

by taking, itself, the offensive by advancing to the rencounter.* It is scarcely but in villages and defiles that I have seen real *melées* of infantry in column, the heads of which encountered with the bayonet; in battle position I have never seen the like.

However it may be with regard to these controversies, we could not too often repeat, it would be absurd to reject the fire of musketry, as well as to renounce semi-profound columns, and the imposing an absolute system of tactics for all countries and against all nations indiscriminately, would be to ruin an army. It is less the mode of formation than the well combined employment of the different arms which will give the victory; I except from it, nevertheless, columns too deep, which should be proscribed by all theories.

We will terminate this dissertation by recalling, that one of the most essential points for conducting infantry to the combat, is to secure our troops from the fire of the enemy's artillery as much as possible; not in withdrawing them unseasonably, but by profiting by the inequalities of the ground, or other accidents which are found before them, in order to shelter them from the batteries. When we have arrived under the fire of musketry, then shelters are not to be calculated upon; if we be in condition to assail, we must do so; shelters are suitable only, in this case, for skirmishers and for defensive troops.

It is sufficiently important, generally, to defend villages which are upon the front, or to seek to carry them if we be the assailant; but it is equally necessary not to attach an undue importance thereto, forgetting the famous battle of Hochstaedt: Marlborough and Eugene seeing the bulk of the French infantry buried in the villages, forced the centre and took twenty-four battalions, sacrificed to guard those posts.

For the same reason it is useful to occupy clumps of trees or copses, which may give a support to that one of the two parties which is the master of them. They shelter the troops, conceal their movements, protect those of the cavalry, and hinder that of the enemy from acting in their proximity.

The skeptic Clausewitz was not afraid to sustain the contrary maxim, and under the singular pretext that he who occupies a wood acts blindly, and discovers nothing of what the enemy is doing, he presents their defense as a fault of tactics. Blinded himself, probably, by the results of

*I have often seen, also, great combats where the half of the infantry was engaged by platoon as skirmishers; but that enters into the category of battalions engaged in an irregular file firing.

the battle of Hohenlinden, the author is too prone to confound here the occupation of a wood in the line of battle with the fault of throwing a whole army in a vast forest without being master of the issues, either of the front or of the flanks; but he must never have seen a combat who denies the incontestable importance of the possession of a wood situated in proximity with a line that he wishes to defend or attack. The part which the park Hougéumont played in the battle of Waterloo is a great example of the influence that a post well chosen and well defended can have in a combat; in advancing his paradox, M. Clausewitz had forgotten the importance which woods had in the battles of Hochkirch and of Kollin. But we have already dwelt too long upon this chapter of the infantry, it is time to speak of other arms.

ARTICLE XLV.

THE CAVALRY.

The formation of the cavalry, subjected to nearly the same controversies as that of the infantry, has been subjected also to the same uncertainty, and the too much vaunted treatise of the Count de Bismark, has not done much to clear them up. As we have been scarcely better settled upon its employment, I shall be permitted to submit what I think of it to the decision of generals habituated to conducting it.

The employment which a general should make of cavalry, naturally depends a little on the relative strength of that of the enemy, either in number or in quality. Nevertheless, whatever modification those variations may induce, a cavalry inferior, but well conducted, may always find occasions to do great things, so decisive is the proper moment in the employment of this arm.

The numerical proportion of the cavalry to the infantry has much varied. It depends upon the natural disposition of nations, whose inhabitants are more or less fit to make good horsemen; the abundance and the quality of the horses also exercise a certain influence. In the wars of the revolution, the French cavalry, though disorganized, and very in-

ferior to that of the Austrians, served marvellously. I saw, in 1796, in the army of the Rhine, what they pompously called the reserve of cavalry, and which formed scarcely a feeble brigade, (fifteen hundred horses.) Ten years afterwards I saw those same reserves fifteen or twenty thousand horses strong, so much had ideas and means changed.

As a general thing, we may admit that an army in the field ought to have a sixth of its force in cavalry; in mountainous countries, a tenth is sufficient.

The principal merit of the cavalry lies in its rapidity and its mobility; we might add even in its impetuosity, if it were not feared to see a false application made of the last quality.

