

tom to attach one or two brigades of light cavalry to each of the infantry corps; those in the centre place it in preference behind the line, those of the wings may place it upon their flanks. With regard to the reserves of this arm, if it be sufficiently strong for organizing three corps, to the end that the centre and each of the wings have its reserve, it would be an order as perfect as could be desired. In default of that, we could dispose this reserve in two columns, the one at the point where the centre is connected with the right, the other between the centre and the left; these columns could thus arrive with the same facility upon every point of the line which should be menaced.*

The artillery, now more movable, is indeed as formerly distributed upon the whole front, since each division has its own. Meanwhile it is well to observe that, its organization being perfected, we can better distribute it according to need, and it is ever a great fault to scatter it too much. There exists, for the rest, few positive rules upon this distribution of artillery, for who would dare to counsel, for example, to block up a gap in a line of battle, by placing a hundred pieces in a single battery, far from the whole line, as Napoleon did with so much success at Wagram? Not being able here to enter into all the details of this arm, we will limit ourselves to saying:

1. That horse artillery ought to be placed upon the ground where it can be moved in every direction.

2. That foot artillery, especially that of position, would be better posted, on the contrary, upon a point where it would be covered by ditches, or by hedges which would secure it against a sudden charge of cavalry. I need not say that, in order to preserve to it its greatest effect, we should be careful not to post it upon too elevated eminences, but rather upon flat grounds or slopes like a glacis; this is what every sous-lieutenant ought to know.

3. If the horse artillery be principally joined to the cavalry, it is well, however, that each army corps have its own, for gaining rapidly a point essential to occupy. Besides that, it is proper that there be some of it in the artillery reserve, in order to be able to direct it with more promptitude to the succor of a menaced point. General Benningsen had cause to congratulate himself at Eylau for having united fifty-eight pieces in reserve, for they contributed powerfully to re-establishing affairs between the centre and the left where his line chanced to be broken.

* It is well understood that this position supposes a ground favorable for that arm, a first condition of every well combined order of battle

4. If one be on the defensive, it is proper to place a part of the batteries of heavy calibre upon the front, instead of holding them in reserve, since it is the object to batter the enemy at the greatest possible distance, in order to arrest the impulsion of his attack and to scatter confusion in his columns.

5. In the same condition it seems suitable, that apart from the reserve, the artillery be equally distributed upon the whole line, since one has an equal interest in repelling the enemy upon every point; this, meanwhile, is not rigorously true, for the nature of the ground, and the evident projects of the enemy, might necessitate the carrying of the bulk of the artillery upon a wing or upon the centre.

6. In the offensive it may be equally advantageous to concentrate a very strong artillery mass upon a point where we should wish to direct a decisive effort, to the end of making a breach in the hostile line, which would facilitate the grand attack upon which might depend the success of the battle.

Having to treat here only of the distribution of the artillery, we shall speak farther on of its employment in combats.

ARTICLE XLIV.

THE FORMATION AND EMPLOYMENT OF INFANTRY.

The infantry is, without contradiction, the most important arm, since it forms the four-fifths of an army, and it is it which carries positions or defends them. But if it must be admitted that next to the talent of the general it is the first instrument of victory, it must be owned also that it finds a powerful support in the cavalry and artillery, and that without their assistance it would often find itself much exposed, and able only to gain half successes.

We shall not evoke here the old disputes upon the shallow and the deep order, although the question, which was thought to be decided, is far from being exhausted, and placed in a point of view which permits the resolving it by examples and probabilities, at least. The war with Spain and the battle of Waterloo have renewed the controversies relative to the ad

vantages of fire, or the shallow order, over the impulsion of columns of attack, or the deep order; we shall express our opinion farther on.

In the meantime we must not be misunderstood; it is no longer the question now to dispute whether Lloyd was right in wishing to give to the infantry a fourth rank armed with pikes, to the end of offering a greater shock in moving upon the enemy, or more resistance in receiving his attack; every experienced military man acknowledges in our day, that there is already sufficient difficulty in moving with order, battalions deployed in three closed ranks, and that a fourth rank would add to this embarrassment, without adding the least thing to their strength. It is astonishing that Lloyd, who had made war, should have insisted so much upon this material force; for the contact is very rarely sufficiently close, in order that this mechanical superiority be put to the test; and if these ranks turn their backs, it is not the fourth that will restrain them. This augmentation of a rank diminishes, in the defensive, the front and the fire, whilst that in the offensive, it is far from offering the mobility and the impulsion which are the advantages of columns of attack. We might affirm even that it will diminish that impulsion, for it is more difficult to cause eight hundred men to march in line of battle with four full ranks than in three, although there be a quarter less extent of front: the difficulty of the jointing of the two middle ranks, amply makes up for this slight difference.

