of Franco's forces. Given anything like equality of weapons, then the best man will win; but modern arms have so extended and multiplied man's power of inflicting damage that the greatest skill, valour and endurance may not suffice to make up for inferior armaments. We must agree, however, that the best weapons may be worthless in weak or unskilled hands.

In regard to the possibility of an entirely new weapon revolutionizing the course of a war in the immediate future, the authors are distinctly sceptical. New weapons take time to develop, and warfare has been an evolutionary process. " The greatest technical change, we think, will be brought about by the development of air power." Nevertheless they are not convinced by the theories put forward by writers like General Douhet who foresaw victory being won by the overwhelming blows

struck by air power alone. Command of the air, they point out, is almost impossible to achieve ; the most that can reasonably be expected is air superiority, and this is likely to be fluctuating, depending as it must upon a variety of factors and not least upon supplies, production and maintenance, which are liable to interference from the enemy's action. Air power is subject to inherent limitations, including the time of flight which prevents a sustained effort, its dependence on weather and the endurance of flying personnel.

> " The intense, ' all eggs in one basket ' air attack *à la* Douhet, therefore, in which ' any reserve held out is an advantage gratuitously offered to the enemy ', is in more ways than one a gamble, which, if it fails of its object, will leave its initiator defenceless in the air.
>
> " There must also be considered the number of bombing planes available for long-distance attacks ; no nation to-day possesses sufficient airplanes to make possible overwhelming attacks on the Douhet model, nor—having regard to the expense of constructing planes, the amount of material necessary, the length of time required to train pilots and the large and expensive organizations without which the modern air armada cannot function—is it at all likely that within the foreseeable future any Power will be able to construct such an air force. To do so would mean the diversion of so vast a proportion of the total national resources as to leave the nation comparatively defenceless on land and sea, save by the action of its aviation ; no great Power has shown any sign of adopting such a policy.
>
> " It is interesting, however, to note that certain French military experts fear what they call ' war at a given date ', that is, the building up of both air and military power *crescendo* with a given ' zero hour ' in mind. The nation doing this, as far as air power is concerned, would have a great initial advantage over an unwary opponent ; for the accumulation of great quantities of aircraft is generally regarded as uneconomical, due to the high rate of obsolescence. But this initial advantage would rapidly diminish unless it gained immediate victory."

This leads naturally to a consideration of terrorization, the attack directed primarily at the civil population. On moral grounds the authors condemn indiscriminate bombing, but they give stronger material arguments for thinking that this is a weapon which even the most ruthless opponent will be cautious about using. Their reasons may be summarized as follows :—

1. It is a gambler's throw, which may only stiffen the enemy's resistance.
2. It will have a very unfavourable effect on neutral opinion.
3. If it fails it will have wasted upon a non-military object an effort which might have turned the scale if otherwise applied.
4. It will immediately provoke reprisals in kind.[1]

[1] *Cf.* remarks on this subject in the article entitled " The Regulation of Bombardment " in this number.

In view of the uncertainty of defeating at one blow even a somewhat inferior enemy, the authors consider that no Power will be prepared to take the risk to begin with. Their preliminary conclusions are thus stated :—

> "First, that air power will assuredly be the initial instrument of attack in wars of the immediate future ;
>
> "Second, that it will be employed, in these initial moves, against military objectives and not against centres of population ;
>
> "Third, that it is incapable, *alone*, under present conditions, of bringing about an immediate decision by such attacks, because of its inherent limitations."

After a brief description of the duties and tactics of the main types of military aircraft, a discussion on the role of air power in modern war follows. The three great qualities of air warfare are evasion, from which arises its power of penetration ; speed, which lends new vigour and surprise to the attack ; and flexibility, which enables it to be concentrated on the objective most important *at the time*—all qualities which lend themselves to an offensive role. Some of its limitations have already been mentioned : others are its inability to hold and occupy, the desirability of having sufficient room and depth in which to operate in order to obtain the best results, the growing dependence on a large ground organization and—temporarily—lack of experience in its use. The last factor might conceivably decide the issue of a war, in more than one way, since underestimation of the enemy's air strength and underestimation of one's own might alike lead to a fatal strategical error.