However important it may be in the ensemble of the operations of a war, the cavalry could not defend a position without the assistance of infantry. Its principal object is to prepare or to finish the victory, to render it complete by taking prisoners and trophies, by pursuing the enemy, by rapidly carrying succor to a menaced point, by breaking the shaken infantry, finally by covering the retreats of the infantry and the artillery. This is why an army, wanting in cavalry, rarely obtains great successes, and why its retreats are so difficult.

The mode and the moment most suitable for engaging the cavalry, belongs to the *coup d'œil* of the chief, to the plan of battle, to what the enemy is doing; and to a thousand combinations too numerous to mention here. We shall indicate then their principal features.

It is acknowledged that a general attack of cavalry against a line in good order, could not be attempted with success unless sustained by infantry and much artillery, at least at a certain distance. It was seen at Waterloo how much it cost the French cavalry for having acted against this rule, and the cavalry of Frederick experienced the same fate at Kunersdorf. We may, nevertheless, find ourselves called upon to engage the cavalry alone; but, in general, a charge upon a line of infantry which should already be found engaged with the adverse infantry, is that from which we could expect the most advantages; the battles of Marengo, of Eylau, of Borodino, and ten others, have proved this.

Meanwhile there is a case in which the cavalry has a decided superiority over infantry; it is when there falls a beating rain or snow, which wets the arms and deprives the infantry of its fire; the corps of Angereau had a cruel proof of it at Eylau, and the left of the Austrians experienced the same fate at Dresden.

Great charges are also executed with success against infantry, when

we should have already succeeded in shaking it by a fearful fire of artillery, or in any other manner. One of the most remarkable charges of this kind was that of the Prussian cavalry at Hohenfriedberg, in 1745, (see Treatise of Operations.) But every charge against squares of good infantry not broken, must fail. Great charges are made for carrying the batteries of the enemy, and facilitating for the masses of infantry the means of crowning his position; then it is necessary that the infantry be in condition to sustain them without delay, for a charge of this nature has but an instantaneous effect, of which it is necessary to profit briskly before the enemy drive back your cavalry disunited. The fine charge of the French upon Gosa, at the battle of Leipsic, 16th of October, is a great example of this kind. Those which they executed at Waterloo with the same object, were admirable, but without results, for want of support. In the same manner the audacious charge of the feeble cavalry of Ney upon the artillery of the Prince Hohenloe, at the battle of Jena, is an example of what may be done in such a case.

Finally, general charges are made against the enemy's cavalry for driving it from the field of battle and returning afterwards against his battalions with more liberty.

The cavalry could be launched with success for taking the hostile line in flank or in reverse, at the moment of a serious attack, which the infantry should execute in front. If it be repulsed, it can return at a gallop, and be rallied upon the army; if it succeed, it may cause the ruin of the hostile army. It is rare that it is given this destination, and I do not see, nevertheless, what obstacle there could be to it, for cavalry well conducted could not be cut off, even when it should find itself in rear of the enemy. For the rest, this is the part which belongs especially to irregular cavalry.

In the defensive, the cavalry can equally obtain immense results, by engaging at the proper moment a hostile body of troops, which, having approached the line should be ready to penetrate it, or which should already have pierced it; it could in this case re-establish affairs, and cause the destruction of an adversary shaken and disunited even by its first successes; a fine charge of the Russians at Eylau, and the English cavalry at Waterloo proved this. Finally, the especial cavalry of the army corps make timely charges, either for favoring an attack, or for profiting from a false movement of the enemy, or in order to finish his defeat in a retrograde movement.

It is not so easy to determine the best mode of attack, it depends upon the object that is proposed, and other circumstances which have an influence upon the choice of the moment. There are four modes of charg-

ing; in columns at distance, in lines at the trot,* in lines at the gallop, finally at a helter-skelter, (*a la débâdée*;) all may be employed with success. In the charge *en muraille* or in line, the lance offers incontestable advantages; in *melees*, the sabre is better, perhaps: hence comes the idea of giving the lance to the first rank which is to break, and the sabre to the second, which is to finish by partial struggles. The firing with the pistol is suited only to advanced posts in a charge as foragers, or when the light cavalry wishes to harass the infantry and draw its fire, in order to favor a more serious charge. As for carbine firing, we scarcely know what it is good for, since it requires the whole troop to halt in order to fire deliberately, which will expose it to a certain defeat if it be attacked boldly. It is skirmishers only who are able to fire running.

