

sible, but even probably, that these armies might have been met on the march by the Austrian reserves, and this time and the place of the probable meeting should have been well considered. If, then, these armies had been only in a measure delayed by the Austrians, we should finally have been obliged to attack, if we meant to obtain a decisive result of the day. Would the preparatory artillery fire have been sufficient for this attack?

It may perhaps also be said, that the Austrian artillery had the advantage of being on the defensive, and that always gives an advantage over the offensive; but there lies a contradiction in this; the artillery of one side must always be on the defensive, but that it must therefore necessarily conquer can hardly be maintained. It is the business, that is the tactics, of the one to make (if there is only room to place the guns) such dispositions as will take away the advantage of the defensive of the other. If the artillery concedes, that under the circumstances they will not be able to effect their object, it throws all the work on the shoulders of the infantry.

The expression "infantry tactics" is essentially a scientific abstraction, necessary for the fixing of scientific ideas and elementary forms. In a battle there is no such thing as infantry tactics; tactics are for the handling of the three branches united. It cannot be said at any moment during a battle, here the artillery tactics cease, and those of the infantry commence; both of them are constantly interwoven one with the other. Desperate circumstances can alone justify the employment of the infantry only, in the crisis of a battle; no theoretical rules can be laid down for infantry fighting under such circumstances, any more than for a battalion that is without its arms. Should the generals commanding insist on the infantry fighting alone, they certainly would not know how to make use of their materials. When the infantry blaze away at the enemy, and the enemy returns it; when the cavalry of both sides mutually attack, and the two artilleries cannonade each other, or, according to the technical expression, "when they mutually seek to draw the fire upon themselves," the tactics of the united arms can no longer be spoken of. Faults committed incur no penalty when both sides are equally blamable. The essential lever in war is the infantry; if that be broken, the battle is decided. Thus all the three branches should concentrate their force against the enemy's infantry, and only pay attention to the other arms in as far as it is absolutely necessary for the purpose of defence. It is a great truth that to work with concentrated force on one point—in battle as in the ordinary affairs of life—is always a warrant for success. The artillery, however good or numerous it may be, will never avert the loss of the battle, when once the infantry have been forced to give way.

If neglect and failure with regard to the tactics of the three arms were less felt on account of the needle-gun in 1866, in future the chance will not arise again: the question, therefore, is, what element is now necessary to secure a preponderance?

The proposals hitherto made are scarcely satisfactory. From one we may deduce that the firing will be mutually left off, and that the bayonet will then resume its old (?) rights. But that can only happen when both sides have come to an agreement to renounce all firing; otherwise the attacked party would always use the great defensive power of its weapon against the one attacking; and the fights of Nachod, Loufach,

Tauborbischoffsheim show sufficiently what the result would be. Others put forward regimental artillery, mitrailleuses. It is not to be conceived how the quick movements of infantry on every kind of ground can be followed with instruments of this kind, or how can they be made use of under a fire of small arms. Only let the wood of Maslowed be recollected. What would the fourteen Prussian battalions have been able to do with such mitrailleuses? An arm that can only be reckoned on at times, is worse than none at all; it leads to false calculations. These artificially forced ideas (*Treibhausideen*) all come to nothing in the simple, mighty wave of battle.

The supposition that at the commencement of the next war we shall remain strictly on the defensive, and allow the enemy's columns to advance among our bullets is a very rational one. If only the enemy will do us this pleasure, the matter is soon settled. They will, however, think twice, and well digest the matter, and possibly restrain a little their fiery dispositions. They will, perhaps, forming conclusions from our rapid proceedings in 1866, think to make us rush in among their bullets, and when we have been well sickened, go in at us with the bayonet. Thus we may stand, fighting shy of each other, and if we should further develop the consequences of this picture, we may both seek to get out of the mess by manoeuvring. But the matter would not take this tame course.

In the next war that side will obtain an unconditional tactical preponderance which best knows how to make use of its artillery, or rather that side which does not put off this practice till the moment that the war commences, that is, the side whose artillery has had the best tactical training.