On the vexed question of a separate air force, the authors hold the view that it is a necessity for most nations but not for the United States. The reason they give is that :—

> "To the United States as to no other nation in the world, with the possible exception of Japan, the Navy, and not the Air Force or the Army, is and ever must be the first line of defence. Consequently, to take from the Navy even in part the full control of its aviation would be a mistake of premier magnitude. And since the primary mission of our land-based aircraft, other than Navy squadrons, must be to co-operate with the Army, primarily in coast defence, it is logical that the Army should control all aviation not assigned to the Navy . . . It is interesting to note that the only other nation similarly situated, the only other nation in the immediate defence of whose homeland the Navy is of *first* consideration, Japan, is the only other great Power which does not have an independent Air Force."

They are, of course, entitled to their opinion, but it can hardly be regarded as a complete survey of—and still less a solution to—our own problems.

In a European war, it is argued, the first operation is likely to take the form of long-range air attacks upon vital centres of strategical

importance—railways, supply depots or industrial plants. To meet these, merely defensive operations will be inadequate. " The best defence against the airplane is another airplane—*offensively employed.*" It will not be possible, however, to abandon vital centres to the unrestricted attacks of enemy bombers. Some fighters will be required for important points, but their number should be kept to a minimum, and they should not be permanently assigned, if it can be avoided, to one specified area. If both air forces act on correct strategical principles a deadlock may ensue ; but in due course wastage, reserves, production, vulnerability and the effect of land and sea operations will come into the picture. The importance of choosing correct objectives can hardly be over-estimated, but the difficulty of doing so is enhanced by the fact that " in air operations, the defeat of the enemy's air forces is but a *means* to the end ; such defeat cannot of itself give final victory, both because of its ephemeral consequences, and because, more fundamentally, the decision must be attained on the ground and not in the air ". Attack on the enemy air force, though necessary, must be regarded as a diversion, and must " contain " a force as large as the detachment making it. The allocation of forces and the results they achieve will depend to a great extent on a close and up-to-date study of the enemy's industrial, transportation and communication systems. The Higher Command will have to bear a responsibility corresponding to the new opportunities offered by air power.

The effect of air war upon surface operations is likely to be profound :—

> " We think it possible definitely to assert that, as between first-class Powers, the movement of great masses of men, the great conscript armies of 1914–1918, and their supply at any distance from their bases, is under modern conditions impossible ; that in the war of the future, such masses of men will never be seen again . . .
>
> " If in a future war such amphibious operations as the Dardanelles campaign are ever again undertaken, they must be preceded by preliminary operations looking toward the establishment of air bases and the gaining of at least temporary air superiority at the point where the landing is to be effected."

Summing up :—

> " The coming of air power means smaller, faster-moving armies, requires careful co-ordination of ground and air plans of operations, offers new opportunities to really capable generalship, spreads out war not only on the battlefield but into areas hitherto outside the range of military operations, forces wide dispersion not only of armies but of essential industries, minimizes if not annihilates the protection of distance.
>
> " Air power is a formidable, indeed a terrible weapon ; its potentialities are not yet well understood, its future lies before it. But this much is sure ; it will be the more formidable in the hands of those who understand both its limitations and its powers, and who employ it

in close co-ordination with all the other instruments of national military effort, rather than either placing full dependence on it or reducing it to the status of a mere auxiliary to surface forces."

Of the chapters " What Will War on Land be Like ? " and " What Will War on Sea be Like ? " naval officers may well find the former more interesting, since they are likely to consider that the latter covers well-worn ground. The essence of the former chapter, of course, is the effect of mechanization on the struggle between mobility and fire-power. Here the authors are a little inclined to hedge. While they are convinced that the offensive is necessary to a decision, they are somewhat vague about the means by which the inherent strength of the defensive is to be overcome. While admitting the progress and importance of mechanized forces, they do not overlook the high wastage which must be expected nor the limitations of tanks and other mechanized units generally, some of which would seem to restrict them greatly. A mechanized division can move " *at best* 100 miles in a day—always provided that at the end of the day's run fuel can be obtained". It is rather interesting that these Americans are not of the opinion that the internal combustion engine has entirely supplanted cavalry, nor that infantry can be dispensed with. " Planes may bomb, artillery may bombard, gas may drench, but not until the infantry—queen of battles—actually captures the essential terrain is the struggle over. For proof of this one need look no further than Madrid." Some pages on anti-aircraft defence are also of interest. If these are reliable, American sound-location is well developed, and it is stated that :—