We have just said that all the modes of charging could be equally good. Meanwhile it is necessary to guard against believing that impetuosity is always decisive in a shock of cavalry against cavalry. The fast trot on the contrary appears to me the best gait for charges in line, because here everything depends upon harmony, steadiness and order, conditions which we do not find in charges at a gallop. These are suitable especially in charges against artillery, because it is more important to arrive quickly than to arrive in order. For the same reason, with cavalry armed with sabres, we may throw ourselves at a gallop at two hundred paces against a hostile line which awaits us steadily. But if we have a cavalry armed with lances, the fast trot is the true gait, for the advantage of this arm depends above all upon the preservation of order; as soon as there is a *melee*, the lance loses all its value.

When the enemy comes upon you at a fast trot, it does not seem prudent to run upon him at a gallop, for you arrive all disunited against a compact and close mass, which will pass through your disjointed squadrons. There would only be the moral effect produced by the apparent audacity of your charge which would be favorable to you; but if the enemy appreciate it at its just value you will be lost, for in the physical and natural order, success ought to be for the compact mass against horsemen galloping without harmony.

In charges against infantry, the Mamelukes and the Turks have sufficiently proved the importance of impetuosity; where the lancers or the

* When I speak here of charges in lines, there is no contradiction with what I have advanced elsewhere; it is comprehended that the question here is not great deployed lines, but brigades, or divisions, at the most. A corps of several divisions will form upon the ground in several echelon columns, the head of which for each will be two or three regiments deployed for the charge.

cuirassiers at the trot will not penetrate, no cavalry will pierce. It is only against infantry much shaken, or whose fire could not be kept up, that the impetuous charge can have any advantage over the trot.* In order to force good squares, cannon and lancers are necessary, better still cuirassiers armed with lances. For charges as foragers or helter-skelter, so frequent in the daily recounters, it is necessary to imitate the Turks or the Cossacks: these are the best examples that can be taken: we shall return to this subject.

Whatever system is employed for going to the shock, a recognized truth for all possible charges is, that one of the best means of succeeding is to know how to throw at the proper time some squadrons on the flanks of the enemy's line which is to be assailed in front. But in order that this manœuvre should obtain a full success, in charges of cavalry against cavalry especially, it is necessary that it be executed only at the instant when the lines come to be engaged, for a minute too soon or too late the effect would probably be nothing: thus it is that the greatest merit of an officer of cavalry consists in this exact and rapid *coup d'œil*.

The armament and the organization of cavalry have been the subject of many controversies, which it would be easy to reduce to a few truths. The lance is, as has just been said the offensive arm for a troop of horsemen charging in line, for it attains an enemy that could not approach them; but it may be well to have a second rank or a reserve armed with sabres, more easy to handle when in a *melee*, and when the ranks cease to be united. Perhaps it would even be better still to cause a charge of lancers to be sustained by an echelon of hussars, who penetrating the hostile line after them, would better finish the victory.

The cuirass is the defensive arm *par excellence*. The lance, and the cuirass of strong leather doubled, or a buffalo hide, seems to me the best armament for the light cavalry; the sabre and the iron cuirass for that the heavy cavalry. Some experienced military men incline even to arming the cuirassiers with lances, persuaded that such a cavalry, very similar to

* M. Wagnen opposes to me the opinion of experienced horsemen who prefer the full gallop commenced at two hundred yards. I know that many horsemen think so, but I know also that the most distinguished generals of that arm incline for charges at the trot. Lasalle, one of the most skillful of those generals, said one day in seeing the enemy's cavalry running up at a gallop—"These are lost people!" and those squadrons were indeed overwhelmed at a slow trot. As for the rest, personal bravery has more influence upon shocks and *melees* than the different gaits; the full gallop has against it only, the leading to dispersion and the change of the shock into a *melee*, which can be avoided with the charges at a trot. On the other hand the much talked of momentum, the only advantage of the gallop, is but a phantom to frighten inexperienced troopers.

the ancient men at arms, would overturn all before it. It is certain that a lance would suit them better than the musketoon, and I do not see what should prevent giving them weapons similar to those of the light cavalry.

