

AN
ELEMENTARY TREATISE
ON
ADVANCED-GUARD, OUT-POST,
AND
DETACHMENT SERVICE OF TROOPS,
AND THE MANNER OF
POSTING AND HANDLING THEM
IN PRESENCE OF AN ENEMY.

WITH A HISTORICAL SKETCH OF THE RISE
AND PROGRESS OF TACTICS, &C. &C.

INTENDED AS A

SUPPLEMENT TO THE SYSTEM OF TACTICS
ADOPTED FOR THE MILITARY SERVICE OF THE UNITED
STATES, AND ESPECIALLY FOR THE USE OF
OFFICERS OF MILITIA AND VOLUNTEERS

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[Editors' note: the original book's table of contents was much abbreviated. I have expanded it to make navigating through this work easier.]

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PREFACE.

THE suggestion of this little compilation originated in a professional intercourse, some months back, with a few intelligent officers of the Volunteer Corps of the city of New York.

The want of a work of this kind has long been felt among our officers of Militia generally, as English military literature is quite barren in systematic works on most branches of the military art, especially so on the one known among the military writers of the Continent as *La Petite Guerre*, or the manner of conducting the operations of small independent bodies of troops; and but few of these officers are able to devote that time to military studies, which their pursuit in a foreign language necessarily demands.

In making this compilation, the works in most repute have been carefully consulted, and a selection made from them of what was deemed to be most useful to the class of readers for which it is intended. The object of the writer has been to give a concise but clear view of the essential points in each of the subjects introduced into the work; if he has succeeded in this, he trusts that the very obvious defects of the work will be overlooked.

An acknowledgment is here due from the writer to Major-General Sandford, commanding the First Division of the New York State Militia, and to H. K. Oliver, Esq., Adjutant-General of the State of Massachusetts, as well as to the officers generally of the First Division N.Y.S.M., for their kind aid in bringing forward the work.

U.S. MILITARY ACADEMY,
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INTRODUCTORY CHAPTER.

HISTORICAL SKETCH OF THE MOST REMARKABLE EPOCHS IN THE MILITARY ART FROM THE TIME OF THE GREEKS TO THE PRESENT.

1. NO one can be said to have thoroughly mastered his art, who has neglected to make himself conversant with its early history; nor, indeed, can any tolerably clear elementary notions, even, be formed of an art, beyond those furnished by the mere technical language, without some historical knowledge of its rise and progress; for this alone can give to the mind those means of comparison, without which everything has to be painfully created anew to reach perfection only after many cycles of misdirected mental toil.

2. To no one of the arts, that have exercised a prominent influence on the well-being of society, are these observations more applicable than to that of arms. To be satisfied of this, there needs only the most cursory glance at the grand military epochs of the ancient and modern world. Looking at the art as it was among the Greeks, under Epaminondas, Philip, and Alexander; and among the Romans, about the time of Julius Caesar, of each of which epochs have full authentic records; comparing it with the phases it assumed in the decline of the Roman Empire and during the Feudal period; and following it, from the introduction of gunpowder down to the brief career of Gustavus Adolphus, its first great restorer in Europe,—it seems incredible that anything, short of the most entire ignorance of the past, could have led professional soldiers to abandon the spirit of the organization and tactics of the early Greeks and Romans, so admirably adapted as to call into play the mental and physical energies of man, for the limbering and unwieldy engines that clogged the operations of the Imperial armies of the Empire; or for the almost equally unwieldy ironclad chivalry of the middle ages whose *prestige* was forever obscured by the first well-organized infantry brought against it.

3. Coming to a more recent period, did we not remember by what slow and uncertain stages the march of improvement in other arts has proceeded,—how much has been seemingly owing to mere chance, rather than to well-directed investigation,—how rarely a master has arisen to embody into simple formulas the often complicated processes and obscure doctrines of those who have preceded him, we should have still greater cause of astonishment, that, at a time of more general diffusion of science, art and literature, and particularly of the classical writers of antiquity, no master-mind should have evoked, from the campaigns of a Marius, or a Hannibal, the germ of the comparatively modern science of strategy; nor have gathered, from that almost horn-book of the schoolboy, Caesar's Commentaries, the spirit of those rapid combinations by which, with a handful of troops, the great Roman captain so uniformly frustrated the powerful and oft-repeated struggles of a warlike and restless people; but, that it should have been left to the great Captain of this to brush aside the mesh-work woven by routine and military pedagoguism; while, by the development of gigantic plans, made and controlled with almost mathematical precision, he fixed immovably those principles which, when acted upon, cannot fail to command success, and which, when over-looked or neglected, lead to defeat, or else, leaving all to chance, make of victory only a successful butchery.

4. However desirable it might be to give to this branch of the military art the consideration to which it is justly entitled, it does not come within the scope of a work like this to do so. The most that can be attempted will be to make a brief recapitulation of the most marked epochs; with a view to draw the attention of the young military student to the importance of this

too-frequently neglected branch, and to lead him into a field of research, where the spirit of inquiry will always be gratified, useful additions be made to his previous stock of acquirement, and hints be gleaned which he will find fully to justify the correctness of Napoleon's decision upon the influence which a study of the campaigns of Alexander, Hannibal and Caesar, must have in the education of a thorough captain.

5. *Tactics of the Greeks.* The Greeks, if not the earliest people who reduced the military art to fixed principles, are the first of whose military institutions we have any exact account; and even of theirs, and of the system of their successors in conquest, the Romans, several points still remain obscure.

6. A Grecian army, at the period when the military art was in the greatest perfection among them, was composed of infantry and cavalry. The former was made up of three different orders of soldiers; termed, 1. The *Opilitai*, or heavily armed, who wore a very complete defensive armor, and bore the *sarissa*, or Macedonian pike, a formidable weapon either for attack or defence, about 24 feet in length. 2. The *Psiloi*, or light infantry, who were without defensive armor, and carried the javelin, bow, and sling. 3. The *Pellastae*, who were intermediate between the other two, carrying a lighter defensive armor, as well as a shorter pike than the *oplitai*.

7. The cavalry consisted of two kinds. 1. The *Cataphracti*, or heavy cavalry, in which both rider and horse were well covered with defensive armor; the former armed with the lance, and a sabre slung from a shoulder-belt. 2. A light cavalry of an irregular character, who were without defensive armor, consisting of archers and lancers, who also carried a sword, javelin, and a small buckler.

8. The elementary tactical combinations, or *formations*, of the Greeks, were methodical but very simple. An army corps was composed, 1. Of a *Tetraphalangarchia*, also termed a grand phalanx, consisting of 16,354 *oplitai*. An *Epitagma*, of 8,192 *psiloi*; and an *epitagma* of cavalry of 4096 men. The heavy armed, or infantry of the line, bore to the light infantry and cavalry the ratio of the numbers 2, 4, and 1.

9. The composition of the grand phalanx was as follows: *Tetraphalangarchia*=4 *Phalanxes*=16 *Chiliarchiae*=64 *Syndagmata*=256 *Tetrarchiaae*=1,024 *Lochoi* or files=4,096 *Enomitiæ* of 4 men each. It is thus seen that, in the various formations, a division of the whole could be made by the powers of 2 or 4.

10. This body of infantry was thus officered. Each *tetrarchia*, consisting of 4 files, or 64 men, was commanded by a *Tetrarch*, who was file leader of the first file.

11. The *syntagma* of 16 files, which was the army unit, and corresponds to our battalion, was commanded by a *Syntagmatarch*, who was stationed in front of his command, having an adjutant on his left; a color-bearer immediately in his rear; on the right a herald-at-arms, to repeat the commands; and on the left a trumpeter, to sound the signals. In the rear of the *syntagma* was stationed an officer who was the second in command.

12. The phalanx was commanded by a general officer bearing the title of *Strategos*.

13. The formation of the *peltastæ* and *psiloi* was analogous to that of the *oplitai*, the number of files being 8, instead of 16 as in the last; and the subdivisions receiving different denominations also.

14. The *epitagma* of cavalry was divided into two equal parts, each composed alike, termed *Telea*. One was placed on each wing of the line of battle. The *telos* was subdivided into 5 divisions; the strength of each subdivision being the half of the one next in order above it. The

lowest, termed *Ila*, of 64 horsemen, corresponding to the modern squadron, was drawn up on a front of 16 with 4 files, and was commanded by an officer with the title of *Ilarch*.

15. The grand phalanx, in order of battle, was divided into two wings, with an interval of 40 paces between them, and one of 20 between the phalanxes of each wing.

16. The *olitai*, when formed for exercise or parade, were drawn up in open order; leaving an equal interval between the men of each rank and between the ranks. When ready to charge, each man occupied a square of 3 feet, and the six leading ranks brought their pikes to a level; thus presenting an array in which the pikes of the sixth rank extended 3 feet in advance of the front one. In attacks on entrenchments, or fortified cities, the men of each rank closed shoulder to shoulder, a sufficient interval being left between the ranks to move with celerity; the leading rank kept their shields overlapped to cover their front; the others held them above their heads for shelter against the weapons of the enemy.

17. The *peltast* corresponded to our *élite* corps of infantry, selected for enterprises requiring both celerity and a certain firmness.

18. The *psiloi* performed all the duties usually devolved, in the present day, upon light infantry, both before and at the opening of an engagement.

19. The position of the cavalry in line of battle, was on the wings. The duties of this arm were mainly to charge that of the enemy. The *cataphracti*, for this purpose, were drawn up on each wing, with a portion of the light cavalry on each of their flanks. The charge was made by the former, and the latter followed up any success gained by them.

20. The marches of the Greeks were usually made by a flank. Sometimes, when the character of the ground permitted, two phalanxes marched side by side, presenting a front of 32 men, and being in readiness to offer a front on both the flanks, if necessary.

21. Among the orders of battles among the ancients, that known as the *wedge*, or *boar's head*, is the most celebrated. In this disposition, the *point*, or *head*, is formed of a subdivision of the phalanx of greater or less strength, according to circumstances; this being supported by two, three, and four subdivisions of the same force, one behind another.

22. *Tactics of the Romans.* Up to the time of Marius, by whom the germ of the decadence of the military art among the Romans was sown, a Consular Army consisted of two *Legions*; and of two *Wings* composed of social troops. The legion was composed of infantry of the line, light infantry, and cavalry. The infantry of the line was divided into three classes. 1. *The Hastati*. 2. *Principes*. 3. *Triarii*. These classes wore a very complete defensive armor; they were all armed with the short straight Spanish sword; the *Pilum*, a kind of javelin, about 7 feet in length, used equally to hurl at a distance and in hand-to-hand engagements was added to it for the two first; and the *triarii* carried the pike.

23. The light infantry, termed *Velites*, used only the casque, and a buckler of stout leather, and bore the Spanish sword and a short javelin, termed the *Hasta*, only half the length of the *pilum*, and used as a missile.

24. The cavalry wore the helmet and cuirass, and carried a buckler; their arms were a long sabre, the Grecian lance, and a quiver with arrows.

25. The legion was officered by six *Tribunes*; sixty *Centurions*, with an equal number of officers who served as file-closers for the infantry; and twenty *Decurions* of cavalry; besides these there were the officers of the *velites*, who fought out of the ranks.

26. Until about the period of the Civil Wars, the legion was commanded by the tribunes in succession; the tour of duty for each being two months; afterwards the rule was adopted of placing the legion in command of an officer styled *Legatus*. Whilst the tribunes exercised the

command, those, who were not on this duty, served on all occasions of detachment service generally.

27. Each class of the infantry of the line was subdivided into ten portions, each termed a *Manipulus*. The velites were attached to these by equal portions. The cavalry were divided into ten troops, termed *Turma*. To each manipulus there were assigned two centurions, and two file-closers; and to each turma two decurions. The velites, although forming a part of the manipuli, had centurions assigned to them, to lead them in battle.

28. The normal order of battle of the Romans, prior to the time of Marius, was in three lines: the hastati in the first the principes in the second; the triarii in the third and the cavalry on the wings.

29. The manipulus, which was the unit of force, was drawn up in 12 files, with a depth of 10 ranks, in the lines of hastati and principes; in the line of triarii there were only 6 files. The right and left files of the manipulus were led by a centurion, and closed by an officer file-closer.

30. The manipuli of the three lines were disposed in quincunx order; the manipulus of one line opposite to the interval between the manipuli in the one in front, this being the same as the manipulus front. The intervals between the lines were the same as the depth of each line. An interval of about 3 feet was left between the ranks and the files of the manipuli.

31. The same order of battle was followed for the social troops on the wings. The two legions occupied the centre; but what interval was left between them, or between the centre and wings, or how far the cavalry was posted from the infantry, is not well ascertained.

32. The velites, before engaging were posted usually between the intervals of the triarii, and, in part, between those of the turma.

33. In both the legionary and allied cavalry the turma were formed in 8 files and 4 ranks. An interval the same as its front, was left between each turma. Of the two officers commanding a turma, one was placed on the right, the other on the left of the front rank. Each wing of cavalry was commanded by an officer styled *Prefectus*. In some instances the cavalry was placed as a reserve, in rear of the triarii, and charged when necessary, through the intervals of the manipuli.

34. In their engagements, the velites performed precisely the same part as that of the light troops which form the advanced-guards and advanced-posts of the present day. Watching and occupying the enemy before the main-body is brought into play; then retiring and taking position to harass him farther, as opportunity may serve.

35. The main-body, from its organization, and formation, was admirably adapted to meet any emergency; presenting, if necessary, by advancing the manipuli of the principes into the intervals of the hastati, an unbroken impenetrable front; or, by throwing the manipuli of the different lines behind each other, leaving an unobstructed passage to the front, or rear.

36. From the preceding brief exposition of the phalanx and legionary formations, the respective properties of these two celebrated bodies, on the field of battle, may be readily gathered. The legion was evidently far better adapted to circumstances of locality than the phalanx, which could only move well and effectively on even ground. In the phalanx, the keeping together of the entire body,—whether in moving onward to bear down the enemy by its pressure, or in waiting to resist his shock by its inertia,—was everything. In the legion, individual activity and the ease with which the manipuli lent themselves to every requisite movement, gave to the entire machine the volition and strength of life. The attack with the pilum, cast on nearing the enemy, was followed up immediately by the onslaught with the terrible short straight sword, equally effective to hew, or thrust with. Each manipulus, equal to any emergency, was prepared by the celerity with which its movements could be made, to

improve every partial advantage, and meet the enemy on all sides. Against cavalry alone, was the impenetrable front of the phalanx, bristling with a forest of sarissas, superior to the legion. The open order adopted for the vigorous action of the individual, who to the charge of the horse had only his pilum to oppose, so inferior to the fire of the musket, that dread of modern cavalry, proved fatal to the legion on more than one sanguinary field; till experience taught, that safety might be found in ranks more serried, and by presenting a front of pike-heads, borne by the first four ranks of the hastati.

37. Marius, urged either by policy or the necessities of the times, made a fundamental, and it is thought fatal change, not only in the organization of the legion, but in other parts of the military system of his country. By substituting for that glow of patriotism with which an army drawn wholly from the bosom of the people is ever found to be animated, the mercenary spirit and its consequences, he aimed a vital blow against the only real safe-guard of a nation's honor, a national army.