" Experiments are now being conducted with an infra-red searchlight which will illuminate the target without showing a luminous beam ; also a heat-detector which will be actuated by the heat of the airplane motor and act as control for searchlights and guns. The extent to which such experiments have been successful is not known."

If war at sea follows the lines envisaged by Major Dupuy and Major Eliot it is not likely to provide us with many major surprises. They do not consider that the next war will necessarily be over before the pressure of sea power has produced its effect, and they are firm believers in the necessity of the battleship. Their ideas on the use of aircraft in naval war contain nothing very revolutionary.

" Attacks by bombers on battleships will not usually be so productive of profitable result as attacks on carriers ; but it may very well happen that the hostile carriers are kept well back, out of reach or at least only to be reached at a prohibitive expenditure of fuel. Certainly a battleship can be severely damaged by heavy bombs, especially if it has already suffered damage from torpedo, mine or gun-fire so as to reduce its speed or cripple its anti-aircraft battery. Whether a modern battleship can be sunk by air bombs is as yet a doubtful point ; the circumstances under which the attack is made will probably provide the answer.

" One thing must be kept in mind : The question of air attacks against battleships, and indeed the whole employment of aviation in naval war, is not to be considered alone, by itself, but as a part of what instructors at the Command and General Staff School are wont to term 'the big picture'. Aviation is an arm of the fleet, just the same as the battleship force, the cruiser force, or the destroyer force. All must be used together, under the single direction of the commander-in-chief, in order to get the best results."

The popular American theories that their relative lack of distant bases makes large ships of vast cruising radius necessary to the United States and that speed is of comparatively negligible importance in a battleship are accepted, but apart from such points naval officers will find little controversial matter in these pages.

The chapter on chemical warfare is equally orthodox. The possibility of the appearance of a new gas with phenomenally destructive properties is discounted. So also are the humanitarian aspects sometimes claimed for chemical warfare. " Both the authors have had some slight experience with gas—experience exclusively disagreeable—and from their viewpoint chemical warfare resolves itself into just one more means to inflict casualties." Given training and the provision of anti-gas equipment, the results, even against civilians, are unlikely to be decisive. The great danger lies in an attack on an ignorant and untrained community.

In the intense propaganda campaign which must be expected on or rather prior to the outbreak of hostilities, a post-war weapon is now employed—the use of broadcasting. This demands psychological insight, technical skill and a curtailment of the people's freedom. In modern war, the dictators will start with many advantages over and above the fact that war at a selected moment is more possible to them than to a democracy. These advantages are apparent in the chapter entitled " What Will War Mean to the Civilian ? " It is emphasized that as a result of modern developments, the " Nation in Arms " of 1914–18 must give way to the concept of " The Nation at War ". To ensure the supply of food, weapons and munitions, " industrial mobilization " is necessary to organize the national resources to the best advantage.

" Germany, forced by the Versailles Treaty to an interlude of disarmament, made up for it later in her feverish rush to re-arm, and to-day has what is probably the most complete active set-up for ' The Nation at War '. Manufacturing plants are so highly organized that the worker personnel is also intensively trained in local anti-aircraft defence, the weapons already installed. In her frontier ' barrier-areas ' the inhabitants of the fortified villages, both agricultural and industrial, are for the most part veterans, are all trained, organized and equipped for anti-aircraft and anti-tank defence."

Industrial mobilization increases the dangers of sabotage and propaganda, dangers which may be increased by internal dissensions on class

lines. We have ourselves had a recent foretaste of this in the Opposition's demand for more or less active intervention on behalf of the Spanish Government on the one hand, and on the other, open sympathy for General Franco on the part of those who ignore the unpleasant consequences to the British Empire which his victory may involve.