Lloyd has not been much more happy in the choice of the means which he proposes for diminishing the inconvenience of narrowing the front; it is so absurd that we cannot conceive how a man of genius could have imagined it. He would deploy twenty battalions, leaving between each of them a hundred and fifty yards, that is to say, an interval equal to their front; we may imagine what would become of those battalions all disunited and isolated at such a distance, leaving between them twenty gaps where cavalry could penetrate in strong columns, to take them in flank, and sweep them like dust before the wind.

The question, we have said, no longer consists in discussing upon the augmentation of the number of ranks of a line, but merely to decide whether it ought to be composed of deployed battalions, acting only by their fire, or rather of columns of attack formed, each of a battalion ployed upon the two platoons of the centre, and acting only by their impulsion and their impetuosity.

Several modern writers have treated these matters with sagacity, without any one of them succeeding to present any thing conclusive, because in tactics all is much more subjected to unexpected events, to sudden inspirations, to the *moral*, and to individualities. Guibert was the most

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German, a work equally good to consult, under the title of *Tactics of the Three Arms*; but it presents a system of masses too accumulated. In France M. Jaquinot has also given a good elementary course.

PLATE III.

DIFFERENT FORMATIONS FOR COMBAT.

N. B.—All the dispositions supposed for a Division of twelve battalions.

Fig. 1.
Order deployed upon two lines.



Fig. 2.

Four Regiments of three Battalions, one of which is deployed and the other two in column.



Instead of putting the battalions in column behind the 1st and 4th Divisions, they might be placed by the side of them, which would augment the front by two divisions per regiment.

Fig. 4.
The same Division formed by Brigades



Fig. 3.
Column of ten Battalions deployed one behind the other with a Battalion on each flank marching by files.

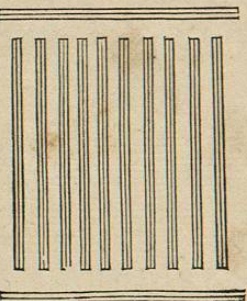


Fig. 5.

Twelve Battalions in columns of attack upon two lines with skirmishers in the intervals.



Fig. 6.

The same Battalions placed in two ranks instead of three, and the fourth Division deployed as skirmishers.

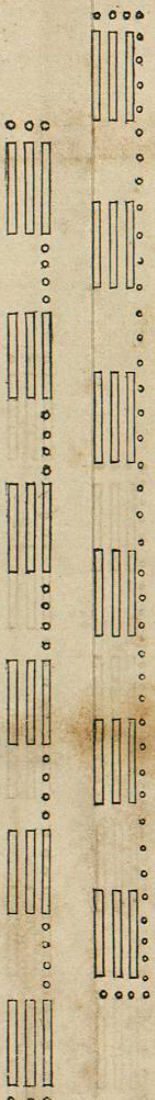


Fig. 7.

Divisions in squares by Battalion disposed checker-wise.



Fig. 8.

The same Divisions in long squares by Battalions.



Fig. 9.

The same in squares by Regiments of three Battalions.

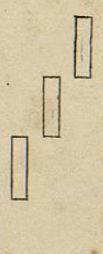


Fig. 10

Division of Cavalry of five Regiments.



The squares may also be formed in unmasked echelons.



The Cavalry should be deployed checker-wise rather than in full lines.

All the orders of battle may be formed with squares as well as with deployed lines.

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in tactics all is much more subjected to
spirations, to the *moral*, and to individualities. Guibert was the most

eloquent advocate of the shallow order and of fires, and a hundred victories of the late wars has given it a hundred denials. The Marquises of Chambray and Ternay have approached the same questions, and have given birth to doubts without resolving them. The course of tactics of the latter presents nevertheless, for orders of battle especially, valuable developments, not for prescribing absolute rules, but for familiarizing us with the different combinations which may result from them; this is all the advantage that can be promised from a tactical work.*

General Okounief, in his argued disquisition upon the three arms, has not shown less penetration, nor obtained less success. Perhaps he has not been sufficiently conclusive and has allowed yet some uncertainty to hover over the solution of the problem. Like his predecessors, he has not enquired whether the French columns, repulsed by the fire of the deployed English, were not masses much too deep, instead of being merely columns of a single battalion, like those of which we have just made mention, which would constitute a capital difference.