In a despotism, such as Prussia was under Frederick, the controlling power of an energetic will may, for a season, not only ward off the attacks of powerful neighbors, but reap conquests, and struggle with fortitude against great reverses, with an army recruited from the scum of mankind; but so soon as a state with any pretensions to republican institutions, substitutes the mercenary wholly for the national spirit in its armies, its fate is sealed. Like Rome, during the brilliant career of Marius, Pompey, and Caesar, and like Venice, under some of her able *condottieri*, as the Colonnas and Sforzas, it may, through the singular ability of particular leaders, still present to the world the dazzling *prestige* that military success, under all aspects, carries with it; but the result is as certain as the ashes that succeed to the flame; anarchy comes in with all its ills, from the rival pretensions of successful partisan leaders, and the spectacle is seen which Rome exhibited at the period referred to; or else the imbecility and utter prostration which Venice presented, almost from the very moment when outwardly she had attained to her loftiest might, down to the pitiable closing scene that wiped her name forever from the book of independent states

38. In the truly great days of Rome, the days of the Scipios, the raising of her legions was done with all the best guards of a constitutional popular election. Six tribunes for each legion, having first been chosen, either by the consuls or by the popular voice, the conscripts to fill its ranks were designated in each tribe by the proper magistrate; these were divided by the tribunes into the following, classes:—1. The youngest and least affluent were selected for the Velites; 2. The next in years and wealth for the Hastati; 3. The next in the same gradation for the Principes; and 4. The oldest and most wealthy for Triarii. The cavalry, or knights, formed a privileged class, into which only those were admitted who paid a certain tax. This classification being made, the tribunes named 10 *first* and 10 *second centurions* for the infantry; with 10 *first* and 10 *second decurions* for the cavalry; and then in concert with the officers thus selected, divided the classes into *manipuli* and *turma*, assigning to each its two proper officers; whilst these, in turn, selected the two officers in each maniple who acted as file-closers.

39. Besides the distinction of first and second centurion, these officers took rank according to class. The first centurion of the Triarii, termed *Primipilus*, was the highest in rank of his grade, and took command of the legion when the tribunes were absent.

40. In the time of the Scipios the legion was composed of 1,200 velites, 1,200 hastati, 1,200 principes, 600 triarii, and 300 knights.

41. Polybius states that the Consular army contained 6,000 legionaries of the line, 2,400 velites, and 600 knights of Roman troops; and of social, or allied troops, 6,700 infantry and 800

horse for the wings; with an additional extraordinary levy of 1,700 infantry and 400 cavalry; making a grand total of 18,600 men.

42. Marius introduced the *Cohort* instead of the maniple as the unit of force; forming it of three maniples, and abolishing the ancient modes of classification. The cohort preserved both the number and designation of the officers attached to the maniples. It was commanded by the first centurion, until, under the emperors, it received a superior officer, termed the *Prefect of the Cohort*. The use was also introduced of making of the first cohort a *corps d'élite*, to which was intrusted the eagle, the orders of its primiple.

43. The order of battle by cohorts depended upon circumstances; usually five were placed in the first and five in the second line. The number of ranks of the cohort was also variable; depending on the front necessary to be presented to the enemy.

44. With the settled despotism of the emperors arose, as a necessary consequence, in still bolder relief, the mercenary system. The substitution of auxiliary cavalry for the Roman knights, and the introduction of foreigners and of slaves, even among the legionaries, soon left not a vestige of the ancient military constitution of the army; and that train of results was rapidly evolved in which defeat was followed by all its ills but shame, and the once proud legionary became an object of terror to his master alone. Effeminacy led to the abandonment of his defensive armor; and, too craven to meet the foe face to face with his weapons of offence, the legionary sought a disgraceful shelter behind those engines of war which were found as powerless to keep at bay his barbarian opponent, as was the lumbering artillery, chained wheel to wheel, of the Oriental, to arrest the steady tread of the English foot soldier.

45. Feudal Period. To follow down the military art through all the stages of its fall until the use of the feudal system, could not fall to be a most instructive lesson, did the limits of this work permit it. Grand as were the occasional deeds of *derring do* of the chivalric age, they were seldom more than exhibitions of individual prowess. Art and consummate skill there undoubtedly were in this period, but no approach to science, countries and provinces invaded and ravaged, cities ruined and castles razed, accompanied by wholesale butchery of the frightened peasant, mocked with the appointments and title of soldier, such, without other result, were the deeds of chivalry, and such they must have continued, had not the Swiss pike, that broke the Austrian yoke, opened the way to free Europe from its wretched thralldom, and again to raise the profession of arms to its proper level, in which mind and its achievements have the first rank, and brute force combined with mere mechanical skill a very subordinate one.

46. Rise of Art in Modern Times. After the decisive day of Morgaten, the Swiss name resounded throughout Europe; and in time it became a point with the leading powers to gain these mountaineers to their side in their wars and even to retain a body of them permanently in their pay. The same men who at home were patriot soldiers, were known abroad, in foreign service, as the real mercenaries; deserting, or upholding a cause, as the one or the other party bid highest. The true rank of infantry now began again to be appreciated; and, with the more permanent military establishments soon after set on foot, an organization on juster principles gradually found its way in; and with it some glimmering views of ancient war.

47. Although able leaders from time to time appeared, and order, with a rude discipline, was introduced among the hireling bands of which the permanent portions of armies in most European states consisted, after the first essay of regularly paid troops made by Charles VII. of France; still no one arose who seemed to comprehend the spirit of ancient art, until the period of the Revolt in the Netherlands brought forward the Princes of Orange and Nassau, William and his son Maurice, both of whom, but particularly the latter, gave evidence of consummate military

talent. The camp of Maurice became the school of Europe, from which came forth many of the most eminent generals of that day.

48. *Epoch of Gustavus Adolphus.* But the great captain of this age was Gustavus Adolphus; a man who combined the qualities of hero, warrior, statesman and philosopher; one who early saw, what in our day is still disputed, that war is both a science and an art, and that profound and varied learning—an intimate acquaintance with literature as well as science—is indispensable in the formation of the thorough soldier.

49. Since the invention of gunpowder, the military art had, in some respects, retrograded, owing to a misapprehension of the true value of this new agent. The apprehension expressed by the bravest of the old chivalry, that it would be the means of extinguishing noble daring, was soon seen to be not ill-founded, in the disappearance of individual prowess in the cavalry; whilst the cumbrous machines put into the hands of the infantry, and the unwieldy cannon, that but poorly replaced the old engines, rendered all celerity, that secret of success, impossible. At the fight of Kintzig for example, which lasted from mid-day to evening, and which took place after the fork, that served the old musketeer as a rest, had been suppressed, and the cartridge been introduced by Gustavus Adolphus, it is narrated, that the infantry were drawn up in six ranks, and that the fire of musketry was so well sustained that the slowest men even discharged their pieces seven times.

50. Besides this improvement in small arms, Gustavus Adolphus was the first to make the classification of artillery into siege and field-pieces, adopting, for the latter the calibres corresponding nearly to those used for the same purposes in the present day. He formed a light regiment of artillery; and assigned to the cavalry some light guns.

51. Important changes were made by him in the cavalry; its armor was modified, the cuirassiers alone preserving a light cuirass, and being armed with a long sword and two pistols.

52. By adopting a new disposition for battle, which he termed the *order by brigade*, the idea of which was clearly taken from the dispositions in the Roman legions, he broke up the large unwieldy bodies into which troops had hitherto been massed; and thus gave not only greater mobility, but decreased the exposure to the ravages of missiles. In his order of battle, each arm was placed according to its essential properties; so that ease of manœuvring and mutual support necessarily followed; and peculiar advantages of position were readily seized upon. To this end, his forces were drawn up in two or three parallel lines; either behind each other, or in quincunx order; the cannon and musketry combined; the cavalry either in the rear of the infantry to support it, or else upon the wings to act in mass. The cavalry was formed in four ranks.

53. The dispositions made at a halt at night were always the same as those to receive the enemy, should he unexpectedly attack. The order of march was upon several columns, at suitable distances apart.

54. Such, summarily, were the main points in the improvements made by this great captain, who, on the field of battle, exhibited the same warrior instinct, in perceiving and availing himself of the decisive moment. Betrayed, as every original mind that reposes upon its own powers alone must be into occasional errors, such, for example, as interposing, on some occasions, his cavalry between bodies of infantry, he more than cancelled them, by being the earliest to perceive the true power of each arm, as shown, in massing his artillery, and by keeping it masked until the effective moment for its action arrived.

55. *Epoch of Louis XIV.* The wars that preceded the period of the Spanish Succession, and those induced by it, developed the seeds sown by Gustavus Adolphus and the Princes of Nassau. The old chivalry having become a thing that was, there arose that young chivalry,

equally distinguished by valor and courtesy, which although sometimes assuming a fantastic hue, has transmitted some of its spirit even to this day, through terrific scenes of popular struggles, and the loosening of every evil passion engendered by such strifes, and converted the battlefield into an arena where glory is the prize contended for; and where, the contest over, the conquered finds in the victor a brother eager to assist him, and to sympathize in his mishap. At the head of this distinguished band we find the Montecuculis, the Turennes, the Condés, the Eugenes, the Marlboroughs, the Catinats, the Luxembourgs, the Vaubans, and a host of others. Still, with the exception of some improvements in the weapons in use, as the changes in the musket, by substituting for the old match-lock the one with the hammer and flint, the addition of the bayonet, and the introduction of the iron rammer, together with a better organization of the artillery, the progress made in the art during this period was in no degree commensurate with the grand scale on which its military operations were conducted. The science of fortification, and its kindred branch, the mode of conducting sieges, form an honorable exception to this general stagnation of the art. Each of these were brought by Vauban to a pitch of perfection that has left but little for his successors to achieve, so long as the present arms and means are alone employed.

56. It was also in this period that the infantry pike was abandoned. This change was first made by Marshall Catinet, in the army he commanded in Italy; and it was gradually adopted throughout the French service by the efforts of Vauban, who demonstrated the superiority of the musket and bayonet to the pike both as a defensive and an offensive weapon. At the same time the distinction between light and heavy infantry became more prominent, partly from the introduction of the hand-grenade, for the handling of which men of the greatest stature and strength were selected, who, from this missile, were termed *grenadiers*, and partly, from the practice of, at first, placing the improved musket only in the hands of the best marksmen.

57. With the more effective use of fire-arms, the necessity was felt of adopting a formation both of infantry and cavalry, that would present a less exposed mark to their balls; but the disinclination to innovation which seems natural to all professions, retarded this change, and it was only after the war of the Spanish Succession that the French gave the example of a formation of infantry in three ranks. The cavalry was still far from that point of efficiency which it subsequently reached. Its movements were slow and timid, and fire-arms, unwieldy implements in the hands of horsemen, were still preferred by it to the sword.

58. The usual order of battle was in two or three lines; the infantry in the centre, and cavalry on the wings. The lines were from 300 to 600 paces apart; having intervals between their battalions and squadrons, in each equal to their front, so as to execute with ease the passage of lines. The importance of keeping some troops in reserve, to support those engaged, and also to be used for special objects, as turning the flank of an enemy, began also now to be acted on. Yet the trammels of routine were but slowly laid aside. Manceuvres and marches made with a tediousness and circumspection difficult to be comprehended in the present day; engagements commenced along the entire front at once; the intermingling of cavalry with infantry; the power of artillery but vaguely felt; little appreciation of the resources to be found in varied ground; battles fought apparently with no other view than to drive the enemy from the battlefield; such were the prominent military features of this celebrated epoch,—one of faults, which deserve to be attentively studied for the lessons they afford even to the present day.

59. The period intervening between the age of Louis XIV., and the rise of the Prussian power under Frederick II., was one of comparative stagnation in the military art. The Duke of Orleans, the afterwards celebrated Regent, on one or two occasion, gave promise of military

talents. The mad career of Charles XII. of Sweden, and the achievements of Marshal Saxe—to whom we owe the modern cadenced step, and the well-known axiom, *that the secret of victory resides in the legs of the soldiers*,—are the most instructive events of this time; particularly as regards the use of fortified points as an element of tactics; shown in the destruction of Charles's force at Pultowa, and in the influence of the redoubts on the renowned day of Fontenoy, with which closed the military life of Marshal Saxe.

60. *Epoch of Frederick II.* With Frederick II. of Prussia arose a new order of things; a mixture of sound axioms and execrable exactions upon the natural powers of man, of which the latter, for years afterwards in the hands of ignorance and military pedagoguism, became the bane of the art, and the opprobrium of humanity, through the cruel tasks and wretched futilities with which the private soldier was vexed; to convert a being whose true strength resides in his volition into a machine of mere bone and muscle.

61. What influence the early hardships to which Frederick was subjected by the half-mad tyrant to whom he owed his being, or the mercenary material, fashioned under the same regimen as himself, with which afterwards he was obliged to work, may have had, in creating this state of things, it is not easy to say; but it seems incredible that, without some such bias, a man who showed such eminent abilities, as a statesman and soldier,—who, in most things, thought wisely, and acted well,—should have fallen into an error so gross and lamentable; one that even the poor shallow philosophy, of which he made his plaything, ought to have detected and reformed.

62. Frederick's first attention was given to the drill, or the mere mechanism of the art which he attained a sad celebrity. Firing executed with a celerity that rendered aim impracticable, and with an *ensemble* which made a point of honor of having the report from a battalion undistinguishable from that of one gun; manœuvres calculated with mathematical precision, applied with equal precision by human beings tutored as dancing dogs; the cane of the drill-sergeant more dreaded than the bayonet of the enemy; the field of battle, that arena where genius and military instinct should be least trammelled, converted into a parade ground, for carrying on the all the trivial mummery of a mere gala-day: such were some of the worst features of Frederick's system.

63. But whenever his mind was left free to carry out an original conception, the master of the art again shone forth. In his orders of march and encampment, his choice of positions to receive an attack, he seldom failed to exhibit the consummate general. In his appreciation of the powers of the oblique order of battle, by which he obtained such decisive results on the field of Leuthen; the perfect state to which he brought his cavalry, and the brilliant success with which he was repaid by it, for his exertions in restoring it to its essential purposes; his introduction of flying artillery, and his clear-sighted views as to the proper employment of this arm generally on the battlefield; Frederick has high claims upon the profession, as well as for his written instructions to his generals, which are a model both of military style and good sense.

64. Frederick adopted invariably the formation of three ranks for his infantry, and that of two for his cavalry. From the preponderating value given to the effects of musketry, his dispositions for battle were always with lines deployed, and so disposed as to favor an easy passage of lines. This, and the curious importance attached to preserving an exact alignment in all movements, deprived the troops of the advantages of celerity, and the use of the bayonet, to which the present column of attack so admirably lends itself.

65. The great authority of Frederick overshadowed, and kept down, the naturally rebellious promptings of common sense against parts of his system; and all Europe soon vied in attempts to rival its worst features, without comprehending its essence. In England, it was

silently imposed upon a hired soldiery without difficulty; and showed itself in a guise in which, but for the painful features, the exhibition would have been eminently ludicrous. Throughout Germany it made its way, in spite of the impenetrable character of the institutions of the day. In France, a furious, war of words and writings was waged between the respective advocates for the true French *laissez-faire*, and the Prussian tournequetism and strait-jacketism; as well as upon the more important question of the deep and shallow formations. If this contest did nothing more, it provoked discussions in which the voice of the real soldier was occasionally heard in the din of mere military pedagogues. It produced the brilliant pages of Guibert, and the whimsical scene, so graphically described by De Ségur, of the *experimentum crucis*, to which he involuntarily, and a comrade voluntarily were put, to ascertain man's powers of endurance under the punishment of the flat of a sabre. Then came that event which swept all these puerilities and most other futilities into one vortex,—the French Revolution. The value of proper control, and the evils arising from its want, were here equally demonstrated; and a just medium at length hit upon, which left to the individual his necessary powers under all circumstances.