With regard to the amphibious troop, dragoons, opinion will ever be divided; it is certain that it would be useful to have some battalions of mounted infantry, which could anticipate the enemy at a defile, to defend it in retreat, or to scour a wood; but to make cavalry of infantry, or a soldier who would be equally proper for either arm, appears a difficult thing: the fate of French foot dragoons would seem to have sufficiently proved it, if on the other side the Turkish cavalry had not fought with the same success on foot as on horseback. It has been said that the greatest inconvenience of dragoons arises from the circumstance that you are obliged to preach to them in the morning that a square cannot resist their charges, and to teach them in the evening that a footman armed with a gun ought to overcome all possible horsemen: this argument is more specious than true, for instead of preaching to them maxims so contradictory, it would be more natural to tell them, that if brave horsemen can break a square, brave infantry can also repulse that charge; that the victory does not depend always upon the superiority of the arm, but rather upon a thousand circumstances; that the courage of the troops, the presence of mind of the chiefs, a seasonably made manœuvre, the effect of the artillery and the fire of musketry, the rain, the mud even, have contributed to checks or successes; but that in general, a brave man on foot or on horseback ought to beat a poltroon. By inculcating these truths to dragoons, they will be able to believe themselves superior to their adversary, either when employed as infantry or when charging as horsemen. It is thus that the Turks and Circassians act, whose cavalry often dismount to fight in the woods or behind a shelter gun in hand. Meanwhile, it cannot be concealed, good chiefs and good soldiers are necessary to carry the education of a troop to that degree of perfection.

However that may be, a regiment of dragoons attached to each *corps d'armée* of infantry or cavalry, as well as to an advanced or rear guard, could be very useful; whilst that forming whole divisions of dragoons is reducing them to the impossibility of being employed as infantry in the small number of unexpected cases where that would become necessary. It would then be better to make lancers of them.

All that has been said in respect to the formation of infantry may be applied to the cavalry, saving the following modifications.

1. Lines deployed checkerwise, or in echelon are much more suitable to cavalry than full lines; whilst that in the infantry the order deployed *en*

échiquier would be too broken, and dangerous if cavalry chanced to penetrate and take the battalions in flank; the disposition *en échiquier* is sure only for preparatory movements previous to the contact with the enemy, or for lines in columns of attack able to defend themselves alone in every direction against cavalry. Whether we form the *échiquier*, or prefer full lines, the distance between the lines ought to be sufficiently great in order that they should not reciprocally drag each other on in case of a check, in view of the rapidity with which they are rallied if the charge is unfortunate. It is merely well to observe that, in the *échiquier*, the distance may be less than in the full line. In no case, could the second line be full. It ought to be formed in columns by divisions, or at least to leave in it openings for two squadrons which we ploy in columns on the flanks of each regiment, in order to facilitate the passage of the troops rallied.

2. In the order in columns of attack upon the centre, the cavalry should be by regiments, and the infantry only by battalions. To comply well with this order, regiments of six squadrons are then necessary, in order that in plying upon the centre by divisions they may be able to form three. If they have only four squadrons, they would then only form two lines.

3. The column of attack of cavalry should never be compact like that of infantry, but at full or half squadron distance, with a view to having ground for separating and charging. This distance is only intended for troops thrown out to combat; when they are in repose behind the line they can be closed together in order to cover less ground and to diminish the space which they would have to pass over in order to engage, provided, nevertheless, that those masses shall be under shelter or out of reach of cannon.

4. An attack on the flank being more to be feared in cavalry than in a combat of infantry against infantry, it is necessary to establish, upon the extremities of a line of cavalry, some squadrons in echelon by platoons, in order that they be able to form, by a right wheel or a left wheel against the enemy who should come to disturb the flank.