I shall resume the points of view which the question presents.

There exist, in fact, but five modes in forming troops for encountering the enemy.

1. As skirmishers;
2. Into deployed lines, either continuous or checker-wise, (*en échiquier*);
3. In lines of battalions ployed upon the centre of each battalion;
4. In deep masses;
5. In small squares

The skirmishers are an accessory, for they ought only to cover the line properly so called by favor of the ground, to protect the march of the columns, to fill up the intervals, or defend the approaches of a post.

These divers modes of formation are thus reduced to four systems: the shallow order, or the one deployed into three-ranks: the half deep order, formed of a line of battalions in columns of attack upon the centre, or of squares by battalions; the mixed order where the regiments should be in part deployed, and partly in columns; finally, the deep order, composed of heavy columns of battalions, deployed the one behind the other.

The order deployed upon two lines, with a reserve, was formerly generally used, it is especially useful in the defensive. Those deployed lines may be continuous, formed checker-wise, (*en échiquier*), or in echelons.

* The Prussian Major Decker, has written in German, a work equally good to consult, under the title of *Tactics of the Three Arms*; but it presents a system of masses too accumulated. In France M. Jaquinot has also given a good elementary course.

The order by which each battalion of a line is found formed in column of attack by divisions upon the centre, is more concentrated; it is in some sort a line of small columns, (like the figure 5 of the opposite plate.)

In the present regulation of three ranks, the battalion having four divisions,* this column would present twelve ranks in depth, which gives perhaps too many non-combatants, and too much exposure of artillery. To diminish these inconveniences, it has been proposed, whenever it should be desired to employ infantry in columns of attack, to form it into two ranks, to place but three divisions of each battalion behind each other, and to deploy the fourth as skirmishers in the intervals of the battalions and upon the flanks, but to rally them behind the three divisions, if the enemy's cavalry chanced to charge. (See figure 6.) Each battalion would have by this means two hundred more shots, besides those which the increase, by a third, of the front would give by putting the third rank in the first two. Thus there would be in fact but a depth of six men, and we should obtain one hundred files front, and four hundred shots for each column of attack of a battalion.

There would thus be strength and mobility united.† A battalion of eight hundred men, formed, after the method in use, into column of four divisions, presents about sixty files to each division, and the first alone firing by two ranks, there would be but one hundred and twenty shots to furnish for each of the battalions thus placed in line, whereas, according to the mode proposed, there would be four hundred delivered.

But whilst seeking the means of obtaining more fire at need, it is important to recollect also that the column of attack is not destined to fire, and that it ought to reserve this means for a desperate case; for, if it commences to fire in marching upon the enemy, its impulsion will become null, and the attack will fail. Besides that, this reduced order would be advantageous only against infantry, for the column of four sections of three ranks, forming a kind of solid square, is better against cavalry. The Arch-Duke Charles was fortunate at Essling, and especially at Wa-

* The word *division*, employed to express four or five regiments, as well as for designating two platoons of the same battalion, creates a confusion in tactical language which it would be important to abolish. It is to the regulations alone that this right is reserved.

† In the Russian army, they take the skirmishers from the third rank of each company or division, which reduces the column to eight ranks instead of twelve, and procures more mobility. But for facility in rallying the skirmishers in column, perhaps it would be better to employ for them the entire fourth division; one would then have nine ranks, or three divisions of three ranks each, against infantry, and the full column of twelve ranks against cavalry.

gram, in having adopted this last order, which I proposed in my chapter upon the general principles of war published in 1807; the brave cavalry of Bessieres could do nothing against those little masses.*

In order to give more solidity to the column proposed, we could in truth call in the skirmishers and reform the fourth section; but there would always be but two ranks, which would present much less resistance against a charge principally upon the flanks. If for diminishing this inconvenience, we wish to form square, many military men think that in two ranks it would offer less consistency still than the column. Meanwhile the English squares were of only two ranks at Waterloo, and in spite of the heroic efforts of the French cavalry, there was but a single battalion broken.

I have explained all the parts of the process; it remains for me to observe that if it were desired to adopt the formation in two ranks for the column of attack, it would be difficult to preserve that in three ranks for deployed lines, an army being scarcely able to have two modes of formation, or at least to employ them alternately on the field of battle. Hence what European army (if we except the English) could be risked to deploy in lines of two ranks? It would be necessary in this case never to move but in column of attack.