66. Epoch of the French Revolution, and its Sequel. With the emigration of her nobles, France saw herself deprived of nearly all those who were deemed capable of organizing and leading her armies. Her enemies were upon her, still brilliant with the *prestige* of Frederick's name and Frederick's tactics; and to these she had to oppose only ill-armed and disorganized masses driven to the field, in some cases, more through apprehension of the insatiable guillotine, than through any other motive, dreading it more than the disciplined Prussians. But here the man, thrown on his own resources, lifted up and borne onward by an enthusiasm bordering on fanaticism, showed himself equal to the emergency. Like our own first efforts, so those of the French were the actions of individuals. Where the drill had done nothing, individual military instinct filled up the want. A cloud of skirmishers soon become expert marksmen, harassed and confounded lines taught to fire only at the word of command; the compact column, resounding with the *Ca ira*, scattered to the winds feeble, frigid lines, torpid with over-management, and effected a revolution as pregnant to the military, as the political one to which it owed its birth was to the social system. Thus was laid the foundation of the tactics of this day; a system that partly sprung up in the forests of America; and upon which, a few years later, the ingenious Bulow would have had military Europe to base its system.

67. The frenzy of enthusiasm past, reason and discipline again claimed their rights; and the judging, able generals of France, brought both the system of skirmishers and the column of attack, to their proper functions; and the way was prepared for that Genius who swayed these two elementary facts with a power that shook Europe to its centre, and caused her firmest thrones to reel.

68. Napoleon appeared upon the scene at a moment the most propitious for one of his gigantic powers. The elements were prepared, and although temporarily paralyzed by a state of anarchy, resulting from the political and financial condition of the country, they required only an organizing hand to call into activity their inherent strength. This hand, endowed with a firmness and grasp that nothing could shake, or unloose, was that of Napoleon. To him we owe those grand features of the art, by which an enemy is broken and utterly dispersed by one and the same blow. No futilities of preparation; no uncertain feeling about in search of the key-point; no hesitancy upon the decisive moment; the whole field of view taken in by one eagle glance; what could not be seen divined by an unerring military instinct; clouds of light troops thrown forward to bewilder his foe; a crushing fire of cannon in mass opened upon him; the rush of the impetuous column into the gap made by the artillery; the overwhelming charge of the resistless

cuirassier; followed by the lancer and hussar to sweep up the broken dispersed bands; such were the tactical lessons practically taught in almost every great battle of this great military period. The task of the present one has been to systematize, and embody in the form of doctrine, what was then largely traced out.

69. In an intimate knowledge of the peculiar application of each arm, and a just appreciation of their respective powers; in all that is lofty in conception, skilful in design, and large in execution, Napoleon confessedly stands unrivalled. But it has been urged that, for the attainment of his ends on the battle-field, he has shown a culpable disregard of the soldier's blood, and has often pushed to excess his attacks by masses.

To do the greatest damage to our enemy with the least exposure to ourselves, is a military axiom lost sight of only by ignorance of the true ends of victory. How far this may have been disregarded by Napoleon, can be known, with certainty, only through Napoleon himself. He, who suffered no important fact, or its consequences, to elude his powers of analysis, could hardly have been unmindful of the fate of the grand column at Fontenay, nor have forgotten the imminent danger in which those squares were placed that, at the battle of the Pyramids, resisted like walls of iron the head-long charge of the reckless Mameluke, when he launched forth the formidable column of M'Donald on the field of Wagram.

CHAPTER I.

TACTICS.

70. TACTICS may be defined to be *the art of drawing up, and moving troops systematically.* It admits of a classification into two divisions. 1. *Minor* or *elementary* tactics; under which head may be placed all that refers to the drill, and other preparatory instruction of troops, to give them expertness in the use of their weapons, and facility of movement. 2. *Grand* tactics; or the art of combining, disposing, and handling troops on the field of battle.

71. The manner of drawing up troops, or their disposition in their *primitive order of battle*, evidently must depend upon the kind of weapon with which they are armed, and their mode of fighting. A glance, upon the preceding pages, will show how the primitive order of battle has been modified by these circumstances, in different nations, and at different epochs. Without stopping to consider these, or to enter into an analysis of the once vexed question respecting the merits of the deep and shallow orders, we shall take it as practically solved, for the present, by the adoption in all civilized states, of the uniform system now in use; which is for infantry troops, either dispersed, or deployed in lines for firing; and in columns of march, or attack, for movements;—for cavalry, either deployed lines or dispersed order for attack, and columns for manœuvres, and exceptionally for attack. To this it may be added, that no soldier, who has made himself conversant with the resources of his art, will allow himself to be trammelled by any exclusive system. What the case requires he will do, if confident of his troops; throwing a deployed line, with the bayonet advanced, upon his enemy, if he judges the moment propitious; or charging impetuously, with his horse in column, under like circumstances.

72. The systems of tactics in use in our service are those of the French; not that opinion is settled among our officers on this point; some preferring the English. In favor of the French, it may be said, that there is really more affinity between the military aptitude of the American and French soldier, than between that of the former and the English; and that the French systems are

the results of a broader platform of experience, submitted to the careful analysis of a body of officers, who, for science and skill combined, stand unrivalled; whereas the English owes more to individual than to general talent; and therefore is more liable to the defects of individual pride of opinion, than where this can only be felt in discussion at the council board, at which its *morgue* is liable to be checked, and its fallacies exposed, by rival talent.

73. In all tactical combinations, experience has shown that for each arm there is a certain numerical force, which lends itself best to the essential conditions demanded in all troops;— which are strength, activity, and the faculty of moving in any direction. This force, termed the *unit*, varies in the different arms. In all cases, it should not be so great but that all the men of which it is comprised may be overlooked by, and be known to, the officer in command of it; and also when drawn up in its order of battle, be within reach of his voice. These last conditions place a practical limit to the tactical unit; owing to the extent to which the human voice can be distinctly heard; the space taken up by each combatant; and the form and dimensions of the figure covered on the ground by the unit in its order of battle.

74. The *battalion* is the unit of the arm of infantry; the *squadron* that of the arm of cavalry; and the *battery* of six guns that of the arm of artillery.

75. For each of these units, particular subdivisions have been adopted; and their command intrusted to officers of suitable grade, both to overlook and to lead them in the various combinations to which the unit may be subjected. For the details on all these points, as they do not come within the scope of this work, reference may be had to the systems of elementary tactics adopted in our service.

76. The order of battle of the unit is usually based upon the nature of the weapon used, and the space required for handling it freely.

77. The *habitual order of battle* of infantry is in two or three ranks. With us, that of two ranks is generally preferred, partly because our battalion is small, and therefore requires all the front that can be given without presenting a line liable to waver at every change of position; but mainly because every musket can be made to tell effectively: a point of great importance where the troops, like ours generally, are habituated to handling firearms almost from childhood.

78. Cavalry is now universally formed in two ranks, in order of battle. The efficiency of this arm resides in the power of its shock; and, as in a charge, the first rank alone is brought into actual contact with the enemy, the only reason for placing a second is to close up gaps made in the front by casualties whilst charging; and also in the *melée* that succeeds the charge, to have a sufficient number of sabres in hand to do good service.

79. The order of battle of artillery is necessarily a line of pieces in front; a second of caissons for the supply of immediate wants, and a third line of caissons in reserve to the rear, beyond the reach of casualties from the enemy's fire.

80. The subdivisions of the unit have their habitual position in the order of battle. This is necessary, in order that the mechanism of the unit may have that simplicity and uniformity in which there will be no difficulty in its being comprehended and retained by ordinary minds, to the end that every movement may be executed with promptitude. Still cases may occur in which the requisite rapidity to meet an attack, or to move in a given direction, cannot be attained without changing the habitual order. Such cases are provided for by what are termed *inversions*, in which the subdivisions temporarily change places and parts.

81. In all changes of position that demand a disturbance of the fundamental order of battle of the unit, it is broken into its subdivisions, which are placed in certain relative positions with respect to each other, according to the object in view. These combinations are termed

manœuvres, and their chief object usually is to change the direction of the front of the unit, according to the particular exigency.

82. MANŒUVRES, like all the rest of the mechanism pertaining to the unit, should be stamped with simplicity and uniformity, for reasons already as signed. The tactics of the present day present, in this respect, a remarkable contrast to those of the period anterior to it; which is owing, in no small measure, to the little scope left for individual fancy, every proposal being submitted to the formal examination of an enlightened board. Stage spectacles alone now occasionally furnish some notions of the whimsies of olden times; so happily bit off in the well-known article of *Salmagundi*, where the street pump figures as an almost impassable obstacle to the show soldier of that day.

83. The foregoing observations, upon the spirit of the actual state of tactics, can doubtless convey nothing more than a vague idea of the subject. They were introduced with this view only; so that the young student of the art might have some general notion, though a vague one, of what is proposed to be attained, before his mind gets more or less bewildered in what must seem, for some time at least, a maze of technicalities, and mere rote-work,—the systems of elementary tactics for conducting the drill.

84. *Army Organization.* Although not altogether within the design of this work, a few words here may be not out of place on army organization. Of all the civilized states of Christendom, we are perhaps the least military, though not behind the foremost as a warlike one. A sounder era, however, is dawning upon us. The desire for war, *as such*, is decreasing, whilst a feeling of the necessity for being always ready for it is becoming more general. All our battle-fields, up to the glorious feat at Buena-Vista, have proved to the world that the American soldier was wanting in no military quality, but combined the vivacity of the French with the tenacity of the English. But this, however, could make but little impression upon the soldier-statesmen of Europe. To be warlike, does not render a nation formidable to its neighbors. They may dread to attack it, but have no apprehensions from its offensive demonstrations. It was reserved for the expedition to Vera-Cruz, and its sequel, the victory of Cerro-Gordo, to bring into strong relief the fact, that we were unostentatiously, and almost silently, becoming a powerful military state. The lesson will not be lost upon our neighbors, however slowly we, in the end, may profit by it. A shout has gone forth from the Rio-Grand, and the shores of the Gulf of Mexico, which, heard on the Thames and the Seine, has resounded along the far-off shores of the Baltic and Black Sea, and will reach the farther Ind, bearing with it a significance that no prudent statesman will hereafter affect to misunderstand. What are the military resources of this great Republic is no longer a question; a more thorough organization is alone wanting for their complete development.

85. Napoleon, at the period of the preparations for his descent upon England, had a moment of leisure which he could bestow upon his military organization. Then, for the first time, it is believed, was introduced a systematic organization of grand masses, termed *Army Corps*; each one comprising within itself all the elements of a complete army, and apt for any emergency.

Since then this has served as a type to France, and other European states, in their organization.

86. An army is now composed of one, or more army corps, made up of infantry and cavalry; an artillery equipage, comprising several batteries; several artillery parks of reserve; with a grand one to which is attached a bridge-train.

87. Each army corps consists of one, or more Divisions; each division of several Brigades; the brigade comprising two Regiments.

Two batteries of foot-artillery, of six pieces each are attached to each infantry division; and one of horse-artillery, of the same strength, to each division of heavy cavalry.

Besides, for each army corps of infantry, there is a reserve of several batteries; and a few served by foot artillery. In some cases, one of the batteries of reserve is served by the horse-artillery.

88. A company of engineer troops, termed *Sappers*, is generally attached to each infantry division; and to each infantry army corps a brigade of light cavalry; with a company of *Pontoniers*, which has charge of the bridge-train.

89. In France, each brigade is commanded by a *Maréchal de Camp*, a grade corresponding to our brigadier-general; each division by a *Lieutenant-General*, which corresponds to our major-general; and an army corps by a *Maréchal de France*.

90. The particular organization of the General Staff, and the different arms of service, would lead to details of no importance here. The proportion, however, of each arm of an army to the others, is a subject of great interest, as upon this depends, in a great degree, the more or less of excellence in the military institutions of a state.

91. The infantry, from its powers of endurance, its capabilities for battle in all kinds of ground, and its independence of those casualties by which the other arms may be completely paralyzed, is placed as the *first arm*; and upon it is based the strength of all the others. It generally forms about *four-fifths* of the entire force.

92. In all states where the military art is justly appreciated, the cavalry arm is placed in the *second rank* to the infantry. To it, an army is often indebted for turning the scales of victory, and giving a decisive character to the issue. To it, the infantry, when exhausted by fatigue, or broken, often owes its safety, and through the respite gained by its charges, finds time to breathe and reform. Without it, much of advanced-post duty, patrols, and detachment service requiring great celerity, would be but badly performed.

But the arm of cavalry by itself can effect but little; and, in many circumstances, does not suffice even for its own safety. The smallest obstacles are sufficient to render it powerless; it can neither attack nor hold a post without the aid of infantry; and at night is alarmed, and justly so, at every phantom.

The proportion borne by the cavalry to the infantry should vary with the features of the seat of war; being greater in a champagne than in a broken, or mountainous country. The proportion of *one-fourth* of the infantry for the first, and *one-sixth* for the last, is generally admitted by received military authority as the best.

93. The artillery is placed *third in rank* among the arms. Its duties are to support and cover the other arms; keep the enemy from a approaching too near; hold him in check when he advances; and prevent him from *débouching* at particular points. To perform these duties it is considered that an allowance of *one piece for each thousand men* of the other arms, and *one in reserve* forms the proper quota of this arm. It is to be remarked, however, that this proportion supposes the other arms in an excellent state of organization and discipline. In the contrary case, the quota of artillery must be increased; for it inspires poor troops with confidence, as they rely upon it, to keep off the enemy, and to cover their retreat. But here arises another disadvantage; as artillery is utterly incapable of defending itself, and therefore, when present in an over proportion, it must necessarily sustain great losses in guns and the other *matériel*.

94. The arm of engineering, although requiring more science and a higher grade of talent for its duties than any other, takes the *last place in tactical considerations*. To it is intrusted all that pertains to opposing passive obstacles to an enemy's advance, and removing those which he may have raised. To it is assigned that most difficult of all tasks to the soldier, patient endurance of manual toil, and a disregard of everything but the work in hand, whilst exposed to the enemy's fire. The proportion of engineer troops will depend in a great measure upon the character of the operations undertaken; being most in sieges, and least in those depending mainly on manœuvres. In the French service, the engineers are one-half the strength of the artillery; a large number, but rendered necessary by the peculiar military position of that country.

95. The troops which compose the three principal arms are generally subdivided into two classes, *heavy* and *light*; partly arising from the nature of their weapons, and partly from their destination on the field of battle.

96. This subdivision is less marked in the infantry than in that of the other arms; for although in most foreign armies, a portion of the infantry carries a sabre with the musket, still this additional weapon is of rather questionable utility; for the musket is the one which, under all circumstances of attack and defence, will be resorted to.

97. All infantry now receive the same instruction; but whether a portion of it ought not to be reserved especially for the duties consigned to light troops, is still a disputed point. One thing is certain, that perfection is more easily reached by confining the individual to one branch of his art, than by requiring him to make himself conversant with the whole. Still it might be often found inconvenient, at the least, if infantry were not able to perform all the functions required of it.

98. The service of light infantry often demands great individual address, intelligence, and well-developed physical powers; a combination of qualities not easily found, and seldom, indeed, without careful habitual training. Whereas, in infantry of the line, the qualities of the individual are of less importance, as results here depend almost solely upon the action of the mass.

99. The habitual order of battle of light infantry is the *dispersed order*; and whether acting offensively or defensively, it depends for its results upon the effect of its fire, resorting to the close order, and using the bayonet, only exceptionally. As each individual, although immediately supported by his own file-closer, and those on his right and left, is still often thrown upon his own resources, being obliged to take cover where he can most conveniently find it, he must be a good marksman, cool, deliberate, and circumspect; since it may become necessary to keep an enemy occupied hours, and even days together, pressing on him at one moment and yielding to him the next, or holding with tenacity, and disputing inch by inch some particular point as it may suit the views of the general in command.

100. In infantry of the line, as success depends upon the action of the mass, *ensemble*, coolness, and determination should characterize all its movements, whether it delivers its fire in line, forms in column to attack with the bayonet, or throws itself into square, to await the charge of the enemy's cavalry.