Air power is an important factor in the necessity for comprehensive regulation of the national life. Since civilians living in the vicinity of strategic points are bound to suffer from the beginning, and indiscriminate air attack may follow in the later stages, training of the whole population in air-protective measures is essential.

> " One thing stands out. More stringent control of the civil populace than ever conceived of previously—at least by democratic peoples—is involved. This control must reach out not only in commerce, industry and alimentation, but even into the most trivial of personal interests. It will be more severely felt, in consequence, in those nations where the civilian has previously had the most freedom.
>
> " Another thing is sure ; so far as those at home are concerned, air threats must bring about the return of the horse and buggy age. Air alarms will bring immediate cessation of many public utilities. High-tension power-lines, electrified railway lines, must cease to function, either from the effect of enemy bombs or because shut off to avoid the danger of broken high-voltage wires thrashing about. Lighting current, of course, will be shut off at every alarm. Away, then, with the electric light, away the electric radio—there will be a ban doubtless on radio reception in any event—away all the electrical conveniences which the ingenuity of modern man has built up for his home. That very ingenuity, turned to destructive purposes, will counteract the benefits it has presented to civilization.
>
> " With such possibilities, with the certainty of nationalization of all resources, regimentation of every phase of the national life, there can be but one result—payment, as Mr. Justice Butler has so succinctly put it, by every citizen, of ' the reciprocal duty, according to his capacity, to support and defend government against all enemies '.
>
> " That nation whose citizens resist this payment will exist no longer, if war comes."

The second part of the book, introduced by a hasty survey of land communications in the history of the past, is an outline of the military problems of the principal Powers. One difficulty of such a study is shown by the fact that although the book was only published in November, the absorption of Austria has already made part of the chapter on Germany out of date. For the most part, however, the conclusions as far as they can be relied on are still valid.

The most pressing military problem facing Germany is asserted to be " the elimination of Czechoslovakia ". Single-handed, of course, Czechoslovakia, weakened by the large number of German sympathizers within her boundaries, would be no match for Germany and could hardly

do more than fight a delaying action to give time for her possible allies to bring pressure on Germany. For the same reason, speed would be of the essence for Germany. Similar considerations apply to Poland; and, in case of war with either country, Germany would probably commence with a strong air attack, followed by a mechanized thrust on land at the enemy's most vulnerable points.

Considering war on Germany's western frontier, the authors assess the position at the beginning of a struggle as follows :—

> " This must be considered primarily from the angle of France as initial principal adversary, with the weight of England possibly added. Belgium, unless physically invaded, may remain passive. A Franco-Russian coalition against Germany complicates matters only so far as such coalition might affect the buffer states west of Russia. Unless they too are allied to Russia, troop movement into Germany is denied to the Soviets, except through Lithuania into East Prussia. Time and space factors resolve the initial struggle into conflict between France and Germany.
>
> " Relative strength: Regular army man-power, 7 to 6 in favor of Germany; divisions, 38 German to 30 French; air strengths equal in numbers, tactical and technical factors favouring France as far as material and training is concerned. Morale may be considered equal. The French officer corps is unsurpassed; German commissioned personnel cannot achieve equality for several years to come. Despite the strenuous and efficient military schools now in full swing, the hiatus in military training imposed by the Versailles Treaty is too severe a handicap to be overcome in a short time.
>
> " Frontiers are contiguous. Mobilization centres on both sides are conveniently placed for immediate action. Adequate covering forces exist on both sides. Vital centres of both nations are mutually within range of aerial attack. Initial advantage can only be gained by hammer-blow."

French strategy is predicted as taking the form of offensive action at sea, active defence in the Maginot zone, and an immediate aerial retaliation. The first German action would undoubtedly be an aerial one, probably directed against Marseilles as the focus of Mediterranean troop transport, Paris and all concentration centres. In view of the French defences, a major offensive against the French frontier would have to be one of limited objectives and would probably be of long duration. An attack through Belgium would now offer doubtful chances of success and Switzerland would present certain difficulties. The general conclusion reached is that " factors unfavourable to Germany predominate in any estimate of war to the West ", but the balance might be altered if a Fascist Spain were her ally.