5. For the same motive it is essential, as has already been said, to know how to throw seasonably some squadrons upon the flanks of a line of cavalry which we are about to attack; if there be irregular cavalry present, it is especially for that we ought to use it in the combat, because for this use it is worth as much and perhaps more than the regular.

An important observation also is that, in the cavalry especially, it is

well that the commander-in-chief extend in depth rather than in length. For example, in a division of two brigades which should deploy, it would not be expedient that each brigade should form a single line behind the other, but rather that each brigade should have a regiment in first line, and one in the second: thus each unit of the line will have its own reserve behind it, an advantage which cannot be misunderstood, for events pass so quickly in charges, that it is impossible for a general officer to be master of two deployed regiments.

It is true that in adopting this mode each general of brigade will have the disposition of his reserve, and that it would be well, nevertheless, to have one for the whole division; for this reason it is believed that five regiments for a division is very suitable for cavalry. If it is wished to engage in line by brigades of two regiments, the fifth serves as general reserve behind the centre. If it is wished, we may also have three regiments in line, and two in column behind each wing.

Is it preferred, on the contrary, to take a mixed order by deploying but two regiments at a time, keeping the remainder in column, in this case, we have also a suitable order, since three regiments formed by divisions behind the line cover the flanks and the centre, at the same time leaving intervals for passing the first line if it is beaten. (See fig. 10, plate 3.)

Two essential maxims are generally admitted for combats of cavalry against cavalry: the one is, that every first line ought to be sooner or later led back, for, in the supposition even that it should have made the most fortunate charge, it is probable that the enemy, by opposing to it fresh squadrons, will force it to rally behind the second line. The other maxim is, that with equal merit in the troops and chiefs, the victory will remain to him who shall have the last squadrons in reserve, and who shall know how to launch them at the proper moment upon the flanks of the hostile line, already engaged with his.

It is upon these two truths we shall be able to form a just idea of the system of formation most suitable for conducting a heavy body of cavalry to the combat. Whatever order may be adopted, it is necessary to guard against deploying large bodies of cavalry in full lines; for they are masses difficult to handle, and if the first is driven back, the second will be dragged along with it without being able to draw a sabre. To the number of a thousand proofs that the late war has given us of this, we will cite the attack executed by Nansouty in columns by regiments, upon the Prussian cavalry deployed in advance of Chateau-Thierry.

In the first edition of this treatise I opposed the formation of cavalry upon more than two lines; but I have never intended to exclude several lines *en echiquier* or in echelon, nor reserves formed in columns; I wished to speak only of cavalry deployed for charging *en muraille*, and the lines of which uselessly accumulated the one behind the other, would be swept away as soon as the first should chance to retreat.*

For the rest, in cavalry more still than in the infantry, the moral ascendancy does a great deal; the *coup d'œil* and the *sang froid* of the chief, the intelligence and bravery of the soldier, whether in the *melee*, or for rallying, procure victory oftener than such or such another formation. Meanwhile, when we can unite these two advantages, we are only the more sure of conquering, and nothing could legitimize the adoption of a mode recognized as vicious.

The history of the late wars (1812 to 1815) has renewed also ancient controversies for deciding if cavalry fighting in line can triumph in the long run over irregular cavalry, which avoiding all serious engagement flies with the speed of the Parthian, and returns to the combat with the same vivacity, limiting itself to harassing the enemy by individual attacks. Lloyd has pronounced for the negative, and several exploits of the Cossacks against the excellent French cavalry seems to confirm his judgment;† but we must not be deceived, and think that it would be possible to execute the same things with disciplined light cavalry, which we should launch as foragers against squadrons well united. It is the constant habit of moving in disorder which causes irregular troops to know how to direct all their individual efforts towards a common end; the best exercised hussars will never approach to the natural instinct of the Cossack, of the Tscherkès or of the Turk.

