MACHINES AND MEN. By JOHN BUCHAN.

HAVE been asked by the Editor to set down my impressions of the character of the present stage of the War in the West. Let it be understood that they are my own personal impressions. They have no kind of official sanction, and I do not know whether any soldier of authority agrees with them. But they are first-hand, and I give them for what they are worth.

Every war is a contest of two factors—men

The one without the other is plus machines. valueless. An unarmed soldier and an unmanned gun are things of equal futility. As matters stand at present the Germans are our superiors in one thing only. They have the better and stronger machine, and they use it to keep our man-power at arm's length. We believe, and we have cause to believe, that the quality of our fighting manhood is, on the whole, better than theirs. They seem to realise this, for they are striving to make it a longrange war. Our business is to devise as quickly as possible a counter-machine of at least equal strength which will give us a chance of " in-fighting." On that depends our success, for it is close-quarter fighting that alone will give us the complete victory, which is the only kind that can be contemplated. The German machine is so good that it is unlikely that we shall be able to better it; at the most we can create something equally, strong. But our fighting stuff is so good that even in the most desperate war à outrance when the Germans were fighting in direct defence of their homes, I do not think they could equal it. There lies our hope of superiority. Our business is to find some way of giving our manhood its chance.

QUALITY v. QUANTITY.

To put it in another way, we are equal or superior in quality, but inferior in quantity. Our guns and our gunnery are as good as the German, our field guns better. Perhaps they are more skilful in the tactical use of machine guns, for they have made a speciality of them and have five to our one. But in air work, in intelligence, in leading, we are certainly their superiors. We are clearly superior, too, in the quality of our Armies. I do not mean that there are not thousands of German soldiers as brave, as well-trained, and as well-disciplined as any in our own ranks. But their armies are no longer homogeneous. The terrible gaps have been filled up with very raw material which has not been absorbed and cannot be absorbed. You have only to talk to a German prisoner of the first line to learn the quality of many of the new drafts. The most notable fact, on the other hand, about our present front is its high quality all round. The famous old regiments that have been in the field since Mons are now largely made up from reserves, but it would be rash to say that the Guards Brigade, for example, is less good now than it was on the Aisne. The Territorials and Yeomanry have been lately fighting alongside our best infantry and cavalry, and doing marvels. The New Army, to anyone who has watched its growth, is not less efficient. The result is that our new troops do not make an ugly patchwork, but seem part of the old pattern, and the same is

true of the French. Again, as to officers, we are better supplied with the right kind. The mortality in the German officer class has been terrible, and since that class is a caste the losses are hard to replace without a violent breach of the whole service tradition. We are far better off in this respect than most people at home realise. There is a type of man in England whom the Germans overlooked in their calculations—the man who spends a few years in the Army and then leaves it to take the hounds somewhere or travel abroad. Nearly all that class is available now. Besides, in a peculiar degree the war in its present phase is a subalterns' war. Young men with half a year's service are as efficient for trench warfare as veterans of several wars. They have all the knowledge that is relevant, and are young and keen and cheerful to boot. One hears people complain that boys fresh from Sandhurst or Oxford are being "sacrificed." But they are not sacrificed, for, if they only learn a little caution, they are precisely the men wanted for the work. I have in mind a famous battalion which won great glory at the first Battle of Ypres and in many recent actions. After the colonel the next senior officer has eighteen months' commissioned service, and none of the others more than a year. Yet the battalion is in as good fighting trim as in October.

THE NEED OF QUANTITY.

These reflections make for optimism. But the time for optimism will not arrive till we have got our quantity to a level with our quality. There is a long road to be travelled before we can make certain of a decisive victory. Our quantity needs to be increased, largely increased, under two heads—men and mechanism.

1. Men.—Probably at this moment the Allies outnumber their opponents on the Western front. To estimate the British number might give information to the Germans, who, I understand, are sedulous students of Land and Water and Mr. Belloc's articles. But it may safely be said that for the thirty miles of line which we are holding our numbers are ample. Why, then, the need of more men? For two reasons, one particular and one general. The French Army since August has been undergoing a strain which only those who have seen these splendid troops at close quarters can realise. British officers have had leave; the French have had little or none. The whole of France has been stretched taut in one mighty effort. Now it seems pretty certain that we must look forward to a second winter of trench warfare—I hope on a different and much more easterly line of trenches. If that happens it is imperative that the British should hold an adequate share of the front. We have a greater population than France, but we are at present holding less than a tenth of the line. No doubt it is a very critical part, and we have had some of the hardest fighting of the war.