I conclude from thence that the system employed by the Russians and the Prussians, that of forming the column of four divisions in three ranks, of which one could at need be employed as skirmishers, is that which is generally applicable to all situations, whilst that the other of which we have spoken is suitable only in certain cases, and would require a double mode of formation.

Independently of the two orders above mentioned, there exists a mixed, which Napoleon employed at the Tagliamento, and the Russians at Eylau; their regiments of three battalions deployed one in first line, and formed the other two behind this one, upon the platoons of its extremities, (fig. 2, same plate.)

This regulation, which belongs also to the semi-profound order, is suitable, in fact, for the offensive-defensive, because the troops deployed in first line resist a long time by a murderous fire, the effect of which always somewhat shakes the enemy; then the troops, formed in column,

* M. de Wagner seems to call in question that I contributed to the adoption of this formation. His Royal Highness, the Arch-Duke himself, assured me of it in the meanwhile, in 1814; for, in the Austrian as well as in the French regulations, it was used only for the attacks of posts, and not for lines of battle.

can debouch through the intervals and throw themselves upon him with success. Perhaps we could augment the advantage of this formation by placing the two battalions of the wings upon the same line as that of the centre, which would be deployed in such a manner that the first divisions of those battalions would be in line. There would thus be a half battalion more for each regiment in the first line, which for fire would not be inconsiderable; but it might be feared that those divisions putting themselves in condition for firing, the two battalions kept in column to be launched upon the enemy would be less easily disposable. However, there are many cases where such an order would be advantageous, it is sufficiently so for rendering it a duty to indicate it.

The order in very deep masses is certainly the least suitable, (fig. 3.) We have seen in the late wars, divisions of twelve battalions deployed and compressed behind each other, forming thirty-six crowded and accumulated ranks. Such masses are exposed to the ravages of artillery, diminish mobility and impulsion, without adding any strength. This was one of the causes of the small success of the French at Waterloo. If the column of Macdonald succeeded better at Wagram, it paid dearly for it, and but for the success of the attacks of Davoust and of Oudinot upon the left of the Arch-Duke, it is not probable that it would have come out victorious from the position in which, for a moment, it saw itself placed.

When it is decided to risk such a mass, it is necessary, at least, to take care to establish upon each flank a battalion marching by files, in order that if the enemy chanced to charge in force upon those flanks, it would not oblige the column to halt, (see fig. 3;) protected by those battalions which will face to the enemy, it will be able at least to continue its march to the object assigned it, otherwise this great mass, battered by converging fires to which it has no means of opposing even a proper impulsion, will be put in disorder like the column at Fontenoi, or broken as the Macedonian phalanx was by Paulus Æmilius.

Squares are good in plains and against an enemy superior in cavalry. They were made formerly very large, but it is acknowledged that the square by regiment is the best for the defensive, and the square by battalion for the offensive. We can, according to circumstances, form them into perfect squares or into long squares, in order to present a greater front, and obtain more fire on the side from whence the enemy is expected to come, (see fig. 8 and 9.) A regiment of three battalions would easily form a long square by breaking the middle battalion and causing each half battalion to move, the one to the right, and the other to the left.

In the wars with Turkey, squares were almost exclusively employed,

because hostilities took place in the vast plains of Bassarabia, of Moldavia and of Wallachia, and the Turks had an immense cavalry. But, if operations have place in the Balkan or beyond, and if their feudal cavalry give place to an arm organized in the European proportions, the importance of squares will diminish, and the Russian infantry will show all its superiority in Romelia.

Be that as it may, the order in squares by regiments of battalions appears suitable to every kind of attack, whenever there is a superiority in cavalry, and we manœuvre on even ground, favorable to the charges of the enemy. The long square, applied especially to a battalion of eight platoons, of which three should march abreast, and one upon each of the sides, would be better for moving to the attack than a deployed battalion; it would be less suitable than the column proposed farther back, but there would be less wavering and more impulsion than if it marched in a deployed line; it would have, moreover, the advantage for being in condition against cavalry.

It would be difficult to affirm that each of those formations are always good, or always bad; but it will be admitted, at least, that it is an incontestable rule that, for the offensive, there is necessary a mode which should unite *mobility, solidity, and impulsion*, whilst for the defensive there is wanted *solidity united to the greatest possible fire*.