101. The duties of light infantry are to open an engagement, and, after it is fairly got under way, to keep it going; turning it to advantage if successful, otherwise breaking it off. In its relations to the infantry of the line, it should cover the flanks of the latter; clear the way for its advance by rooting the enemy out of all covers, and then holding them if requisite. Upon it devolves all advanced-post, detachment, and advanced and rear-guard service.

102. To the infantry of the line is confided everything where firmness is the essential requisite; as the attack or defence of key-points, the formation of all supports and reserves; whether on the field, or in the attack and defence of posts.

103. There is a third class of infantry, termed *riflemen*, which does not form a part proper of the arm of infantry; partaking, when properly constituted, more of the character of partisan than of regular troops; being chosen only from that portion of a population whose habits lead them to a daily use of fire-arms, and give them an unerring aim. As an auxiliary in the defence of particular localities, where they are secure from the attack of the bayonet, or of cavalry, and can deliver their fire with that deliberation which their weapon demands, riflemen will often be found invaluable; as nothing is more dreaded by troops generally than this lurking, and often invisible foe, whose whereabouts is only divined by the destruction he deals around him.

104. In cavalry, the distinction between heavy and light is more strongly marked, and the functions of each more clearly defined than in infantry.

105. The *cuirassiers*, from their defensive armor and heavy sabre, which in both man and horse call for great physical powers, constitute the true heavy cavalry. The *dragoons* and *hussars* belong to the light, and the *lancers* indifferently perform the functions of either.

106. The most essential quality of all cavalry, which distinguishes it from all other arms, and gives it the faculty of taking an enemy frequently at disadvantage, is that of celerity. If to this the rider unites boldness, and even, when called for, recklessness, it makes of this arm a truly fearful one.

107. Cavalry, to attain its ends, should unite several essential conditions; horses and weapons in good condition; sufficient depth of ground both in front and rear to gather speed for the charge or space for rallying; to be led boldly but skilfully into action; have its flanks covered against a surprise; and be followed by a support, or reserve, to cover the retreat, or secure from the effects of confusion the line charging, if brought up unexpectedly by the enemy.

108. There are qualities which are peculiar to each kind of cavalry, growing out of the duties required of this arm. To the heavy cavalry, the *cuirassier sans peur*, should belong the attribute of irresistibility. Apparently as careless and indifferent to the maddening strife around, as was *le Noir Faingéant*, in the "Gentle and Joyous Passage of Arms of Ashby-de-la-Zouche," whilst waiting the moment for action; the cuirassier, when, with sabre raised, he rushes on his foe, should, like the tornado, level all before him, and leave nothing of his task unfinished but the gathering of the wreck he leaves in his track.

109. The dragoon, when first instituted to combine the functions both of the foot soldier and cavalier, was found, like most mongrels, to have the qualities of neither in a very serviceable degree. He still retains his musketoon, and on out-post duty, and skirmishing in broken ground, does a soldier's duty with this weapon. Apt for attacks, whether in close order or dispersed, he should lend himself to the charge kindly; and in cases where thrown on his own resources, display all the intelligence, activity, and circumspection of the best light infantry.

110. The dashing bold hussar, that epitome of military impudence and recklessness at the tavern, should present those qualities in a sublimated form on the field. Regardless of fatigue and danger, his imagination should never present to itself an obstacle as insurmountable. On the march, constantly at the enemy's heels; in position keeping him it all moments on the alert, harassing him either with fatigue, or apprehension for the security of his rear and communications; on the field careering with a falcon's speed and glance upon his quarry, however it may seek to elude his blow, such should be the hussar.

111. The lancer, like the poet, “is born not fashioned.” In the hands of the Pole, the lance, whether used to charge in line or in the dispersion of pursuit, is a truly fearful weapon; but to those to whom long practice in its use has not made it a second nature, it is only embarrassing, and more to be avoided by a comrade than by a foeman. Still the apprehension of being run through has a powerful moral effect upon a man; and there is no sound more appalling to a flying enemy than “here come the lancers.”

112. As the functions of heavy cavalry are to bear down all opposition, and present an impassable wall to the enemy’s efforts, its duties are confined to the battle-field; there, placed in the reserve, it is held in hand until the decisive moment arrives, when it is launched forth to deal a blow from which the enemy hopelessly struggles to recover, either to achieve victory, or to fend off utter defeat.

113. To light cavalry are intrusted the important duties of securing from surprise the flanks of the heavy; to watch over the safety of horse artillery, and to perform the services required of them by infantry divisions, and those of detachment service in general.

114. The artillery, which had for a long period, and even still, preserves the character of eminent respectability, has of late years begun to infuse a dash of the dare-devil spirit of the cavalier into its ranks. If it has not yet taken to charging literally, it has, on some recent occasions in our service, shown a well-considered recklessness of obstacles and dangers, fully borne out by justly deserved success.

115. The distinction between light and heavy in this arm arises not only from the difference of calibre in the pieces, but also in a difference of their tactical application.

116. The heavy field calibre is the 12-pounder, which is reserved for batteries in position, and is seldom shifted during the action.

117. The light field calibre is the 6-pounder, and the 24-pounder howitzer, which are served either by foot or horse-artillery, and follow the movements of the other arms.

118. Improvements both in the *matériel* and the tactics of artillery have been very marked within late years. Formerly, considered only in the light of an auxiliary on the battle-field, artillery now aspires, and with indisputable claims, to the rank of a principal arm. Its decisive effects, at the late battles on the Rio-Grande,* are supported by testimony too emphatic to be overlooked.

119. From the studies required of him, the artillerist is well trained to maintain the characteristics of his arm; courage of the highest order, in which the physical is always under the control of the moral element, producing, as a necessary result, unbounded devotion to the task assigned; a presence of mind that nothing can disturb; and that coolness which no danger, however appalling, can impair.

120. The tactical applications of artillery on the field depend on the calibre. To the heavy are assigned the duties of occupying positions for strengthening the weak points of the field of battle; for securing the retreat of the army; for defending all objects whose possession might be

* In alluding to the late brilliant achievements of our artillery, it is but just to call attention to the fact, that the country is indebted for it to the Hon. Joel R. Poinsett, late Secretary of War under the administration of President Van Buren. Without the forethought and military sagacity of this accomplished gentleman, and his untiring efforts, while in office, to promote the public good and insure its safety if suddenly brought into a state of war; the country, in all probability, would have been found, on the breaking out of the Mexican difficulties, in the same dilemma with regard to this most important arm as it was in some other hardly less essential points. It is to be hoped that the maxim so often idly repeated, and the value of which was here forcibly illustrated, *In Peace prepare for War*, may not again be used in vain.

of importance to the enemy, as villages, defiles, &c.; and for overturning all passive obstacles that cover the enemy, or arrest the progress of the other arms.

121. The light pieces, served by foot-artillery, follow the movements of the infantry; covering the flanks of its position, preparing the way for its onset, and arresting that of enemy. It is of this that the principal part of the artillery in reserve is composed.

122. The horse-artillery is held in hand for decisive moments. When launched forth, its arrival and execution should be unexpected and instantaneous. Ready to repair all disasters and partial reverses, it, at one moment, temporarily replaces a battery of foot, and at the next is on another point of the field, to force back an enemy's column. In preparing the attacks of cavalry, this arm is often indispensable and always invaluable; brought with rapidity in front of a line, or opposite to squares of infantry, within the range of canister, its well directed fire, in a few discharges, opens a gap, or so shakes the entire mass, that the cavalier finds but a feeble obstacle, where, without this aid, he would in vain have exhausted all his powers.

CHAPTER II.

MANNER OF PLACING AND HANDLING TROOPS.

INFANTRY.

123. *Position and Formation.* On the field of battle, whether the object be to attack, or defend, the infantry is divided into three bodies; an advanced-guard, the main-body, and a reserve. Their proportion will depend upon the total force, and the character of the position occupied. The advanced-guard must be of sufficient strength to hold the enemy in check, but, at the same time, the main-body, upon which the brunt of the action should fall, must not be left of insufficient force, by unnecessarily increasing the advanced-guard; and the reserve should be strong enough to repair any disaster that may befall the main-body; or to profit by its success in accomplishing the complete overthrow of the enemy.

124. These three bodies are separated from each other by intervals which will depend upon the nature of the ground. The advanced-guard occupying the front; the main-body at a distance from 150 to 300 paces in its rear; and the reserve at a like interval to the rear of the main-body. Where the ground, for example, is undulating, and therefore favorable to masking the troops from the enemy's fire, these intervals may, if requisite, be reduced to 80 or 100 paces.

125. The troops composing these three bodies will be formed either in columns of battalions, or be deployed, according to the circumstances under which they may be placed. For an attack, for evolution, or for defence against cavalry, the formations of columns of battalions is best. To repel the enemy's attack by a fire, and in some cases, to present a less favorable mark to his artillery, the battalions are deployed. The battalions, whether deployed or in column, preserve the proper intervals for evolutions; these intervals may be increased in obstructed ground without weakening the defence.

126. The battalions composing the main-body may be drawn up in one or two lines. The latter usually obtains only when a large force is present. In this case the reserve no longer holds the position of a third line, as in the other; but forms an independent body, to be used according

to the emergency; the second line supporting the battalions of the first, and, for this purpose, occupying positions to the rear, opposite to their intervals.

127. Defence. When the position is taken up to receive the enemy's attack, and then either to remain on the defensive, or to assume the offensive, as circumstances may justify, the advanced-guard will be posted on the ground most favorable to hold the enemy in check, and so force him, by disputing it with tenacity, to develop his means and plans. This is best done by a judicious combat or skirmishers, who, for this purpose, are thrown forward 300 or 400 paces, to feel the enemy, and are only reinforced when closely pressed.

128. Whether the advanced-guard shall maintain its ground obstinately until reinforced by the main-body, or whether it shall fall back, either on the flanks or to the rear of the main-body, must be determined by the strength of its position. If this be so strong that the enemy's loss in carrying it must be great, then it should be pertinaciously maintained; in the contrary case it must, after a suitable show of resistance, be abandoned.

129. As a general rule, troops should be placed as much out of view as practicable before they into action, by taking advantage of covers offered by the ground. The main-body should be kept masked in this way until it is called to engage the enemy. If it advance to support the advanced-guard, it will usually attack with the bayonet; if the advanced-guard is called in, the main-body will usually receive the enemy by its fire; the battalions being deployed for this purpose. If the enemy is staggered by this fire, or, in advancing, shows, by the wavering or confusion of his line, a want of confidence, the fire may be followed up either by a charge of the troops in line; or they may be formed in columns of attack before charging, if the enemy perseveres in his onward movement. A charge by a column, when the enemy is within 50 paces, will prove effective, if resolutely made.

130. The reserve is composed of the most reliable troops. It should be distinguished for cool courage; acting under all circumstances, either defensive or offensive, with circumspection and determined resolution.

As the object of the reserve is to infuse greater energy into the action of the main-body, and, if necessary, to strike a last and decisive blow, it should be kept masked from the enemy's fire and view until called into action. The proper moment for engaging the reserve is either when the enemy has been shaken in his attack by the resistance offered by the main-body, or when the latter is unable farther to resist the enemy's efforts. If engaged too soon, the resistance offered to the reserve may prevent its making a decisive blow; if not engaged in time, the main-body may be too far exhausted and disorganized to rally.

In cases where the reserve forms a second line, to support the main-body, it should approach the first line when it becomes engaged, to be ready to replace it when circumstances may render it necessary. The advanced-guard, in such cases, should retire to the rear, to act as a reserve.

131. Attack. In the attack of infantry, the same fundamental dispositions are made as for the defensive. The advanced-guard will not throw forward its skirmishers until they are near enough to engage the enemy. The line of skirmishers should be strongly supported, and will press the enemy with vigor and without relaxation. If the force engaged be small, the main-body will regulate its movements by those of the line of skirmishers; if considerable, the reverse will obtain.

132. The main-body and reserve follow in column the advanced-guard, preserving the requisite intervals. The columns should take every advantage of the ground to mask their movements; getting rapidly over any where they are much exposed to fire. So soon as the

advanced-guard is checked, it will fall back either on the flanks of the columns, or to the rear; and the main-body will be immediately brought into action, either by deploying and opening its fire, or by a vigorous charge with the bayonet. If the main-body falters in its attack or gives any signs of want of resolution, the reserve should advance at once through the intervals, and make a vigorous charge with the bayonet.

133. If the attack by the main-body is made with the bayonet, the interval between it and the columns of the reserve may be lessened to 80 or 100 paces. The flanks of the columns of attack, and intervals between them, should be occupied by skirmishers. This is an important precaution; as, by forcing the enemy to deliver his fire before the columns have reached within a destructive range, the main obstacle to their onward movement will be removed.

134. Pursuit. If the assailed retires, the pursuit must be conducted with system and in good order. The line nearest the enemy will throw forward a few troops in pursuit; which, in most cases, will be preceded by skirmishers. The line in close order, will follow these troops until it attains a good position to receive the enemy, should he make an offensive movement, when it will be halted and formed in readiness for action. A pursuit by infantry alone cannot be pushed far, even should the enemy retire without any order, or show of resistance, as the retreating force will soon distance their pursuers.

135. Retreat. When, either in the defensive, or offensive, it becomes necessary to retire, the first point to be attended to is to withdraw the troops engaged; either to a good position to their rear, where they can halt and face the enemy, or else behind the line in their rear, which should hold the assailants in check, and allow the retreating troops to fall back in good order. Having fairly got disengaged, dispositions must be promptly made to withdraw from the field. This may be done by the entire force moving off together, if the enemy shows no disposition to follow up his success with energy; or, in the contrary case, by retiring by successive portions; the line which withdraws falling some 150 paces to the rear of the one by which it is covered, whilst falling back, and then forming, to cover in turn the retreat of the latter.

The dispositions made in the retreat will depend entirely upon the character of the enemy's pursuit, and the features of the ground. It will usually be made in columns, covered by skirmishers, if the pursuit is made by infantry alone; if by cavalry, the retreat must be made with great circumspection; the troops retiring slowly and in good order, adopting the formation against cavalry; never hastening the march, unless very near a good position for defence, which should be attained as rapidly as possible, unless closely pressed by the cavalry.

136. If it be necessary to continue the retreat for some marches, under the eye of the enemy, a rear-guard must be formed; selecting, from a fourth to a third of the entire force, for this service. The main duty of the rear-guard is to hinder the enemy from pressing too closely on the main-body; and it should therefore, under no circumstances, allow itself to be forced back upon the main-body. The dispositions adopted by the rear-guard will depend upon the features of the ground; its rear will usually be covered by a line of skirmishers. The rear-guard will keep within good supporting distance of the main-body; and, when pressed by the enemy, the latter, whenever a favorable position offers, will halt and form; to cover the former, and force the enemy to greater circumspection.

137. Measures for Protracting an Engagement. In the attack, as in the defence, it may frequently become an object to protract an engagement, without coming to any decisive result; either for the purpose of holding a position for a certain time, to favor other objects, as the arrival of reinforcements; or to occupy an adversary upon one point whilst a decisive blow is preparing on another. This game can be played only upon ground favorable to alternations from the

defensive to the offensive; and should only be intrusted to troops thoroughly conversant with the duties of skirmishers. The main-body is kept some two thousand paces to the rear of the skirmishers in such affairs; taking advantage of the ground, and making suitable dispositions of the troops to avoid the effects of the enemy's artillery. Small columns are thrown forward between itself and the troops engaged, which take post in covered ground, to be at hand to support skirmishers. The troops engaged should be promptly reinforced, when the enemy presses onward; and attempts should be made, by charging him in flank, to force him to retire. The troops in action should be frequently relieved, and the opportunity should be seized, when the fresh troops come to make an onward movement on the enemy, and force him from any points he may have gained.

