

# How the German Infantry Fights

**A** GLANCE at the European war maps shows that the Germans know how to fight. But what the United States, grappling with preparedness, wants to know is how the Germans do it.

Imagine a Russian position in the East. A position in the East means a section of country which has been fortified with barbed wire, entangled on stakes as high as a man's knee, behind which are trenches or natural cover such as woods. Suppose this position is two miles long. Before the attack the Germans open a heavy artillery fire. It is directed at three points. The wire entanglements are blown to pieces, the trenches are torn up, and the roads by which supplies come from the Russian rear to the defenders are covered with fire. The ammunition used against the entanglements is high explosive shells; against the trenches these same shells and occasional shrapnel; against the roads of communication almost entirely shrapnel. The idea is that shrapnel is not of much use against men protected by trenches, but that it plays havoc with men in open country. A shrapnel is a projectile filled with two hundred-odd leaden balls the size of your thumb nail, and burst at a desired distance from the cannon mouth by a time fuse. It is most effective bursting about ten yards off the ground and a little in front of the target, the shrapnel spraying out like the stream from a watering-cart. A shell, on the other hand, explodes on contact, flinging jagged white-hot fragments of steel. The explosive gases in the higher-calibred shells, such as the 30.5 cm. and 42 cm., likewise tear men apart.

So much for the artillery preparation. The Germans give the order to charge. The artillery redoubles its efforts, keeping up the cannonade until the advancing Germans are so close to the enemy that it dares not fire longer, for fear of slaughtering its own men. The German attack goes up in three parallel and widely separated lines. These lines are deployed like skirmishers, about five yards between each man. They all advance on the run. The second line runs faster than the first and the third line faster than the second. The effect of this is to bring these men, when almost upon the enemy, shoulder to shoulder. But mark that point, "when almost upon the enemy." When crossing the zone of fire the Germans were not shoulder to shoulder and did not afford any massed target. They were in three rushing lines, the units of which were widely separated, and by their trick of giving each line a different speed of advance, they were all brought together for that one terrific moment just before the

bayonets get in their work, when it is most disconcerting for the enemy to face such a mass of men. These charging lines are fed by reserves kept in column formation until they are deployed and sent across the zone of fire for a second triple wave of charging men. That is the way the Germans attack.

This is what the English Tommies meant when they wrote home that "the beggars came down on 'em in clouds." The impression that sticks in the defending soldier's mind is how the enemy looks before he begins to use the bayonet. After that he can see nothing, only the blood mist.

The Germans were the first to use extensively the breech-loading rifle. When they fought Austria in 1866 they were opposed by infantry using the old muzzle-loaders. It was in this war that the Prussians introduced their company formation. The Prussian infantry manoeuvred in company columns. Each company had three sections, one behind the other. The first section was deployed in front as skirmishers. That formation, embodying the advantages of both line and column, is the basis of the German infantry attack to-day. This is, as we have seen, keeping the reserves in column from which the deployed attacking lines are fed.

After the war of 1866 German military circles were torn with the dispute as to how future wars should be fought. They could not hope for a repetition of the easy victories of the Prussian infantry who had been armed with breech-loaders while the Austrians had old-fashioned muskets. It was contended then that the new quick-firing rifles would give such a superiority to the defense that the basis of German tactics—"the offensive must be sought for everywhere"—would be modified. From the time of Frederick the Great until to-day, German military literature, with the exception of the discursive period after 1866, insists that the Germans must always take the offensive. They regard the defensive as a sign of weakness. It is to be permitted temporarily, but always the attack must be sought. On a German officer captured by the English in this present war there was found an order from a brigade-general. It said that reports had come to him that the men in this officer's regiment were losing their aggressiveness in the trenches, that they were showing signs of being satisfied with a "sit-and-take-it" warfare. This, the general said, would never do. The spirit of the German army is attack, and the men must always feel that. If they were accustomed to holding trench positions

too long they would lose some of that attacking power when the time should come to charge. Half the little trench attacks which you read about in the newspapers aimed at small sections of the French or English trenches are made so that the men will not get stale from defensive warfare.