This truth admitted, it will remain to decide whether the bravest offensive troops, formed in columns and deprived of fire, will hold out long against deployed troops having twenty thousand musket shots to send it, and able to deliver it two or three hundred thousand in five minutes.

In the late wars, we have often seen Russian, French and Prussian columns, carry positions at the support arms, without firing a shot; it is the triumph of impulsion and of the moral effect which it produces, but against the murderous fire and the *sang froid* of the English infantry, columns have not had the same success at Talavera, at Busaco, at Fuente di Onor, at Albuera, and still less at Waterloo.

Meanwhile, it would be imprudent to conclude from thence that this result should cause the balance to incline decidedly in favor of the shallow order and of fire; for, if the French were accumulated in all these affairs into masses too profound, as I have more than once seen with my own eyes, it is not astonishing that enormous columns, formed into deployed and wavering battalions, battered in front and flank by a murderous fire, and assailed on all sides, have experienced the fate which we have pointed out above. But would the same result have taken place with columns

of attack formed each of a single battalion ployed upon the centre according to rule? I do not think so, and in order to judge of the decided superiority of the shallow or firing order, over the half deep order, or that of offensive impulsion, it would be necessary to witness repeatedly what would happen to a deployed line which should be boldly attacked by an enemy thus formed, (fig. 6 of plate 2.) As for myself, I can affirm that, in all the actions in which I have been, I have seen these little columns succeed.

Moreover, is it easy to adopt another order for marching to the attack of a position? Is it possible for this purpose to conduct an immense line in deployed order and firing? I believe that every one will pronounce for the negative: to throw twenty and thirty battalions in line, executing a fire by file or by platoon, with the object of crowning a position well defended, is to arrive there in disorder like a flock of sheep, or rather it is never to succeed.

What ought we to conclude from all that we have just said? 1st, That if the deep order is dangerous, the semi-profound order is excellent for the offensive. 2d, That the column of attack by battalions is the best order for carrying positions, but that is necessary to diminish as much as possible its depth, to give more fire at need, and to diminish the effect of the enemy's fire; it is proper, moreover, to cover it by many skirmishers, and to sustain it by cavalry. 3d, That the deployed order as first line, with the second in column, is that which is the best suited to the defensive. 4th, That the one and the other may triumph according to the talent a general shall have for employing seasonably his disposable forces, as we have said in treating of the initiative, in Article 16 and Article 31.

In truth, since this chapter was written, the numerous inventions which have had place in the art of destroying men would be able to militate in favor of the deployed order, even for moving to the attack. However, it would be difficult to anticipate the lessons which it is necessary to look for from experience alone, for despite all that rocket batteries, the howitzers of Schrapnel or of Bourman, and even the guns of Perkins, could offer redoubtable; I own that I should have difficulty in conceiving a better system for leading infantry to the assault of a position, than that of the column by battalions. Perhaps it will even be necessary to give back to the infantry the casques and cuirasses that it wore in the fifteenth century, before throwing it upon the enemy in deployed lines. But if we return decidedly to this deployed system, it would be necessary, at least, in marching to the attack to find a more favorable means than that of long continuous lines, and to adopt either columns at distances for deploying on arriving at the enemy's position, or lines broken *en échiquier*, or

finally the march in battle by the flank of platoons, operations all more or less dangerous in front of an adversary who knows how to profit from them. Meanwhile, as we have said, a skillful general can, according to circumstances and localities, combine the employment of the two systems.

If experience has proved to me long since that one of the most difficult problems of the tactics of war was the best mode of forming troops for going to combat, I have found out also that to resolve this great problem in an absolute manner, and by an exclusive system, is a thing impossible.

In the first place, the nature of countries differ essentially. There are those where we can manœuvre two hundred thousand men deployed, as in Champagne; there are others, like Italy, Switzerland, the valley of the Rhine, the half of Hungary, where we could scarcely deploy a division of ten battalions. The degree of instruction of the troops in all kinds of manœuvres, their armament and their national character, could also have an influence upon formations.

By favor of the great discipline of the Russian infantry, and of its instruction in manœuvres of every species, it is possible that they may succeed in moving it in great lines with sufficient order and harmony for causing it to adopt a system which would, I think, be impracticable with the French or the Prussians at this day. My experience of this kind has taught me to believe everything possible, and I am not of the number of orthodox persons who admit but one same type and one same system for all armies, as for all countries.