138. *Defence against Cavalry.* When infantry is threatened by cavalry, the proper formation to repel its charge is that of squares. If but one square is formed, it must rely on its own resources to beat off the enemy; but when there are several they may give mutual support by bringing a flank fire from one upon a force advancing on either of the two contiguous to it. The safety of infantry against cavalry will depend upon the preservation of perfect coolness, good order, and connection in the ranks; the avoidance of any precipitate movements which bring about a surprise; and the husbanding of its ammunition, and reservation of its fire until the enemy is within a deadly range. Well disciplined infantry, whilst in position, and when not exposed to a fire of artillery, may securely trust to its own resources to repulse the best cavalry, so long as it adopts the proper precautions. If annoyed, as sometimes may happen, by the fire of a few horsemen, advanced to draw the fire of the squares, it will be better to throw out some skirmishers, ten or twelve paces from the squares, to keep off such attacks, than to open a fire from the squares.

139. *Defence, &c., against Artillery.* Infantry may take advantage, either of covers presented by the ground, or occasionally shifting its position, to avoid the fire of artillery. Very slight undulations, or obstructions, like the low banks along the borders of ditches, will serve to cover troops, by causing the shot to rise above them. If no covers are at hand, the chances of casualties, when within point-blank range may be diminished by moving forward, or backward, some 50 paces; if the fire be a ricochet, the position should be shifted some 50 paces to the right or left. The enemy's batteries may be annoyed, and sometimes be forced to change their position, by sending out good marksmen, who advance singly to within some 250 paces of them; where, lying down, they can pick off the officers, men and horses.

140. *Attack of Artillery.* Whenever it is found necessary to carry a battery by the bayonet, the troops for this duty are divided into two detachments; one of which is charged with capturing the guns, and the other with attacking the supports of the battery.

The dispositions made by the detachment which moves against the guns will be the usual one of skirmishers; the line surrounding the battery, and opening their fire upon it when within about 250 paces, taking advantage for this purpose of any covers, to screen the men. The supports of the line of skirmishers should be kept well to the rear to be ready against a flank movement on the line. If this manœuvre succeeds in drawing the fire of the guns, and any confusion is observed among the men, then a rush must be immediately made upon them with the bayonet.

The detachment against the supports of the battery will make its dispositions according to the kind of troops which compose the supports. If of infantry, the detachment to seize the guns, divided into two portions, will advance either in line, or column, as may be best, on the flanks of the line of skirmishers; gradually getting in advance of it, and closing on the flanks of the

battery, so as to attack the supports in flank; keep to the rear of the line of skirmishers, in order to tempt the supports to move forward, and thus mask the fire of their guns. If the supports are of cavalry, the detachment, divided into two columns, will follow the line of skirmishers, in rear of the flanks; to cover it against a charge of the cavalry.

CAVALRY.

141. Position. This arm is usually placed in the rear of the infantry, on ground favorable to its manœuvres, and where it will be masked from fire until the moment arrives to bring it into action; here, if acting on the defensive, the cavalry watches its opportunity to support the other troops, driving back the enemy, by prompt and vigorous charges, when these are hard pressed; or, if on the offensive, biding its time, to rush upon the assailant, and complete his destruction; when his ranks commence to waver or show signs of disorganization from the assaults of the other arms.

142. Formation. The habitual formation of cavalry for the attack is in a line of two ranks, with reserve, or support to its rear. The supports are indispensably requisite to guard against those chances of danger to which cavalry is particularly exposed, if attacked in turn, when in a state of partial disorganization after a successful charge; or when threatened by an offensive movement against its flanks. The supports offer a safeguard against either of these dangers; for, if the front line is brought up by the enemy, after a successful charge, it can retire and rally in the rear of the supports; and if the enemy makes a movement against the flanks, the supports, placed behind them and in column, can form and anticipate the enemy's charge. For the foregoing reasons, cavalry should not give way to a headlong pursuit after a successful charge, unless its supports are at hand; and, in cases where a charge is made without supports, a portion only should engage in pursuit, the rest being rallied to form a support.

143. Cavalry is seldom called on to use firearms. When on out-post service, or acting on the defensive on ground unfavorable to charging, a portion of the force may be dispersed as flankers, to hold the enemy in check by their fire. In this case their movements are regulated in the same way as other skirmishers.

144. Defence. The defensive qualities of cavalry lie in the offensive. A body of cavalry which waits to receive a charge of cavalry, or is exposed to a fire of infantry, or artillery, must either retire, or be destroyed. This essential quality of cavalry renders its services invaluable in retreats where the enemy pursues with vigor. In such cases it should be held in constant readiness to take advantage of every spot favorable to its action; and, by short and energetic charges, force the enemy to move with circumspection.

145. Attack against Infantry. So long as infantry maintains its position firmly particularly if the ground is at all unfavorable to the movements of cavalry, the chances are against a successful attack by the latter. Cavalry should therefore either wait patiently until a way is prepared for its action, by a fire of artillery on the enemy's infantry; or until the infantry has become crippled and exhausted by being kept in action for some time; or else, watching its opportunity, make a charge whilst the infantry is in motion, so as to surprise it before it can form to receive the attack.

Cavalry should direct its charge on that point of the enemy's infantry where it will itself be exposed to the least column of fire. If the infantry is in line, the charge should be made on one of its flanks; if in square, on one of the angles of the square; and when several squares are

formed, so as to afford mutual support by their fire, selecting the squares on the flanks as most vulnerable, from their position.

146. The formation usually recommended for charging against squares, is that of three squadrons in line at double distance, the leading squadron being followed by the others, either directly in its rear; or else the squadrons may be formed in echelon, successively overlapping each other by about the front of a platoon. The angle of the square is charged by each squadron in succession, if the charge of the one preceding it fails; the repulsed squadrons of each wheeling to the right, or left on retiring; to leave the way clear for its successor. A fourth squadron follows those in line; to surround the square and make prisoners if it should be broken by the charge.

147. To draw the fire of the infantry before charging, a few skilful flankers may be thrown forward, to open a fire on the square. Stratagem may also be tried, by moving along the front of the infantry, at some 400 paces, and then charging, if is tempted to throw away its fire at this distance. In an attack where several squares are in line, if one fires to second another it should be instantly charged.

148. *Attack against Artillery.* In attacks against artillery, the detachment of cavalry should be divided into three bodies; one-fourth of the detachment being charged with carrying the guns; one-half to attack the supports of the battery; and the remaining fourth acting as a reserve, to cover the parties in advance, from an offensive movement against their flanks, or rear.

The party to secure the guns make their attack in dispersed order, and endeavor to gain the flanks if the battery. When the battery has a fair sweep over the ground along which they must advance, they should, by manœuvring and false attacks, try to confuse the artillerists, and draw their fire before their charge.

The attack against the support of the battery will be directed in the usual manner; the party manœuvring to gain their flanks.

ARTILLERY.

149. *Position.* The manner of placing artillery and its employment must be regulated by its relative importance under given circumstances, with respect to the action of the other arms.

In the defensive, the principal part is usually assigned to the artillery; and the positions taken up by the other arms will, therefore, be subordinate to those of this arm. In offensive movements the reverse generally obtains.

150. *Defence.* In defensive positions the security of the batteries is of the last importance. Unless the batteries are on points which are inaccessible to the enemy's cavalry and infantry, they must be placed under the protection of the other troops, and be outflanked by them.

As in the defensive, we should be prepared to receive the enemy on every point; the batteries must be distributed along the entire front of the position occupied, and on those points from which they can obtain a good sweep over the avenues of approach to it; the guns being masked, when the ground favors, from the enemy's view, until the proper moment arrives for opening their fire.

151. The distance between the batteries should not be much over 600 paces; so that by their fire they may cover well the ground intervening between them, and afford mutual support; the light guns being placed on the more salient points of the front, from their shorter range and greater facility of manœuvring; the heavier guns on the more retired points. Guns of various

calibre should not be placed in the same battery. A sufficient interval should also be left between batteries of different calibre, to prevent the enemy from judging, by the variation, in the effect of the shot, of the weight of metal of the batteries.

Those positions for batteries should be avoided from which the shot must pass over other troops, to attain the enemy. And those should be sought for from which a fire can be maintained until the enemy has approached even within good musket range of them.

Where the wings of a position are weak, batteries of the heaviest calibre should be placed to secure them.

152. A sufficient number of pieces—selecting for the object in view horse-artillery in preference to any other—should be held in reserve for a moment of need; to be thrown upon any point where the enemy's progress threatens danger; or to be used in covering the retreat.

153. The collection of a large number of pieces in a single battery, is a dangerous arrangement; particularly at the outset of an engagement. The exposure of so many guns together might present a strong inducement to the enemy to make an effort to carry the battery; a feat the more likely to succeed, as it is difficult either to withdraw the guns, or change their position promptly, after their fire is opened; and one which, if successful, might entail a fatal disaster on the assailed, from the loss of so many pieces at once.

154. In all defensive dispositions the ammunition should be most carefully husbanded. A fire should never be opened until the enemy is within good range; and, when once opened, be continued with perseverance and coolness up to the last moment in which it can be made effective.

155. Attack. In the outset of offensive movements, good positions should be selected for the heaviest pieces, from which they can maintain a strong fire of the enemy until the lighter pieces and the columns of attack are brought into action. These positions should be taken on the flanks of the ground occupied by the assailant, or on the centre, if more favorable to the end to be attained. In all cases, wide intervals should be left between the heavy batteries and the other troops; in order that the latter may not suffer from the return fire which the assailed will probably open on the batteries. For the same reason, care should be taken not to place other troops behind a point occupied by a battery, where they would be exposed to the return fire of the assailed; when this cannot be avoided, the troops should be so placed as to be covered by any undulation of the ground; or else be deployed in line to lessen the effects of the shot.

156. The artillery which moves with the columns of attack, should be divided into several strong batteries; as the object in this case is to produce a decisive impression upon a few points of the enemy's line; by bringing an overwhelming fire to bear upon these points. These batteries should keep near enough to the other troops to be in safety from any attempts of the assailed to capture them. Their usual positions will be on the flanks and near the heads of the columns of attack; the intervals between the batteries being sufficient for the free manœuvres of the other troops, in large bodies. The manœuvres of these batteries should be made with promptitude; so that no time may be lost for the action of their fire. They should get rapidly over unfavorable ground to good positions for firing, and maintain these as long as possible; detaching, in such cases, a few pieces to accompany the columns of attack. In all the movements of the batteries, great care should be taken not to place them so that they shall in the least impede the operations of the other troops.

CHAPTER III.

POSITIONS.

157. AMONG the most important modern additions to the military art, is that of *topography*, or the study of the natural features of positions, with a view to turn them to account in the first dispositions for battle, and its various succeeding phases.

158. It is only by this study that the *coup d'œil militaire*, or the art of disposing troops in harmony with the ground on which they are to act, can be brought to any high degree of perfection; whatever may be the natural gifts of the individual.

159. This study is not altogether of modern origin. Among the ancients, some of the Greek generals have given evidence of a feeling of its importance; as in the examples of Epaminondas, Xenophon, Alexander, and particularly of Philopoemen. The Romans, although having adopted an order of battle which lent itself better to varied features of ground than that of the Greeks, still showed but little knowledge of this branch, until after the wars with Pyrrhus, when the art of *Castrametation* underwent some change with them.

160. The tactics which grew out of the French Revolution gave to topography great prominence; and no general perhaps has ever displayed more consummate attainments in this respect than Napoleon; whose descriptive memoirs, particularly of the Alps, are considered as models for all graphic writings; presenting with clearness and comprehensiveness, a picture that the mind's eye cannot fail to seize.

161. The term *Position* is applied to any ground taken up by a body of troops either to make, or to receive an attack.

162. To select a position understandingly, an officer must possess a thorough practical knowledge of the tactical combinations of the different arms; their respective qualifications for the offensive and defensive; and of the adaptation of ground to their particular manœuvres.

163. In choosing a position, the ground must be examined not only with respect to its peculiar suitability to the object in view, but also with reference to the influence of that in its vicinity upon this object.

164. The first point to be looked to is the extent of the position. This should be such that, deduction made of the advanced-posts, and of the reserve, its front and flanks shall present an unbroken line of troops, from which a close and well-sustained fire can be brought upon all points by which these can be approached.

In estimating the front of a position, an allowance of about 180 yards may be made for each battalion, from 600 to 700 strong; about 60 yards for each squadron of horse of 48 files, the necessary intervals between these units being included in this estimate; and from 12 to 20 yards for the interval between the pieces of a battery.

In estimating the depth, an allowance of 600 to 800, yards at least, should be made from the front to the rear; in order that the two lines and the reserve may be posted in suitable relative positions

165. The position should offer no features by which the prompt movement of troops from one point to another, for mutual support, might be obstructed. Its *débouches* to the front for offensive movements, as well as those to its rear in case of retreat, should be ample. It should be beyond the effective cannon range of commanding heights both on its front and flanks.

166. The flanks, being the weakest points of body of troops, must be secured from being turned, or attacked; by resting them upon some strong natural feature of the position, as a river, precipice, &c., which the enemy can neither turn, nor seize upon; or else on some point that will afford sufficient means of prolonging the resistance to enable reinforcements to reach it in time, as an entrenched village,[†] a field work, &c. When the flanks cannot be secured in either of these ways, they must be strengthened by an accumulation of troops upon them; to offer a vigorous resistance to the enemy should he attempt an attack.

167. Positions for the Defensive. When a position is taken up to maintain a strictly defensive attitude, the natural features of its front should be of a character to prevent an enemy from approaching in good order; and to enable the assailed to dispute, with advantage, every foot of ground. The enemy, moreover, should not be able to turn the position, when it is unavoidably exposed to this manœuvre, without great risk to his own safety, by an offensive movement of the assailed on his flanks, or rear.

168. The manner of disposing and handling troops in a defensive position will mainly depend upon its natural features. The only rule that can be laid down is, to post the different arms upon ground best adapted to their respective tactics; and in such relative positions as to afford mutual support, and not impede each other's movements.

169. The obstructions on the front and flanks of the position will be occupied by the advanced-guard, formed of light troops of each arm, if the ground is favorable to their combined action; for the purpose of observing the enemy, and holding him in check if he makes an onward movement.

170. The main-body of the infantry will occupy every point, between the obstacles on which the flanks rest, in such a manner that no intervals shall be presented through which the enemy can penetrate without being exposed to a close and powerful line of fire.

171. The artillery will be placed on those points where it can have a commanding view of the ground in advance of the position, and sweep by its fire the approaches of the enemy, both in front and flank.

172. The cavalry, posted in rear of the infantry, should occupy ground upon which it can make effective charges, to support the infantry when pressed by the enemy.

173. In posting troops on obstructed ground, care should be taken not to place them on points where they can only be idle spectators of the combat; either from the impossibility of their being approached by the enemy, or from their not being able to join the enemy at the proper moment. In like manner, those points should be avoided where, from obstacles in their rear, the safety of the troops might be compromised in case of retreat. Whenever it becomes necessary to dispute the possession of the latter class of points with the enemy, the avenues to the rear must be occupied by detachments of suitable strength, to secure the retreat of the troops in advance.

174. In order that the necessary manœuvres may be promptly executed, without confusion; and to avoid offering a mark that might attract the enemy's fire, and occasion useless exposure; no more troops should be placed on any point than its defence may indispensably require; and whenever it becomes requisite to strengthen a weak point, by an accumulation of troops upon it, every advantage should be taken of the undulations, or other accidents of the ground, to mask them from the enemy's fire until the moment arrives for bringing them into action.