If experience has proved that irregular charges may bring about the defeat of the best cavalry in partial combats, it is necessary to acknowledge also the impossibility of counting upon helter-skelter charges in

* M. Wagner, in order to combat this assertion, cites the battle of Ramillies, where Marlborough conquered by a grand cavalry charge in lines, without intervals, against the French *en echiquier*. But, if my memory serves me, I think that the allied cavalry was at first formed *en echiquier* on two lines; the true cause of the success was that Marlborough, seeing that Villeroi had paralyzed the half of his army behind Anderkirch and the Gette, had the good sense to draw thirty-eight squadrons from that wing in order to reinforce his left, which had thus twice as many cavalry as the French. As for the rest, I willingly admit many exceptions to a maxim which I do not give as more absolute than all other maxims of cavalry tactics, a tactics as changeable as that arm.

† When I speak of the excellent French cavalry, I mean to speak of its impetuous bravery, and not of its perfection; for it does not approach the Russian or the German cavalry, either in equitation, in organization, or in the care of its horses.

pitched battles, upon which depends often the fate of a whole war. Such a charge could without doubt aid an attack in lines, but alone it would produce nothing important. We ought then to consider those irregular charges as a powerful auxiliary in the daily rencounters of cavalry, and as a useful accessory in decisive shocks.

From all that which precedes, we ought to conclude, in my opinion, that for battles, a regular cavalry, furnished with long arms, and for petty warfare, an irregular cavalry armed with excellent pistols, with lances and with sabres, will ever be the best organization for this important branch of the service of war.

For the rest, whatever system we adopt it appears not less incontestable that a numerous cavalry, whatever be its nature, ought to have a great influence upon the results of a war; it can carry to a distance terror into the ranks of the enemy; it captures convoys, blockades the army, thus to speak, in its positions; renders its communications difficult, if not impossible; disturbs all harmony in its enterprises and in its movements. In a word it procures almost the same advantages as a rising in mass of the people, by carrying confusion upon the flanks and upon the rear of an army, and by making it impossible for its general to calculate anything with certainty.

Every organization, then, which should tend to double the strength of the cavalry, in case of war, by incorporating militia into it, would be a good system; for those militia, aided by a few good squadrons, will be able at the end of some months' campaign, to make good partizans. Without doubt those militia will not have all the qualities which the warlike and wandering populations possess who pass, thus to speak, their lives on horseback, and whose first instincts are those of petty warfare; but they will supply them in part. In this respect Russia has a great advantage over all her neighbors, as much by the number and quality of her horses of the Don, as by the nature of the irregular militia which she can raise at a moments' warning.

The following is what I wrote twenty years ago in Chapter 35 of the Treatise of Grand Military Operations, upon this same subject:—

"The immense advantages which the Cossacks have given to the Russian armies are incalculable. Those light troops, insignificant in the shock of a great battle, (unless it be for falling upon the flanks,) are terrible in the pursuit and in a war of posts; this is the most redoubtable enemy for all the combinations of a general, because he is never sure of the arrival and execution of his orders, his convoys are always exposed,

and his operations uncertain. So long as an army has a few half regular regiments of them, their whole utility is not recognized; but when the number of them is increased to fifteen or twenty thousand, their importance is felt, especially in countries where the people are not hostile to them.

"When a convoy is carried away by them, it is necessary to escort all such, and that the escort be numerous and well conducted. We are never certain of making a tranquil march, because we know not where our enemies are; these labors require considerable forces, and the regular cavalry is soon rendered unserviceable by fatigues which it is not able to sustain.

"For the rest, I believe that hussars or volunteer lancers, raised or organized at the moment of the war, well conducted, and moving where bold chiefs conduct them at their will, would accomplish nearly the same object; but it is necessary to regard them as independent, for if they were to receive orders from the headquarters, they would no longer be partizans. They would not, perhaps, have all the qualities of good Cossacks, but they might approach them."

Austria has also in the Hungarians, the Transylvanians and the Croats, resources which other States have not; however, the services rendered by the mounted *landwehr* prove that we can draw also upon this species of cavalry, were it only for relieving the regular cavalry in the accessory services which abound in all armies, as escorts, despatches, detachments for conducting convoys, flankers, &c. Mixed corps of regular and irregular cavalry can often render more real services than if they were composed only of cavalry of the line, for the fear of compromising and ruining the latter, often prevents launching it into audacious movements which may produce immense results.