In order to approach the nearest possible to the solution of the problem, it seems to me then that we ought to seek—

- (a) The best mode of moving in sight of the enemy, but still out of reach of his shot;
- (b) The best mode of advancing to the attack;
- (c) The best order of defensive battle.

Whatever solution may be given to these questions, it appears to me suitable, in every case, to exercise the troops:—

1. In the march in columns of battalions upon the centre, for deploying, if desired, within reach of the musket, or for advancing on the enemy, even with the columns, if it be necessary;
2. In the march in deployed and continuous lines, by eight or ten battalions at a time;
3. In the march *en échiquier* of battalions deployed, which offer broken lines more easy to move than long continuous lines;

4. In the march in advance by the flanks of platoons;
5. In the march in advance by small squares, either in line or *en échiquier*;
6. In the changes of front, by means of these various methods of marching;
7. In the changes of front executed by columns of platoons at full distances, in order to reform without deployment; a means which is more expeditious than the other modes of changing front, and which is better adapted to all kinds of ground.

Of all the modes of moving in advance, the march by flanks of platoons would be the easiest if it did not offer some danger; on level ground it answers marvellously, on rough ground it is the most convenient. It has the inconvenience of much fracturing the line; but by habituating the chiefs and the soldiers to it, by dressing well the guides of platoons, and the directing colors, all confusion could be avoided. The only objection which could be offered to it would be the fear of exposing the disjointed platoons to the danger of a rush of cavalry. I do not deny the danger, but it can be avoided either by being well watched by the cavalry, or by not employing this order too near the enemy, but only for crossing the first part of a great space which should separate the two armies. At the least sign of the approach of the enemy, the line could be reformed in a second, since there would only be necessary the time required for a platoon to place itself by file in line at the marching step. However, whatever precautions we may take, it must nevertheless be confessed that this manœuvre could only be employed with troops well disciplined and well exercised, but never with militia or young soldiers. I have never seen it used before the enemy, but only in manœuvres; and for the changes of front especially, it was employed with success. We could always try it in the great annual manœuvres.

I have also seen tried, marches in lines of battalions deployed *en échiquier*; these marches did very well, whilst those in full or continuous lines were always horribly bad. The French, especially, have never known how to march well in deployed lines. Perhaps those marches *en échiquier* would be found also dangerous in case of an unexpected charge of cavalry; we could, however, employ them for the first moment of the march, to the end of rendering it more easy, then the second *échiquiers* could enter in line with the first before assailing the enemy. Besides, by placing but a small distance between the *échiquiers* it would be always easy to form the line at the instant of a charge, for it must not be for-

gotten that the *échiquiers* do not constitute two lines, but a single one, which has been divided in order to avoid the wavering and the disorder of a march in continuous line.

The best formation for charging seriously the enemy is not less difficult to point out. Of all the trials which I have seen made, that which appeared to me to succeed the best was the march of twenty-four battalions upon two lines of columns by battalions formed upon the centre for deploying; the first line went at the charge step upon the enemy's line, and arrived within twice the range of musketry, it deployed in the march. The company of voltigeurs of each battalion was deployed as skirmishers, the others were formed, then commenced a sustained fire by file; the second line of columns followed the first, and the battalions which composed it threw themselves at the charge step through the intervals of the companies which were firing. This was done, in truth, without an enemy, and it seemed that nothing could have resisted this double effect of the fire and of the column.

Besides those lines of columns, there are yet three other means of moving to the attack in semi-deep order.

The first is that of lines mingled with deployed battalions and battalions in column upon the wings of those deployed, of which we have spoken at page 297. The deployed battalions and the first divisions of those in column would fire at half musket range, and afterwards throw themselves upon the enemy.

The second is to advance with the deployed line, and firing, to within half musket range, then to throw the columns of the second line through the intervals of the first.

The third is the echelon order, mentioned on page 213, and in figure 11 of plate 1.

Finally, the last mode is to advance entirely in deployed order, by the sole ascendant of the fire until one of the two parties retreat, which appears almost impracticable.

I cannot affirm which of those modes would be the most suitable, for I have seen nothing of the like in the field. In fact, in war, I have never seen anything in the combats of infantry, but battalions deployed beforehand, which commence firing by platoon, then engaging by degrees a fire by file; or else by columns marching fiercely upon the enemy, which fled without awaiting the shot, or which repulsed those columns before the actual meeting, either by its firm continuance or by its fire; or, finally,

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 Hougumont 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-