175. The value of obstacles, as supports for the flanks, or as obstructions in the front, or rear of a position, is altogether relative; and depends on the number of troops. A very slight

[†] See Chapters VII, IX, X, and XI, Mahan's Field Fortification, on Intrenchments, &c., of Positions, &c.

obstacle on a flank, which will serve to hold the enemy in check but a few minutes, may answer all the purposes of a small body of troops; by enabling them to make such changes in their dispositions as the nature of the case may call for; whereas a larger body, under like circumstances, might be overwhelmed on their flank before they could make suitable manœuvres to prevent it. A broken, obstructed country to the rear, presenting few and narrow avenues of retreat, might be fatal to a large body of troops forced to retire in the face of an enemy; whereas, to a small body, the same features of ground might present many points where strong positions could be momentarily taken up to hold the enemy in check, and force him to pursue slowly and circumspectly.

176. When it is found that the enemy is moving upon the position, the advanced-guard makes suitable dispositions to hold him in check; by occupying with its skirmishers all the obstacles in its front and flanks; when forced to retire upon the main position, these troops concentrate more and more as they approach it, taking care not to mask the fire, or impede the action of the main-body.

177. The artillery will only open its fire when the enemy is within a destructive range; it will then concentrate its efforts against the columns of attack; not replying to the fire of the enemy's batteries, unless it becomes urgent to do so, from their effects upon the other troops. The artillery will maintain its positions with pertinacity, as long as possible watching its opportunities, during the different phases of the action, to support and succor the other arms; as, for example, when it becomes necessary to replace the front line of infantry by the reserve; to advance the cavalry; when the other arms are obstinately disputing a decisive point; or when the enemy abandons the attack. The great mobility of field artillery, owing to the more recent improvements, places it in the power of this arm to act with great boldness in support of the others. The ground over which the gains may be required to move, for this purpose, should be well examined, before the attack commences, by the officer commanding the artillery; that no delays may occur in bringing them into action upon the proper point at the proper moment.

178. The main-body of the infantry should not open its fire until it can be thrown in with deadly effect. If the enemy, unchecked by the fire, still pushes forward, he must be met by a charge, either in line, or column, from the point menaced; a portion of the reserve immediately closing the interval left by the troops making the charge.

179. The reserve should not be brought into action unless its co-operation is indispensable for obtaining some decisive result; as forcing the enemy back from some important point from which the main-body has been compelled to retire; or covering the retreat of the main-body, until it can rally and form again in the rear.

180. The cavalry must be in readiness, from its position, to act promptly, either against an attempt upon the flanks of the infantry; or to profit by any faults, or disorder of the enemy. If the enemy throws forward small detachments without supporting them properly, or advances his main-line without securing his flanks, or shows symptoms of confusion in his infantry, the opportunity should not be lost by the cavalry. In all movements of the infantry, either in advancing or retiring, the cavalry should be at hand to cover it from a sudden attack.

181. If the enemy is beaten off, pursuit is made, either by the cavalry or by detachments of infantry, according to the features of the ground; whilst the main-body is promptly rallied, and placed in position, to receive the enemy should the attack be renewed.

182. The dispositions for a retreat will depend upon the circumstances under which it may be made. When the troops retire by successive lines, the greater portion of the artillery should always be in the line nearest the enemy, and between the battalions; the remainder being

in the second line, ready to repulse any flank attack. The cavalry is posted in rear of the second line, either upon one, or both wings, to be in readiness for a charge at any moment.

183. When the entire force moves off together, the rear is secured by a rear-guard of the best troops, composed of one, or several arms, as the circumstances of the ground may require. The rear-guard will profit by the features of the ground to check the enemy; but will be careful not to lose time, by prolonging unnecessarily the resistance on any point; as this might bring down the main force of the enemy upon it.

184. Great circumspection should be shown in retreating through obstructed ground; in watching the enemy's movements on the flanks; and in timely securing defiles leading to the rear; to prevent the enemy from cutting off the retreat.

185. Attack. An enemy may be made to abandon a defensive position, either by driving him from it; or by manœuvring to turn it and so force him to fall back, to secure his line of communications. In attempting the latter plan, it should not be forgotten that the assailant is, to a greater or less degree, exposed to the same danger as his adversary, who, if active and enterprising, may turn the tables on him.

The celebrated battle of Rivoli, in which a portion of the Austrian force turned the flank of the French position, and was there obliged to lay down their arms,—Napoleon, using on that occasion, when these troops were discovered in his rear, one of those magical expressions, "*Those are ours,*" by which he so well understood how to electrify the soldier,—is a remarkable example on this head. The battle of Buena-Vista, where the Mexicans, after turning the flank and gaining the rear of our troops, barely escaped a similar fate, is another; whilst that of Cerro-Gordo is as remarkable for the masterly and admirable manner in which the enemy's position was turned and carried, although resting upon ground which was fairly deemed impracticable by him.

186. In, planning the attack of a position, attention must, in the first place, be directed to those points in which its main-strength resides, and for this reason termed the *key-points*, the loss of which will force the assailed to retire. As the assailed will probably put forth all his efforts to maintain these points, their attack will demand corresponding exertions on the part of the assailant; and should be made only with troops of the best character.

187. In the second place, those points must be carefully examined, which, by their fire, flank the position; as an advance upon its front cannot be made without great loss and hazard of success until the assailed is dislodged from them.

188. Finally, points which are weak, either from the features of the ground, or from a faulty disposition of the troops; as approaches which are badly swept by the fire of the assailed; an exposed flank with too few troops; or a point where they are not properly placed for mutual support.

189. The main effort of the assailant is seldom directed against more than one point of the position; that one being usually selected which, if carried, will lead to the most decisive results; as for example, one of the flanks, when not resting upon any strong obstacles. But the main attack is always combined with demonstrations upon some other point; both with a view of deceiving the assailed as to the real point of attack, and to prevent him from withdrawing troops from other points to strengthen the one menaced.

190. These demonstrations, or false attacks are, in some cases, made by the advanced-guard of the assailant, after driving in that of the assailed; in others, by a special detachment. In the latter case, the detachment should seldom exceed a fourth of the entire force; and should be

composed of troops of each arm; both for its own safety against any offensive movement, and to present to the assailed a likelihood of danger.

191. The advanced-guard, composed of light troops of each arm, commences the attack, by driving in the advanced posts of the assailed; keeping within supporting distance of the main-body, and occupying such points as may be necessary to cover its manœuvres, or to secure its retreat in case of failure. If a reconnaissance of the position has not been previously made, it will be effected under cover of the movements of the advanced-guard.

192. The artillery takes position where it can silence the batteries of the assailed, and prepare the way for the advance of the other troops. The infantry is usually formed in two columns for the real attack; the leading column being sometimes preceded by an advance. A part of the artillery advances either in one body, or in echelon, on the flank of the column of attack; the leading section preceding, by about a hundred paces, the head of the column of attack. If the column of attack deploys to open its fire, the artillery moves to one of its flanks and seconds it by a fire of case shot. If the column charges with the bayonet, the advanced portion of artillery retires to the position of that in the rear; to be ready to cover the infantry by its fire, if the attack fails. The cavalry follows in the rear of the infantry; to secure its flanks from any offensive movement, and to hold the assailed in check, should he attempt a pursuit after beating off the infantry.

193. If the attack is successful, the artillery and the greater portion of the infantry are immediately formed in good order, to be in readiness for any emergency; the pursuit being left to the cavalry and some detachments of infantry. In case of failure the troops engaged fall back under cover of those in their rear; the artillery, by a well-directed fire, and the cavalry by opportune charges, holding the enemy in check, until order is re-established in the retiring troops, as a preliminary to a retreat, or to a renewal of the attack.

194. *Positions in Obstructed Ground.* This term may be applied to localities where the ground, although level, is cut up by ditches, hedges, broken roads &c., which obstruct the free movement of troops.

195. Positions of this character are more favorable to the defensive than the offensive. As, from the nature of the case, connected movements are, for the most part, impracticable, the commander will find it difficult to direct the engagement, and must rely upon the judgment and skill of his subordinates for its successful issue.

196. The general disposition of the troops will be in dispersed order. There will be but few opportunities for the action of cavalry; and the artillery can seldom find positions to act in mass. The light cavalry and light pieces may be placed in front, wherever they can act with advantage, and support the infantry. The supports and reserves should be kept well to the rear of the troops engaged; to be ready to meet the enemy should he attempt to turn the flanks, a manœuvre to which obstructed ground is frequently favorable. The heavy cavalry and heavy artillery take post to the rear, at any point which may offer a good position to cover the retreat.

197. The attack, like the defence, will be mainly conducted by the infantry, and some light pieces; the infantry, acting as skirmishers, and the artillery being employed to force any opening, that may offer, for the advance of the infantry. Whenever the artillery gets a good position it should endeavor to keep it as long as practicable. The cavalry can effect but little; as the enemy's, even if inferior in strength, may watch its opportunities, from behind obstacles, to make short and successful charges. The artillery not in action will occupy the roads, at points to the rear most suitable for covering the retreat, if the attack fails.

198. In positions of a mixed character, presenting alternations of open and obstructed ground, the troops on the defensive must guard, with great care, every accessible point at which the assailant can *débouche* from the obstructed upon the open portions. A strong fire of heavy artillery should be brought to bear upon these points; and cavalry should be posted in places where they can be masked from the enemy's fire, and be at hand to charge the assailant, as he attempts to *débouche*. These efforts should be seconded by the bayonets of the infantry, if a favorable opportunity occurs.

199. The obstructed ground to the rear must be strongly occupied, to secure the retreat; by posting light troops under the cover afforded by the skirts of woods, by ditches bordered with trees and hedges, &c.; and advantage must be taken of every small defile, to dispute the ground inch by inch.

200. In the phases of engagements in positions of this character, the defence must frequently be accommodated to the troops at hand; as in the confusion of the most orderly retreat, in such cases, it is impracticable to preserve that connection between the movements of the different arms which would be best for mutual support. If the assailant, by disconnected movements, or a disorderly pursuit, lays himself open to an attack, it should be made and pressed with vigor, or not at all.

201. In the attack of mixed positions, the supports and reserves should be kept well to the rear, whilst the troops are engaged in the obstructed portions; to guard against offensive movements on the flanks by the assailed. Those engaged should close in as the ground opens to prepare to *débouche* upon it in force; in which operation the infantry must be covered by the cavalry and artillery. In advancing upon the obstructed ground, the way must be prepared for an attack with the bayonet, by a heavy fire of the artillery, directed particularly upon the most accessible points.

Operations of this character demand extreme prudence and forethought. Every forward movement must be made with great caution; every point gained must be well secured; and its possession disputed with tenacity if the assailed attempts to repossess himself of it. In no other way can the troops engaged be kept well in hand, and be prevented from the confusion and dangers of a hasty pursuit.

202. *Positions in Forests.* In occupying a forest defensively, the skirts and the openings to it, as roads, &c., must be strongly guarded by a line of skirmishers with its supports and reserves, and by artillery so placed as to sweep in flank those points which are most accessible, as the salient portions, and the roads. The line of skirmishers, besides availing themselves of the natural covers of the position, as trees, ravines, &c., will form abatis in front of the more accessible points; and the cannon, in like manner, should be covered by epaulments, when suitable means are at hand.

203. The main-body will take up a central position, on ground favorable to the defence; covering its flanks by marshes, or other like obstacles, strengthening, if requisite, its front by abatis; and guarding all the approaches by a suitable disposition of its heavy artillery. The points of junction of roads leading to the front should be strongly occupied, and strengthened, when practicable, by field works.

204. The space between the skirts of the wood and the central position should be obstinately disputed; advantage being taken of any clearings that may occur, to post light pieces and cavalry in ambush near them, to drive back the assailant, as he *débouche*s on the open ground.

205. As cavalry can only act, under such circumstances, in small detachments, the main-body of it will take position to the rear, to cover the retreat of the other troops from the forest, and check the assailant in *débouching* from it.

206. The attack will be directed on the salient portions, and upon the entrances of the forest; first by a heavy fire of artillery, to drive back the infantry, and force the guns of the assailed to retire. This will be followed up by a rapid attack in line, with the bayonet, on those points, whilst demonstrations are made against the others occupied by the assailed.

If the attack with the bayonet succeeds, the troops must secure the points seized before pushing forward in pursuit; placing some cannon and troops at the most suitable points, to cover the retreat, should the assailed make a strong offensive movement.

207. The pursuit should be made firmly but cautiously; the skirmishers leading and rooting out the assailed from every strong cover; some field pieces, and a column of infantry, each secured by skirmishers on their flanks, following upon the main road, with a detachment of cavalry well to the rear, but within supporting distance, to act according to the emergency.

208. If the assailed makes a firm stand at his central position, an attack upon his front will not only be bloody but of doubtful success; an attempt should therefore be made to turn his flanks, he is occupied in front by demonstrations and false attacks.

If the assailed retires, the pursuit will be made by some light pieces followed by the infantry and cavalry; the different arms being employed according to the varying circumstances of the ground.

209. *Positions in Mountains.* The best and only safe system of defence in mountainous positions is to occupy, with the main-body, a central point, at which the principal passes meet and be always in a state of readiness to act offensively against the enemy, on whatever point he may advance; throwing forward strong detachments in the principal passes to observe the enemy, and offer a vigorous resistance, in order to force him to develop his plan of attack. So soon as it is ascertained on what point the principal force of the enemy is concentrated, the main-body will advance, from the central position, to a point where it will be secure from a flank attack, to act offensively. The detachments on the other passes will act on the flanks of the enemy, by crossroads, if they can do so, or will try to fall on his rear.

210. When circumstances constrain to a passive defence, a position must be taken up either across, or along the valley, which will best secure the flanks, and cover the line of communication.

211. The attack in mountainous positions is conducted on the same principles as the defence. The assailed must be threatened on every point; by throwing columns into the several passes, whilst the main-body advances along one of the principal lines. If the assailed maintains a strict defensive, the several columns unite and make the attack; if he assumes the offensive, the principal columns must be reinforced, and an attempt be made to throw detachments on his flanks and rear, to force him to fall back. The flanks of the troops in column, advancing in the valleys, must be covered by detachments of skirmishers on the heights.

212. The attack will be made mainly by the infantry, as skirmishers. A strong line of fire must be maintained with great pertinacity; the supports must be kept well to the rear; the reserve and main-body holding the points of junction of the roads leading to the front, and not advancing until the engagement is well under way.

Great prudence must be shown in advancing; as the troops engaged are liable at any moment to an attack on their flank. If the assailed attempts this manœuvre, the line of skirmishers must hold on pertinaciously to the ground gained, whilst the supports display and

keep the enemy in check, until the reserves can be brought up to repel the attack with the bayonet. As the line of skirmishers force back the assailed, the main-body follows in column along the valley; its flanks being secured by skirmishers on the heights. If opposed by the assailed, the main-body must attack with vigor, to carry its point promptly; as those engaged in front have no chance of being relieved.

213. There is here seldom any field of action for cavalry; the main portion of this force will therefore be kept to the rear; occupying the points of junction of the passes. Small detachments of dragoons may occasionally do good service in front; making charges, or fighting on foot, as the opportunity offers.

214. The artillery can seldom find positions on the roads. A few light pieces, which can be placed in position on the heights and be well served, may frequently produce very decisive results. When it is necessary to open a way, for the main-body to advance, at points of peculiar strength, it should be done by the heaviest pieces. The horse-artillery will usually be attached to the troops charged with making a demonstration on the flanks of the enemy's position, through the secondary passes.

215. As the assailed will probably obstruct the passes by abatis, or other obstacles, a detachment of engineer troops should accompany each column, being kept always at hand to clear away the obstructions.

216. *Positions near Rivers.* Positions may be selected near rivers either for the defensive, to prevent an enemy from passing; or for the offensive, to force a passage.