Whether or not Italy entertains grandiose ideas of a vast empire in North-East Africa, her economic situation makes control of the Mediterranean a vital factor to her security, and in a war with Britain a decision would have to be obtained there. Italy would no doubt

secure a local command in the central Mediterranean, but could hardly expect to keep open either the Straits or the waters of the Levant. An advance from Libya offers superficial attractions, but would meet steadily increasing resistance. A quick victory would be essential and " the plain truth is that Italy has not the resources for a war with the British Empire ". Against France, an Italian offensive on land would depend on the acquiescence of the Swiss ; the situation in North Africa would depend on the outcome of naval war in the Mediterranean. The position of Spain would again be of great importance. Italy is likely to be of most account as part of a *Mittel-Europa bloc* operating on interior lines against other possible combinations.

Russia's military problem is primarily one of defence on two widely-separated frontiers. On the west she is separated from her strongest and most probable opponent by buffer states whose attitude would largely condition the course of a war. In the east, Russia has been improving communications and strengthening her defences, and must now be taken into serious account by the Japanese General Staff. Her military morale, however, must have been affected by recent " purges ". In this connection it is suggested that an underlying cause of the downfall of Marshal Tukhachevsky may have been his advocacy of a defensive strategy, in opposition to the Kremlin's advertised policy of a vigorous offensive on enemy soil.

From the Japanese side of the picture, the first objective is domination of Eastern Asia, closely followed by control of the China seas. The strengthened Russian position indicates that Japan will have to penetrate westward into Mongolia to threaten her communications and must be prepared for a major effort if it comes to war. China, unassisted, is at present " unable to offer very serious resistance to a careful step-by-step advance by Japan, as long as the latter does not try to bite off too much at a time ", but an advance southward will bring her up against other major Powers. The main British resistance would necessarily be based on Singapore, but it may be expected that now that the Washington Treaty has lapsed, Hong Kong and other positions will be strengthened. The Dutch are fortifying the East Indies, and the United States must view with concern a threat to the Philippines, which form a very attractive objective for Japan. Among other advantages, their occupation would facilitate the attainment of her dream of a canal through the Isthmus of Kra.[1]

Against Britain, Japan would probably start with an air attack on Hong Kong, a landing in Fukien and an advance on Kowloon. If America were her only adversary, occupation of the Philippines would be the first step, followed by the reduction of Guam and the establishment

[1] See page 364.

of bases in the Pacific Islands. The result of these operations would determine subsequent strategy ; but given success here, a military defeat of Japan would present great difficulty even to an Anglo-American alliance. One of the most favourable factors on their side might be the —alleged—lack of efficiency of Japanese airmen and the indifferent quality of the Japanese aircraft industry.

Although many of Britain's and France's problems have previously been examined from the point of view of their potential enemies, the authors consider it desirable to deal with them from the other side, on the assumption that the two countries are highly probable, if not certain, allies. Both must face two important defensive problems : firstly, defence against air attack and, in the case of France, invasion also ; and secondly, the security of their sea communications. Unless these are adequately solved, offensive action will be crippled, if not impossible. A hostile Spain would add greatly to the difficulties of both Powers, and in this event her reduction must be one of the first steps to be taken. Italy would have to be immobilized by cutting off supplies and her naval operations neutralized. The occupation of Sardinia is suggested as the most promising method of doing this, after local air superiority had been obtained. On the Continent, it is thought that a small, but highly mobile, British expeditionary force should replace the large forces of the last war, supported, of course, by active air operations. In general, although they do not overlook the vulnerability of the Entente nations to air and sea attack, the authors consider the position to be more favourable than our pessimists will allow.

More fortunate than those countries of Europe whose natural inclination is to be neutral but whose situation as buffer states exposes them to what the authors describe as " The High Cost of Being in the Way ", the United States can concentrate on neutrality with greater prospects of success. None the less, war must be regarded as a possibility—as a result of foreign intervention, domestic sympathy or, less probably, the demands of collective security. From a defensive standpoint, the authors consider that the weakest element is the somewhat indefinite responsibility of America for the Philippines. Once lost, their recovery would hardly be a practicable operation of war for the United States. It therefore appears that America should choose between their complete abandonment or greatly strengthening their defences. Apart from this point, America is strong enough to resist aggression. " It behoves America to nourish that strength—increasing it where necessary —and remembering that, while war is terrible, defeat in war is worse."