We may gather from the history of the wars of former times that the efficiency of large cavalry masses depends on their leader. A cavalry leader cannot be guided by special orders; he is a general among generals of the highest grade, and should know how to obviate all difficulties which stand in the way of his efficiency. The moment when he should use energetic measures passes away quickly, so that any counsel, except that within his own breast, would be too late. A man such as is required is not necessarily to be found at all times in an army. Genius is not a frequent gift. It is only, however, when a born cavalry general is to be had, that the formation of large masses of cavalry is justifiable; they are not absolutely necessary; but if a mistake should be made, and the massed cavalry delivered into the hands of one who afterwards is found unfit to command them, the army would be robbed of the co-operation of a powerful agent. A mass of cavalry which remains idle would perhaps have performed good service, if it had been separated into smaller divisions. If, not being able to reckon on a born cavalry general, we advocate the distribution of cavalry by brigades to an army corps, it must not thereby be understood that we renounce altogether the operating by large cavalry masses. On the day of battle the different *corps d'armée* must always form a junction, and the assembly of the several cavalry brigades of each, so as to form a cavalry division, can be attended with little difficulty.

Whether the cavalry will be able to play an especially prominent part in future wars, may be decided by the experiences of 1866, as well as from what did happen as from what did not. So long as rapidity, boldness, and dash (*Waghalsigkeit*) are active agents in war, the cavalry will retain its importance.

A cavalry devoid of these qualities, but more so possessing good intentions, obedience, with sluggish bravery (*hausbackener tapferkeit*) and a laudable modesty (*loblicher bescheidenheit*), is worse than none at all. In the last century, even when the fire-arms were not to be compared to those of the present day, the cavalry were never supposed to attack unshaken infantry, or to move within grapo-shot range of batteries. Then, also, it was well understood that they must watch their opportunity. These conditions have altered very little. If the greater range of the fire-arms of the present day obliges the cavalry to keep their distance, at the same time the *terrein coupé* on which battles are now fought will afford them many opportunities for a nearer approach under cover, without acting disadvantageously on their efficiency. But the cavalry must learn to accustom itself to the new feature in war of the trenched and broken ground, and not demand plains, on which fire-arms can be used against them with the greatest advantage. A lighter cavalry is required, and not a heavy one.

Here, then, we close this tactical retrospect. What we have said may suffice to fix attention on those points which are worth noticing. Possibly we may have been mistaken in some of the details, but we only attach importance to the general ideas which may be traced throughout our remarks. If these should be just, the unimportant details of the points mooted, although not exactly correct, certainly cannot make the whole false. There are some, perhaps, who may think us to blame for having here spoken openly of circumstances, the truth of which has hitherto been concealed from the public eye. In all classes of society there are, no doubt, questions which should not be brought to open discussion, and which we endeavor to bear and cure in secret; but matters belonging to the history of battles cannot be comprised in this category. Battles cannot be fought secretly. What possible purpose would it serve to hide errors which one day by a signal defeat may be revealed, most intelligibly, to the whole world? But it may be replied that an individual opinion, which is not infallible, may, by spreading false views, do as much harm as it would otherwise do good were its views correct, and thus, to obviate all danger, all individual views should be suppressed. We do not subscribe to this doctrine. He who thinks that he is able to speak the truth usefully, is justified in so doing. He knows his own responsibility.

But it may also be urged, the time is not yet come to publish these things. When, then, will the time come? When those on whom, perhaps, now an undeserved reproach is cast, are dead; when it will probably be too late to profit by the experiences which we have gained. The time has always arrived to speak the truth.

The present times are much too momentous to be regarded with indifference. What turn political combinations will take, whether for war or peace, no man can foretell. The course of events often deceives the most clear-sighted speculations. But when a danger threatens, is it wise to say—"Oh, it will not happen, or at any rate not yet?" The war which may break out will be a most serious matter for the soldier. He can and will meet it with the fullest confidence in his powers, which have been already proved. Nevertheless, the most absolute self-examination is necessary. Our army has to thank the circumstance of its earnest training at home for its success up to the present time. In the future it will be far from boasting,