217. A position for guarding a river should be selected at some central point, from which the troops can be rapidly marched to oppose the enemy wherever he may attempt to cross. Small posts are established along the course of the river, at the most suitable points for observing the enemy; and communicating to the rear intelligence of his movements.

So soon as it is known that a decided attempt is to be made at any point, the cavalry, with some batteries of horse-artillery, will move to oppose it. If, on reaching the point, it is found that the enemy has succeeded in throwing over a portion of its forces, they must be vigorously attacked, by successive charges of cavalry, and by a persevering fire of the artillery. If the ground is obstructed, so that the cavalry cannot charge, the dragoons should dismount and act as skirmishers. Positions should be selected by the artillery, where it can take that of the enemy, on the opposite bank, in flank; the object being to silence it, or to draw off its fire, to enable the cavalry to act. Everything here depends on lengthening the affair; and preventing the enemy from reinforcing the troops that have passed, until the main-body can arrive from the central position, to support the cavalry and artillery engaged.

218. The passage of a river in the face of an enemy is an operation of extreme difficulty; and every means should therefore be employed to deceive the enemy, and draw off his attention from the point selected for the passage. The bridge train and other requisites being in a state of readiness, the night-time is selected as most favorable to a successful issue.

The point, selected to pass a river in the face of an enemy, should combine several properties, as a position; to give the assailant a decided advantage over the assailed. The river at this point should be narrow, so that the bridge may be rapidly constructed; the banks should form a bend towards the assailant, to enable him to plant his batteries in a position to concentrate their fire on that part of the ground, on the opposite bank, where the troops must form; care being taken that these batteries are not exposed to an enfilading fire from those of the assailed, within the proper range for this fire; the ground near the landing place, on in order that the troops, passed over in boats before the bridge is ready, may not be exposed to the artillery and cavalry of

the assailed, and may be enabled to maintain their position until reinforced by the main-body. If there are islands, near the point of landing, from which a fire of artillery and infantry can be brought to bear on the assailed, they should be occupied by infantry, and some filed-pieces; particularly if they are wooded, or offer other covers.

219. In moving upon the point, silence and perfect order should be preserved throughout. Batteries of the heaviest guns are placed at the most suitable points, to bring a converging fire to bear upon the approaches to the landing on the opposite shore. Light troops are thrown over in boats, to occupy the ground in advance of the landing which troops, if discovered by the advanced posts of the enemy, should be rapidly reinforced. So soon as the bridge is ready; all advanced-guard, composed of troops of all arms, will pass and take position to cover the formation of the main-body. The advanced-guard will mainly keep on the defensive, acting with great prudence, not to offer any advantage to the enemy; its task being to gain time for the rest of the forces to pass.

220. The order in which the main-body should pass must be regulated by the character of the ground, and the resistance offered by the enemy. Usually a portion of the heavy guns follow the advanced-guard, and take position to check the enemy; the main-body of the cavalry with its batteries of horse artillery passing last. In other cases, it may be best to throw over the cavalry and horse artillery before the other troops.

221. The task, imposed upon the batteries, of covering the passage, is of the greatest moment. Careful attention should be given to the management of their fire; directing it, in all cases, upon that portion of the enemy's force whose presence is most threatening.

222. A retreat across a river, when pressed by the enemy, is of all operations the most difficult; and requires every auxiliary means to save the retreating force from destruction. The point selected for the passage should have the same requisites as one for the offensive; and its natural strength should be increased by field works; in order that the enemy may be kept from pressing too hotly upon the rear of the troops that pass the last.

In a retreat of this character, all the usual stratagems for deceiving an enemy must be resorted to before commencing the movement; so that time sufficient may be gained for making the necessary dispositions to secure the point of passage, as well as to gain a march, or two, in advance. The heavy artillery should be dispatched at an early moment to the rear, to take a position on the opposite shore, for covering the passage. The rest of the force, covered by a strong rear-guard, formed of the best troops, will effect their passage gone rally in an inverse order to that followed in one for the offensive.

One of the worst dangers to be guarded against is the confusion caused by hurry. To avoid this, the arrangements for the march of the different bodies should be made with the greatest care; so that each may reach, at the proper moment, the point of passage.

CHAPTER IV.

ADVANCED-GUARDS AND ADVANCED-POSTS.

223. TO keep an enemy in ignorance of the state of our forces and the character of our position is one of the most indispensable duties in war. It is in this way that we oblige him to take every possible precaution in advancing; forcing him to feel his way, step by step, and to

avoid risking his own safety in hazarding those bold and rapid movements which, when made against a feeble, or an unprepared enemy, lead to the most brilliant results.

224. This object is effected, by placing between the position occupied by the main force, and the presumed direction of the enemy, a body detached from the main force, but acting always with reference to it, termed an *Advanced-Guard*.

This term is used for any body of troops so separated from the main-body; whatever its strength and composition; and whether the troops be in position, or on a march.

225. For a large force, the advanced-guard is necessarily composed of troops of all arms; its strength being proportioned to that of the main force;—the more or less resistance of an independent character it may be required to make;—and the greater or less extent it may be found necessary to embrace, by its advanced-posts, on the front and flanks, to watch and anticipate every movement of the enemy.

The proportion of the advanced-guard to the main-body may vary from a third to a fifth of the total force. In armies of some strength, or large *corps d'armée*, particularly where the nature of the country requires a wide development of advanced-posts, the larger proportion is demanded; as at least one-third, or even one-half of its strength will be required for the advanced-post service. In a small force of two or three thousand men, one-fifth will usually be all that can be well spared for the same purposes.

226. Our purpose, in all cases, should be to keep the enemy in a state of uncertainty as to our actual force, and movements; and this can be effected only by keeping constantly between him and our main-body a force of sufficient strength to offer an obstinate resistance, if necessary, to every attempt he may openly make to gain information; and even to act offensively against him, when occasion offers, so as to keep him in doubt as to the actual character and number of the troops before him; the old military axiom, being always kept in mind, that "*a sword opportunely drawn frequently keeps another back in its scabbard.*"

227. In all defensive positions, the advanced-guard and its advanced-posts should retire slowly but circumspectly; so that the main-body may have time to take all its defensive measures. In the offensive, the attack of the advanced-guard should be decided and vigorous; pressing upon the enemy at every point; and leaving nothing undone to moralize him, by the confusion which so often follows from an impetuous onset.

228. Whilst in position, the advanced-guard should take advantage of the natural, or other obstacles on its front and flanks which are within supporting distance; to strengthen itself, and gain supports for its advanced-posts. In this way, its means of resistance, whether acting offensively, or otherwise, may be greatly augmented. Ground of this character, taken up by the troops, should not be abandoned without very cogent reasons for it; since, should circumstances bring about a forward movement, it might cost more to regain what was given up than to have maintained up than it obstinately at first.

229. The ground to be taken up by an advanced-guard, and embraced within its advanced-posts, should be carefully chosen. To take position where the movements of the enemy can be well watched, whilst our own troops are kept concealed, and not liable to a sudden attack, either in front or flank, are the *desiderata* in such cases. If, in following this guide, it should lead to a development of advanced-posts which would be too weak at any point for a tolerable resistance, there remains but the alternative to retire slowly before the enemy,—taking care that he do not slip behind the out-posts and their supports,—upon some central point to the rear, where the advanced-posts, united to the troops in reserve, may make a good stand; and from

which, if the chances are favorable, they may advance upon the enemy, and make him pay dearly for his temerity.

230. In all affairs of advanced-posts, great circumspection is to be shown, both by the officer in command of the advanced-guard, in throwing forward fresh troops to strengthen a point assailed, as well as on the part of the general-in-chief, in sustaining the advanced-guard by weakening his main-body. These are points that can only be decided on the spot. The safer rule, in all cases, is not to weaken the main-defence, or main attack, by detaching from it, to support a feeble point. If the force engaged, under such circumstances does not suffice for its own defence, it is best for it to fall back in time; and, taking position with the main-body, endeavor, by their combined efforts, to turn the scales of victory in their favor.

231. The duties of advanced-guards being so much more frequently to feel and occupy an enemy, preparatory to some decisive blow by the main-body, than to engage him with a view to follow up any advantage gained, it follows, as a matter of course, that they should be composed of the most efficient and active light troops at the general's disposal. Such troops, in the hands of a solid, energetic, but prudent leader, will be the right arm of an army. Prompt on all occasions; never taken at fault, they keep the enemy constantly occupied; harass him with fatiguing precautions, to secure his flanks and rear; whilst their own force is kept relieved from these annoyances, and always fresh for any great emergency.

232. *Advanced-Posts.* The duties of the advanced-posts are the same whether the troops are stationary or in movement; they are, 1. To keep a good lookout for the enemy, and when in his immediate presence, to take all means to be accurately in, position, and movements; 2. Should the enemy advance, to hold him in check long enough to give the main-body ample time to be prepared for his attack.

233. By a faithful discharge of these duties, the whole army can, at all times, and under all circumstances, be kept in a state of readiness for action; without subjecting the soldier to any failure beyond the ordinary physical endurance of a well-developed manhood; as but a small portion, comparatively, of the force present is required to watch over the safety of the rest, and can therefore be frequently relieved, so that every one may have time sufficient for the repose demanded after extraordinary exertions.

234. The object being to secure the front and flanks of the position, occupied by the main-body, from any attempt either to reconnoitre, or attack it, the detachments which form the advance-posts must be so distributed as to embrace all the avenues by which the enemy can approach the position. The system adopted, in most services, to effect this object, consists of two, or three concentric lines of posts, disposed in a *fan-shaped* order. The exterior line, which forms the *Out-Posts*, embraces a wide circumference; and by means of a chain of *Sentinels*, posted in advance, prevents any one from penetrating to the rear between the posts, without being seen.

235. The second line, which is one of *Grand-Guards*, embraces a narrower circumference than the line of out-posts; occupying the more important avenues from the out-posts to the interior; so as to be in a position to support the out-posts in case of necessity; and to receive them if driven in.

236. The interior line consists of several strong detachments, termed *Pickets*, posted upon the main avenues to the position. They serve as supports to the two exterior lines, upon which they rally if forced to retire before the enemy.

237. Besides these dispositions for security, *Patrols* are kept up between the line of posts, to keep the one informed of the state of the other; and also between the out-posts and chain of

sentinels, to see that the duties of the latter are well performed; and to search any ground not brought well under the eyes of the sentinels. The whole, in this way forms a connected system, for observing the enemy and for mutual support in case of attack.

238. The duties of the out-posts, and of the advanced-guards which form their supports, are strictly those of observation. If attacked, they offer no resistance farther than to enable them to feel the enemy perfectly, and never lose sight of him. The task of holding the enemy in check by a vigorous resistance, so as to procure sufficient time for the main-body to make its dispositions for the battle, is consigned to the pickets.

239. The ground taken up by the advanced-posts will depend on the capabilities which its natural features offer for the defence; on the number and character of the approaches it presents to an enemy for attacking the front, or flanks of the position occupied by the main-body; and upon the facilities it may afford for communication between the posts.

240. *Out-Posts.* The position of the out-posts, with respect to the main-body, will be regulated by the more or less broken character of the country. As a general rule, the mean distance may be taken at about two miles. The line occupied by these posts should take in all the approaches to the front and flanks of the main position. When a position is to be held for some time, or is taken up after a battle, the out-posts may be thrown farther in advance; to procure greater repose and security for the main-body.

241. The ground on which the line of out-posts is established should be carefully examined; with a view both to observation and defence. As far as able, those points should be selected for posts present, some natural advantages for the defence will screen the troops from the enemy's view; and enable them to watch all his movements. Whenever the features of the ground do not offer natural obstacles to cover the posts, artificial means of a slight character should be resorted to. The flanks of the line should rest upon strong natural obstacles; when such cannot be found, without giving the line too great an extent, these points must be secured by strong pickets of cavalry or infantry, thrown back to form crochets; from which patrols must be constantly kept up on the flanks, in the presumed direction of the enemy.

242. The strength of each out-post, and the distance from one to the other, will be regulated by the features of the ground, and the number of sentinels, or vedettes that each post must throw out. The posts should, as far as practicable, be within sight of the advanced-guards to which they belong, and the sentinels of their respective posts. When the ground does not permit this arrangement, sentinels should be placed at intermediate points, to communicate promptly whatever may happen at the line of posts, or of sentinels, to the rear. Posts of infantry should not, as a general rule, be placed farther apart than 600 paces; nor their sentinels more than 300 paces in advance of the posts. Those of cavalry may be some 1500 paces apart; and their vedettes from 600 to 800 paces in advance. The strength of each post should be calculated at the rate of four men for each sentinel, or vedette.

243. *Sentinels.* The sentinels and vedettes form a chain in advance, and are posted on points from which they can best watch the enemy, without being seen by, or exposed to him, in any way. As one of their main duties is to prevent any one from passing their chain, they should be so placed with respect to each other, that they can see all the ground between their respective posts, and be able to stop anyone who may attempt to pass between them. At night and in misty weather, the sentinels should be doubled and be drawn in nearer to the out-posts.

Whenever it may be deemed necessary to post sentinels on points beyond the line of out-posts, they should be furnished by posts detached in advance of the line.

244. *Grand-Guards.* As the grand-guards furnish the out-posts, and serve as their supports, not more than one-third of their force should be taken for the out-posts. The grand-guards are posted on the principal avenues leading to the detachments on which they are to fall back, if driven in; and, when of infantry, about 200 paces, and of cavalry, 600 to 800 paces, in the rear of the out-posts. The points which they occupy should be selected, both to secure them from the enemy's view, and to give a ready communication between them and their respective out-posts. No difficult, or broken ground, should lie between the grand-guards and their out-posts; if any such occur, particularly if it be of a nature to offer facilities to an enemy to penetrate to the rear, the whole should be posted on the farther, or hither side of it; and in preference in the latter position, if by it the chain of posts can be preserved unbroken.

245. *Pickets.* The main-detachments or pickets, which form the supports to the grand-guards and out-posts, occupy the principal avenues to the position of the main-body. As their duty is to hold the enemy in check; the points which they take up should be susceptible of a good defence; such, for example, as villages, defiles, &c.; whenever these advantages are not found at hand, resort should be had to any temporary obstacles, as abatis, &c., which can be readily procured, to place the troops under shelter. The points thus occupied should, as a general rule, be about midway between the line of out-posts and the position of the main-body.

246. Small posts should be thrown forward by the pickets, between their position and the line of grand-guards; both for the greater security of the detachments, and as supports to the grand-guards. In like manner, when the line of pickets is of considerable extent, intermediate posts must be established, to keep open a communication between them.

247. No pains should be spared to obstruct the approaches of the enemy to the points occupied by the pickets; particularly those which lead to the flanks; leaving open such only as will oblige the enemy to attack under the most unfavorable circumstances; and if, between the advanced-posts and the main-body, a defile, or other unfavorable pass should occur; which the enemy, by turning the line of the advanced-posts, might seize upon, and thus cut off their retreat, it should be occupied by a strong detachment; both to prevent such a manœuvre, and to favor the retreat on the main-body.

248. *Strength of Advanced-Posts.* The entire strength of the advanced-posts, as well as the relative strength of the pickets, grand-guards, and out-posts, will depend upon the character of the ground covered by them; as being more or less open; and presenting more or less facilities for circumscribing the approaches of the enemy to the main position. It rarely occurs that sufficient troops can be detached to cover all the accessible ground, and perform the duties in a thorough manner.

249. The strength of each picket, and the kind of troops of which it is composed, will depend on the degree of resistance to be offered to the enemy's attack; and the character of the position occupied. In most cases, where a vigorous defence is called for, they will consist of troops of all arms; and an aggregate of several hundred men. The grand-guards, out-posts, and patrols, should not exceed one-third the strength of the pickets to which they belong. They will be composed of cavalry, or infantry, according to the more or less broken features of the ground.