The criticism of " If War Comes " which springs to the mind most readily is that it is too superficial. Its treatment of the problems of war

is elementary; this is naturally most noticeable to us in the chapter dealing with naval war. A reluctance to pursue the operations of a hypothetical war beyond the opening moves may be detected. We are not invited to consider in any detail the situation which may arise if the opposing mechanized and air forces fight each other to a standstill. The effect of France's political dissensions is not taken into account in the estimate of her strength, nor is there any specific consideration of, for example, the relative endurance of a natural and an artificially induced —or enforced—national morale under adverse fortunes of war. Perhaps, however, this would be asking too much of a book which must be kept within reasonable compass and the grasp of the general reader. Its scope, after all, has been deliberately limited; and even the specialist, unless he is an advanced student of war in all its aspects, is likely to find food for thought within that scope.

P. W. B.

BALANCE SHEET as at 31st December, 1937.

LIABILITIES.

	£ s. d.	£ s. d.
Accumulated Funds as at 1st January, 1937	5,154 14 9	
Add Surplus from Income and Expenditure Account	92 1 3	
		5,246 16 0
Subscriptions paid in advance ...		8 10 0
Sundry Creditors:—		
Printing and Production of November 1937 number ...	197 18 2	
Sundries	32 15 5	
		230 13 7
		£5,485 19 7

RICHARD WEBB, *Hon. Treasurer.*
J. H. OWEN, *Secretary.*

ASSETS.

	£ s. d.	£ s. d.
INVESTMENTS (at cost)—		
£100 India 4½% Bonds (1950/55) ...	87 13 0	
£2,700 3½% Conversion Loan ...	2,090 14 6	
£1,750 4% Consols	1,534 16 3	
£350 5% Conversion Loan (1944/64)	353 17 10	
£400 4% Funding Loan (1960/90)	353 11 0	
£200 3% Conversion Loan (1948/53)	198 16 0	
£250 3½% War Loan—Bearer ...	265 11 8	
		4,885 0 3
N.B.—The market value of these investments on 31st December, 1937, was £6,100 10s. 0d.		
Debtors—		
For Subscriptions	21 0 0	
,, Income Accrued	46 2 3	
,, Office Rent paid in advance	4 10 0	
		71 12 3
Cash at Bank—		
Deposit Account	306 6 10	
Current Account	214 13 9	
	521 0 7	
Cash in Hand—		
Hon. Editor	2 4 8	
Secretary	1 18 7	
Army and Navy Stores, Limited	4 3 3	
		529 7 1
		£5,485 19 7

AUDITORS' REPORT.

In our opinion the above Balance Sheet accurately sets forth the financial position of THE NAVAL REVIEW on 31st December, 1937.

80/86, Regent Street, London, W.1, and at Newcastle-on-Tyne.
5th April, 1938.

GILLESPIE BROTHERS & CO.,
Chartered Accountants.

INCOME AND EXPENDITURE ACCOUNT for the Year ending 31st December, 1937.

December 31st, 1937.	£	s.	d.	£	s.	d.
To Printing and Production of Volume XXV	721	13	4			
„ Literary Services	123	17	0			
„ Postages	78	9	5			
„ Assistant Editor and Secretary's Pay	200	0	0			
„ Stationery, Books, etc. ...	56	0	5			
„ Office Rent and Sundry Expenses	9	10	10			
„ Telegrams, Telephones, Messengers, etc.	18	0	0			
„ Audit Fee	9	9	0			
				1,217	0	0
„ Balance, being surplus for year				92	1	3
				£1,309	1	3

December 31st, 1937.	£	s.	d.
By Subscriptions and Payments for back volumes	1,092	14	4
„ Interest on Investments (*less* Tax)... ...	163	4	9
„ Income Tax recovered	51	12	0
„ Deposit Interest	1	10	2
	£1,309	1	3