I would not terminate this article without noticing the by far too passionate attacks of which it has been the object on the part of General Bismark, and with which, unfortunately, I have become acquainted too late for replying to them as I ought to do. The passage which seems to have especially excited his wrath, is that in which I have advanced, after many others, that cavalry could not defend a position by itself. The General, who doubtless pretends that cavalry can make war of itself alone, and that it could hold a position quite as well as infantry, thinks to justify such sophisms in going for examples even to the war of Hannibal upon the Ticino, as if musketry, shells and grape shot had brought about no change in the employment of this arm! Proud of his equestrian erudition, he treats as ignorant all who do not think like him.

Without being a Seydlitz or a Laguérinière, one may very well reason upon the employment of cavalry in war, and although I have no pretension to being a trooper, I can say that the most experienced of generals in our day have partaken of my ideas upon the cavalry, and that in many battles I have often judged of it better than those who have commanded large masses of it.

The only one of my maxims which has excited some controversies, is that relative to the gait of the trot for charges against cavalry. Whatever may have been said of it, I believe still, at the moment at which I am writing, that success depends much upon the maintenance of order until the instant of the shock; and that for lancers especially, the shock of a *mass well in hand* and at the trot, would triumph over a troop scattered by the gallop.

As for the rest, to maintain order as much as possible in the shock, to endeavor to have it seconded at the opportune moment by a flank attack; to be able to give moral impulsion to one's troop, and to have an echelon ready for support, are the only elements of success which I have ever recognized as practicable in the charges of cavalry against cavalry, for all the fine maxims in the world vanish in a struggle rapid as the lightning, where the most skillful professors would only have time to parry sabre cuts, without even being in condition to give an order which could be heard and executed.

With regard to the good employment of the cavalry, in the whole of a battle as in that of the whole of a war, I believe that no experienced general would repudiate the ideas which I have advanced upon this subject.

I have never denied that cavalry would not concur in the defense of a position; but that it would defend it by itself, I shall ever deny. Posted on a position, behind a hundred pieces of artillery, it will be able to maintain itself there if one be contented with cannonading it, as the French cavalry so bravely defended itself at Eylau; but let infantry and artillery march upon it after having paralyzed its batteries, and you will see if the position will be defended.

For the rest, the true cause of the great wrath of General B**** is easy to divine. I have had the imprudence to say that his Treatise upon the Cavalry, albeit very erudite, had not caused much progress to be made in this arm. This judgment has doubtless appeared to him severe, and in spite of the wrongs of the author in regard to myself, I agree that it was pronounced in too absolute a manner. Meanwhile, after the teachings we have been able to receive from the cavalry of Seydlitz and

of Napoleon, I do not know whether that which M. B**** would organize and conduct according to his doctrines, would do much better; here lies the question. For having dared to resolve it negatively, I am but an ignoramus; there is good criticism for you! If opinions be free, cannot one discuss them without injuries? As for myself, I recognize in M. B**** much mind and erudition; perhaps he has even too much for the subject he treats. When wit sparkles and the passions speak, reason and judgment sleep. As for the rest, I have already observed in the notice which precedes this work, that it was not in serious books that a military man ought to reply to personalities especially after having been ignorant of them for six years.

ARTICLE XLVI.

THE EMPLOYMENT OF THE ARTILLERY.

The artillery is at the same time an offensive and defensive arm, equally formidable.

As an offensive means, a great battery, well employed, crushes a hostile line, shakes it, and facilitates to the troops which attack it the means of breaking it. As a defensive arm, it must be acknowledged that it doubles the strength of a position, not only by the harm it does an enemy from afar, and by the moral effect which it produces at a long distance upon troops which march to the attack, but yet by the local defense which it will make of the position itself, and within grape shot range. It is not less important in the attack and defense of places, or of intrenched camps, for it is the soul of modern fortification.

We have said a few words upon its distribution in the line of battle, but we are more embarrassed in speaking of the mode in which it should be made to act in combat. Here the chances multiply in such a manner, by reason of the particular circumstances of the affair, of the ground and of the movements of the enemy, that we cannot say that the artillery has any action independent of that of the other arms. In the meanwhile we have seen Napoleon at Wagram throw a battery of a