In the second place, it is men—the human factor—by which a campaign is ultimately won. A machine does the preparation, but the soldier completes the job. Our business is to get a

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machine which will nullify the enemy's, and then use the weight and quality of our man-power. Since we are not fighting for an equivocal peace but for the unconditional surrender of Germany, we must have the men to launch on her when we have shattered her defences. Exaggerated notions about the value of sea-power have tended to obscure in the minds of many people what such a decision as we are aiming at really involves. We are not fighting for insular security but for victory, and therefore it is not enough to sweep German merchantmen from the seas or even to destroy her Navy. Germany will not be beaten by shortage of food or shortage of munitions, but by shortage of men, and her decisive crushing can only take place by land. We must shatter her power in her own element; otherwise the war is as indecisive as the traditional combat of wolf and shark.

2. The Machine.—Here we have a long leeway to make up in certain breaches. There is, first of all, machine guns. The Germans are believed to have at least twelve to a battalion; our maximum is four, and that is not often reached. In all the trench fighting machine guns are highly important, as important as the bombs and grenades which we have learned to use most skilfully. The German line when it is attacked tends to "bunch" and collect into fortresses which bristle with machine guns, and the effect of this equipment is as if their troops were armed with a wonderful new automatic rifle.

Another deadly part of their machine is their poisoned gas. I am inclined to think that we are on the way to get even with this devilry without using a counter-poison. Our latest type of respirator is very good, and it was found in the fight at Ypres on May 24 that those troops who had been practised in their use till they were handy with them got off wonderfully lightly. Most people would prefer that we should not use a similar weapon in reply. We can probably devise a gas as deadly and as practicable as the German chlorine.

Most important of all is the supply of high explosive shells. It is useless to indulge in recriminations on this subject. Probably it will be found that none of the experts till quite recently were quite clear on the matter, and if experts speak with a divided voice the administrator at home is helpless. But to-day there is no question about the need. A German artillery or gas attack can only be met by a counter-bombardment. At the second battle of Ypres, which began on April 22, our line was maintained against impossible odds and with very great expenditure of life. Again, infantry cannot advance against trenches and entanglements, as the enemy constructs them to-day, unless an artillery preparation has broken them down. The French movement the other day towards Lens succeeded, because for four miles they had sterilised and flattened out the ground with their gunfire. The sight of that tremendous performance—great guns firing all day with the rapidity of maxims—was a lesson in the practical business of war. For miles there was nothing left of hostile parapets and entanglements—only a ploughed countryside, and fragments of wire and humanity. After it the infantry could advance as safely as on parade.

It is useless to labour this point, for we are all agreed. The melancholy reflection is that we

have not yet got the adequate machine, and until we get it we fight at a disadvantage. The bright spot is that once we have got it we have a clear superiority. Germany has trusted too much to her machine. Under cover of it her soldiers have dealt out death at long range, and they are so familiarised with this method of fighting that it may be doubted if they will do well at close range. Certainly in the last month their infantry attacks have been fiascos. Von Mackensen's thrust on the San, so far as we can judge, has been chiefly an affair of artillery. Counter their artillery with an equal or stronger weapon and the Allies are free to get to grips with them. I do not think there is a single case where, when we got to close quarters, we have not succeeded.

THE STRATEGIC PURPOSE.

There are three ways in which an enemy can be defeated. You may outflank him, roll in his wings, and compel a wholesale surrender. Or you may wear him down in a series of small actions where his losses are on the average much higher than yours, till a point is reached where his resistance crumples from sheer lack of numbers. Or, finally, you can make in his line a rent wide enough for your wedge to move in, roll up the ragged ends, and break his cohesion.

The first plan is impossible in the West, where the flanks of the armies rest on the Alps and the sea. The old manœuvre-battle is hopeless, since you cannot alter the configuration of Europe. The second is the plan the Allies have pursued during the winter. A war of attrition is successful when the enemy's normal rate of wastage is greater than yours, and this has been, generally speaking, the case whichever side initiated the attack. But attrition is a slow business, and a decision reached by exhaustion is not as valuable for our purpose as a series of crushing defeats in the field. For one thing, it costs the victor too much. Besides, if Germany is beaten by a slow wastage she may still trust in her military machine and believe that later, under more favourable conditions, it may succeed. But if the very gods in which she has confided play her false she may turn to more wholesome deities.

The third plan—to tear a great rent in her line—is the most hopeful. If that rent is wide and deep enough we may succeed in cutting the communications of a large section of her front, and so forcing her to shorten it and take up a new line. The same manœuvre repeated may drive her back inside her own borders, and give us the first stage towards victory—a campaign within German territory. But to make the rent needs a machine the equal of her own—more guns, far greater reserves of ammunition, and a great weight of men. We can provide all these things if we choose, and so the issue is in our own hands.

One last word. Germany is formidable not because she is more wicked and unscrupulous than ourselves. Her vices and follies are in the long run hindrances to her, not assets. She is formidable because of her virtues—her patience and science and foresight, the astonishing unanimity and discipline of her people, the endurance and self-sacrifice of her armies. We can win only by showing superior virtues, and that is an encouraging reflection for honest men. The Devil has not yet got his own way with the world.