Oddly enough, it was the French who were most influenced by the discussion in German military circles after the war of 1866. It was the French who took the view that the breech-loading rifle would give the defense a big advantage—a view which cost them dear in 1870. Even though the great Moltke himself suggested defensive tactics in some of his recommendations after 1866, the old attacking tradition of the Prussian army was too deep-rooted to be changed. In the war against France in 1870 the Germans compromised. They sent out many more men into the skirmish lines than in 1866, but the point is that these skirmishers were only regarded as a preliminary to the battle. We have seen to-day how skirmish lines fight a battle. Behind the skirmishers in 1870 the Germans threw in their old mass formations. At Mars la Tour a Hanoverian brigade lost half its strength in a few minutes, and at St. Privat the Prussian Guard was checked in twenty minutes with the loss of six thousand men. That was the last mass formation attack the Germans ever made.

The idea of attacking with the men spread out was at first appalling to German military strategists. Spread out men and you are bound to lose the officer's control of them. They then began an attempt to organize what Moltke called "the necessary disorder of the attack." It was a direct innovation from all the barrack-yard training of that day, but with that innate peculiar adaptability for meeting a new situation the Germans were able to give up their mass formation and to capture Le-Bourget in 1870 with the skirmish-line attack. If careless observers of the German army only studied it enough to realize that it is not a constricted but a versatile machine, they would never have written as they did after the battle of the Marne, "Now the German army is beaten because it has to take the defensive." The Germans reorganized their fighting methods in 1870 and they have done it to-day. Trench warfare is against the spirit of their army. Their officers have told me that the soldiers were dissatisfied when they were ordered to begin digging trenches.

We have to thank some observers of German manoeuvres in recent years for other misinformation on the way the Germans fight. Often at German manoeuvres there were seen firing-lines with soldiers four and five deep. Observers who didn't think it worth while to ask questions shrewdly conjectured about the heavy losses which would come

from this kind of fighting. When they left Germany they told us about it. One of our United States officers watching a German manoeuvre remarked at the dangerous density of the firing-line.

"You must imagine," a German staff officer replied, "that three-quarters of the men you see there have been wounded. Simply to save time we bring them along with the firing-line instead of leaving them scattered over the ground for a mile or so behind."

Meckel, that German military genius who rebuilt the Japanese army, long pleaded for heavy firing-lines. It is his influence that is responsible for the Germans' wonderful system of attack to-day, that is, the piling in of one firing-line upon another until, close upon the enemy, they all meet. Let me show the German advantage. When the English were cut to pieces at Mons their infantry fought as they did in the Boer War. They fought with the unconditional extended order. On a thousand yards of front the men were about five yards apart; that meant two hundred rifles in action. Upon this came the three rushing lines of Germans, two hundred rifles in the first lines, two hundred in the second, two hundred in the third. When they were almost upon their enemy they were six hundred rifles blazing to the English two hundred. That meant a fire-superiority of three to one; that meant annihilation or retreat. As one Tommy has put it, "I had a machine gun, you know. A row of German helmets comes up over the hill. We was peppering the beggars. Up comes the second line. We peppers that, when up comes the third. It got damned discouraging, you know."

In discussing with German officers the way the English and French fight I have had some frank admissions. A Bavarian captain in front of Ypres told me that the English were not effective on the attack, but they were remarkable defensive fighters. The German objection to the English attack is that it is too disordered. They say that as soon as the charge begins the English officers lose control of their men and that everything becomes "*gemischt*," mixed. They point out with a satisfied smile that you cannot create an efficient officer control over the attack when you have to make officers at short notice. They say that if the English had about ten years' training with real organization they would be wonderful troops.

They admire the qualities of the French officers, but they are not enthusiastic about the troops. They say that the French infantry relies too much upon the wonderful light artillery. They say that French officers often tell their men, "The artillery's killed nearly all the Germans in that trench; go and take it now." Also they say that the French infantry breaks more quickly on the attack than the English.

They have one method now for repelling attacks made by French infantry. Every French offensive is preceded by a terrific cannonade. Then the French infantry goes up with a rush that would seem to imply that the French field guns had prepared the way so that nothing could stop the charge. Wherefore the Germans never fire a shot until the French are within a hundred yards and then they let them have it with machine guns. This was the situation during the last terrific offensive of the French in Champagne. The French fired their artillery for seventy hours and made the German front-line trenches simply untenable. Then the infantry charged on trenches that were supposed to be filled with nothing but the dead. And the same old story was repeated. Upon getting close the French were racked with terrific machine-gun fire.

In that Champagne offensive captured French soldiers were found carrying emergency concentrated provisions for ten days. That meant one of two things. It meant that the offensive was supposed to be the long-talked-of march on the Rhine,

that Joffre expected to break the German line and pile his soldiers through the gap at top speed, carrying their provisions unhampered by any delays from transport trains. Or else it meant that their officers were giving the French infantry a kind of psychological chloroform to make the attack fiercer; that they had issued these provisions to make the men actually feel that they were going through to the Rhine. A good guess is that it was a little of both, for surely Joffre would never have wasted so much artillery ammunition unless he expected to break the German line. Breaking the western line is regarded as a military impossibility. Our own military observers who have been over the ground tell me that the Germans will never break through, nor will the Allies. And the point is this—proven in the Champagne offensive where the French actually broke through at one point only to be slaughtered all: in the warfare of to-day no army can develop quickly enough in a limited area the follow-through attack, entirely vital, to make the "break attack" decisive.

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## The Human Scale

**G**REAT buildings often have great doors; but great doors are heavy to swing, and if left open they may let in too much cold or glare; so that we sometimes observe a small postern cut into one leaf of the large door for more convenient entrance and exit, and it is seldom or never that the monumental gates yawn in their somnolence. Here is the modest human scale reasserting itself in the midst of a titanic structure, but it reasserts itself with an ill grace and in the interests of frailty; the patch it makes seems unintended and ignominious.

Yet the human scale is not essentially petty; when it does not slip in as a sort of interloper it has nothing to apologize for. Between the infinite and the infinitesimal all sizes are equally central. The Greeks, the Saracens, the English, the Chinese and Japanese instinctively retain the human scale in all that part of their work which is most characteristic of them and nearest to their affections. A Greek temple or the hall of an English mansion can be spacious and dignified enough, but they do not outrun familiar uses, and they seem to lend their spaciousness and dignity to the mind rather than to crush it. Everything about them has an air of friendliness and sufficiency; their elegance is not pompous, and if they are noble they are certainly not vast, cold, nor gilded.

The Saracens, Chinese, and Japanese in their va-

rious ways use the human scale with even greater refinement, for they apply it also in a sensuous and psychological direction. Not only is the size of their works moderate by preference, like their brief lyrics, but they exactly meet human sensibility by a great delicacy and concentration in design and a fragrant simplicity in workmanship. Everything they make is economical in its beauty and seems to say to us: "I exist only to be enjoyed; there is nothing in me not merely delightful." Here the human scale is not drawn from the human body so much as from the human soul; its faculties are treated with deference—I mean the faculties it really has, not those, like reason, which a flattering philosophy may impute to it.

An English country house which is a cottage in appearance may turn out on examination to be almost a palace in extent and appointments; there is no parade, yet there is great profusion—too much furniture, too many ornaments, too much food, too many flowers, too many people. Everything there is on the human scale except the quantity of things, which is oppressive. The Orientals are poorer, more voluptuous, and more sensitive to caligraphy; they leave empty spaces about them and enjoy one thing at a time and enjoy it longer.

One reason for this greater subtlety and mercifulness in the art of Orientals is perhaps the fiercer assault made on their senses by nature. The Eng-