250. It rarely occurs that artillery is placed at the out-posts. Whenever it happens that a piece, or two, may be deemed necessary, to sweep some passage, or defile, in advance of the line of out-posts, the guns must be protected by a strong post, to insure their safety in a retreat.

251. If, from the character of the ground, the out-posts are mainly of infantry, some cavalry should always be attached to them, to patrol in advance of the position, and to convey intelligence to the rear of what may be passing in the neighborhood of the out-posts.

252. When the advanced-posts cover an advanced-guard, the commanding officer of the whole should take a position, with his artillery and the main-body of his command, at some central point, in the rear of the pickets; in order to be ready to support them if hard pressed by the enemy. The choice of this position is an object of the greatest importance; as the safety of the advanced-posts as well as that of the main-body may depend upon the degree of judgment shown in this selection.

253. So soon as the advanced-posts have taken their stations, instructions should be given to the officers of the different posts, with respect to the points upon which they are to fall back, in case of being forced in; the lines of communication they must retire by; and the position they must take up, in joining the supports to which they respectively belong

254. *Duties of an Officer Commanding an Out-post.* An officer in command of any of the out-posts must be capable of untiring vigilance and activity; to perform the various duties which devolve upon him.

He should be provided with a good map of the country, a telescope, and writing materials.

255. He will thoroughly reconnoitre the ground upon which he is to dispose his command; and also as far in advance as circumstances will admit; questioning closely any inhabitant he may find. After taking up his position, he should go forward, with the half of his command, and post each sentinel himself. If, however, he relieves another in the command, and deems it advisable to make any changes in the dispositions of his predecessors, he should promptly report the facts to the commanding officer in his rear.

256. When the officer finds that the enemy is not in his immediate neighborhood, he should endeavor to feel his way cautiously towards him by patrols; and when in immediate presence, he should omit no means to watch the enemy's movements; and from the occurrences of the moment, such as noises, the motion of clouds of dust, camp fires, conflagrations, &c., endeavor to divine what is passing in his camp, and his probable intentions.

257. Accurate written reports should be promptly sent to the officer in command, in the rear, on all these points. The reports should be *legibly* written, and should clearly, but *concisely*, state what has fallen under the officer's eye; what he has learned from others; and the character of the sources from which his information is drawn.

258. He will particularly see that no communication with the enemy be allowed; and that no flag be permitted to pass the line of posts, without orders from the rear.

259. The post under the officer's command, whether horse or foot, should not all be allowed to sleep, or eat at once. The horses, when watered, should be taken singly, or by pairs, and always mounted. At night, one-half of the command should be under arms, prepared for an attack; the other seated, their arms and the bridles of their horses in hand. The men should never be permitted to occupy a house; and if the weather is such that a fire out of doors is indispensable, it should be as much concealed as practicable; one-half only being allowed to sit near it; the other posted, at a convenient spot at hand, to fall on the enemy should he attempt a stroke.

260. When the position taken up is to be held for some time, it will be well to change the locality of the posts occasionally; this should be done, particularly at night, in a hilly district, changing the post from the brow of the hill, where the men can best keep a look-out by day, to the low ground at night, as more favorable to detect any movement above.

261. The out-posts are usually relieved at daybreak, as, being the most favorable moment for the enemy to attempt a surprise; the new-guard will serve to reinforce the old. For the same

reason, the old guard should not be suffered to retire before the patrols come in, and report all safe.

262. As a general rule, no post should ever retire before an inferior force; and, if attacked by one superior to it, resistance should be cautiously made with a view solely to give time to the grand-guard to be in readiness to receive the enemy. When it is seen that the movement of the enemy is serious, the officer should draw in his sentinels as skirmishers, and retire upon the grand-guard; the latter will usually be divided into two divisions, one of which will be sent to take up a position to the rear, to cover the retreat; the other will act as support to the line of skirmishers, so as to feel the enemy. In all cases of retiring, whether of sentinels upon their posts, or of posts upon their supports, care should be taken to assume a direction towards the flank of the force in rear; so as to unmask its front and not impede any forward movement it may make, if necessary.

263. The degree of resistance to be offered by the pickets will depend on the object to be obtained, and the importance of the point occupied. They should not retire until they have received the whole of their grand-guards, out-posts and patrols.

264. At night the precautions should be necessarily redoubled; and every movement be made with extreme caution. Whenever any noise is heard in the direction of a sentinel's post, the officer should proceed, with a part of his command, in its direction; to ascertain the cause of it. If he finds that it arises from an onward movement of the enemy, he should only fall back upon his grand-guard when he sees that resistance would be unavailing; retiring slowly and cautiously, and taking every advantage, which the ground offers, to check the enemy's advance. Should the enemy fall suddenly upon his command, he must endeavor to cut his way through, and reach his position in the rear by the best circuit he can find.

265. *Advanced-Guards.* Measures of precaution, for a force in position, are far more easily arranged than for one in motion. At a halt of some days, but slight changes in the first dispositions, arising from a more thorough knowledge of the sound taken up, will be requisite; on a march, the scene is continually shifting; and the enemy may fall on just at that point, or under those circumstances in which we are least prepared to meet him. Hence a necessity for doubling the ordinary precautions on a march, and keeping the troops more in hand, so as to be, at all moments, prepared for any emergency.

266. The spirit of the dispositions is the same in both cases; changes in the details, so as to adapt our force to the changing features of the ground passed over, present the real difficulty. On a march, we may have to guard against an attack on the head of the column; on either flank, or both; and in the rear. Hence a necessary disposition of movable advanced-posts, in each of these directions, keeping pace with the progress of the main-body, and far enough from it to give it timely warning of a threatened attack.

267. The dispositions in front is termed the *Advanced-Guard*; those on the flanks, the *Flankers*; and those in rear, the *Rear-Guard*.

268. As the head of a column in march towards the enemy is the weak point, it is here that the principal strength must be accumulated, so that, if threatened with an attack, sufficient resistance can be offered, to enable the rear divisions to come and take timely position for battle. The advanced-guard should therefore be composed of troops of all arms, and be always in a suitable state of readiness to receive the enemy, according to the nature of the ground upon which it may be formed. To watch the enemy; resist him with obstinacy, should he suddenly attack, until time is gained for the main-body to receive him; drive in his advanced-posts with impetuosity: such are the duties which this body may in turn be called on to perform.

269. The first of these duties, that of learning the whereabouts of an enemy, is intrusted to individuals, or to parties of more or less strength, as the occasion may require; light cavalry being usually selected, in preference to any other arm, for this service.

270. *Head of Advanced-Guard.* A head or leading detachment of some force, composed usually of both cavalry and infantry, and if requisite some pioneers, forms the advance of the main-body of the advanced-guard; for the purpose of searching all the ground within a dangerous proximity; and of clearing the way for the advancing columns. Through this detachment a communication is kept up with the flankers; and all the ground is thus hemmed in around the advancing column, by which an enemy might approach it.

271. The strength of the leading detachment will depend greatly upon the character of the country; and upon the state of the weather and season being more or less favorable to the unobserved approach of an enemy. A leading detachment of one-fourth the total advanced-guard; two flank detachments, to act as flankers, of one-eighth; and a rear detachment, acting as a rear-guard, also of one-eighth; taking, in all, one-half the total strength of the advanced-guard, is considered, under ordinary circumstances, a good distribution for the duties to be performed.

272. All the ground, within the proximity of the advanced-guard, must be carefully searched by it. No invariable rule can be laid down on this subject, everything depending on the character of the country; the state of the weather; and the march being by day or night, as to the more or less dispersed order that can be adopted for examining the ground.

273. The leading detachment, and those on the flanks, should keep in a position, with respect to each other, that will admit of prompt mutual support and guarding against the approach of an enemy unperceived. The flank detachments, for this purpose, keeping somewhat to the rear of the leading one. The most advanced portions of these troops should be of cavalry, unless the country be mountainous, or very thickly wooded, in which cases infantry is the best arm for the duty.

274. The distance that should be left between the leading detachment and the principal body of the advanced-guard, will depend upon the more or less of necessary precaution already alluded to. An interval of from a thousand to two thousand paces may be left between the leading detachment and the main-portion; the small detachments thrown forward from the leading detachment may precede it from two hundred to six hundred paces; whilst the leading men, who form, as it were, the apex of this disposition, precede the last about one hundred paces.

275. *Dispositions of Advanced-Guard.* From these indications of the manner of distributing the troops of the advanced-guard, the following general dispositions, adapted to ordinary circumstances of locality may be gathered. The apex, or most advanced point, may be formed of a staff, or other intelligent officer, under the escort of a few horsemen; in his rear follow small detachments of horse, preceded by a line of horsemen, as skirmishers, in dispersed order, thrown out from them; this line of small detachments and their men may embrace a front of a thousand or more paces, according to the face of the country. On each flank of the detachments, from which the skirmishers are thrown forward, march small detachments of both horse and foot, as supports of the line. In the rear of this line, at a hundred paces or so, may be placed a small detachment, charged with patrolling either on the front or flanks. Finally, at some sixty paces in rear of the detachment for patrols, follows the remaining portion of the horse and foot, composing the leading detachment. The main-body of the advanced-guard, following some hundred paces farther to the rear; and the rear of its march, being closed by the small rear detachment already mentioned.

It will be seen, by comparing this disposition of troops of an advanced-guard in march, with the one adopted for the advanced-posts at a halt, that they are analogous, and differ in no material respect, as their object in each case is the same.

276. In a forward movement, this general disposition of the troops of the leading detachment should be adhered to, as far as the features of the ground will permit. Whenever these features become such that a concentration on the centre is rendered necessary, a proper order should be temporarily taken, to enable the troops promptly to resume their original order, so soon as the ground opens. The leading line of skirmishers will carefully examine all the ground over which they pass; and observe all that occurs around them. The men, for this purpose, keeping in pairs; and taking all suitable precautions not to place themselves in positions favorable to being seen from a distance.

277. If the enemy is met, dispositions are immediately taken to receive him. The line of skirmishers is strengthened; the supports brought up; and if there is any artillery, it takes position on the road, to sweep it. In this order, the whole of the leading detachment falls back slowly upon the main-body of the advanced-guard; and further dispositions are made according to the exigency of the case.

278. The general order of march of an advanced-guard remains the same in all circumstances of ground; the position of the troops alone varying with changes of its features. In broken ground, for instance, the line of skirmishers of the leading detachment would be of infantry, and this line would be supported by some cavalry.

279. A strict observance of good order, particularly among the troops of the leading detachment, is of the first importance; nothing should therefore be permitted which might either withdraw their attention from their chief duty of watching; or which might give warning to an enemy of their approach. They should especially guard against being drawn into the use of their fire-arms, short of an actual surprise.

280. On a night-march the precautions should be redoubled. The leading detachment will be more concentrated, keeping mostly to the road. If the enemy is seen, word will be sent at once to the rear, for a halt, and the suitable dispositions will be taken, as noiselessly as practicable.

281. All defiles met with of any length should be examined carefully by some scouts, before any number of troops venture into them; and then proper measures should be taken for securing them from an attack, until the troops are all clear of them. All woods that can be easily gone round should be made the circuit of by some horse before passing through them. Thick forests should be carefully examined, a hundred or more paces on each side of the road. And in all cases any doubtful ground must be first searched, by the leading troops, before any large body approaches within musket-range of it.

282. *Flank Patrols.* Besides the flankers proper, which constitute a part of the movable advanced-posts, detachments of an independent character are sent out to patrol along the flanks of the main-column. These should keep themselves in communication, by suitable dispositions of vedettes, with the flankers.

283. As the flank patrols are frequently beyond direct supporting distance, they must adopt all the necessary dispositions against surprise of any other body marching independently; having their advanced-guard, &c., &c.

284. These patrols keep on a level with their column; and particularly secure all lateral roads, or defiles, by which it might be suddenly attacked, until the column is beyond danger. Great activity, watchfulness, and caution, should characterize this service. The officer in

command of a flank patrol must use his discretion, in meeting an enemy, whether to attack him, or to let him pass, if he has not himself been observed.

285. *Rear-Guard.* The duties of a rear-guard, in retreat, will depend upon the more or less of activity and vigor shown by the enemy in pursuit. If the enemy is enterprising, then it will require all the sagacity of the commanding-officer; all the firmness of the soldiers; to cover and defend the rear of the column, and to guard against demonstrations upon its flanks. To hold the enemy in check, just the time necessary to enable the retreating column to extricate itself from unfavorable ground; and then to withdraw from the fight, without being too far compromised; to prevent the enemy from pressing on so hotly as to force the main-body of the rear-guard upon the tail of the column whose retreat is to be secured, are problems of no easy solution; and call for all the best military qualities, both in the officer and the troops to whom the solution is assigned.

286. In mutual support among all the arms; aptitude for turning to advantage all variations in the features of the ground; and tenacity in keeping every advantage until the last safe moment; reside the excellence of a rear-guard. In interdicting by the fire of its skirmishers all approach to its covers; in occasional bold manœuvres of its light-artillery, when the enemy's columns are open to its fire; in daring rapid charges of its cavalry, when the enemy presses forward to gain some critical point; a rear-guard may give an enemy such lessons as will force him to adopt that prudential course, on which its own safety, and that of its column, alone depend.

287. As the march of a rear-guard is an almost continual running fight, its dispositions should be taken for phase of its duties. Its rear should accordingly be closed by a line of skirmishers, properly supported by the other arms. This line must equally exhibit caution, coolness and firmness; giving way to no hasty movements; and reserving its fire until it can be thrown in with murderous effect. If forced back by superior numbers, the skirmishers should concentrate on the flanks of the other troops, leaving the road clear, either for the fire of the artillery, or for the action of cavalry, or of infantry in mass.

288. In all its actions, the rear-guard should never lose sight of the danger it continually runs of being surrounded, or cut off, by a movement on its flanks, or rear. Against this, its only course is to push out flank patrols, as far as they can safely venture; restricting these to the duties of conveying timely warning, to the main-body of the rear-guard of any appearance of a movement of the kind referred to; and of preventing it, if attempted, by a bold stand, either defensive, or offensive, as circumstances may demand.

289. *Advanced-Posts in Cantonments.* As cantonments are taken up either during seasons when operations cannot be well carried on; or to give the troops some extraordinary repose, after a harassing campaign; more advanced-posts will generally be necessary than under ordinary circumstances; and to fulfill their end they ought to be placed on ground favorable to a strong resistance; in order to give the separated corps time to concentrate against an earnest attack of the enemy.

290. A good disposition of stations for out-posts, from which the enemy can be seen at a distance; a line of supports placed on strong ground in the rear; easy communications for concentration on the main-body; active and vigilant patrols, kept moving not only along the front, but penetrating on the flanks, and rear of the enemy, to get wind of his strategical plans: such are the general precautions demanded of its advanced-posts, by an army in station for some time.

291. In the disposition of the main force, to concur with the preceding, one precaution should not be omitted in a stay of any duration; and that is, not to allow any one body to remain long enough in a village, or inhabited place, to become in a degree domesticated. Nothing is more likely than this to injure the *morale* of the best troops. The seductions of otherwise harmless pleasures, may lead to fatal habits of remissness in duty; and the officer quietly indulging in his game at cards, in a family circle, may receive his summons for surrender, as he is gathering up his last trick.

CHAPTER V.

RECONNAISSANCES.

292. THERE are no more important duties, which an officer may be called upon to perform, than those of collecting and arranging the information upon which either the general, or daily operations of a campaign must be based. For the proper performance of the former, acquirements of a very high order, in the departments of geography and statistics, are indispensable requisites; to which must be added a minute acquaintance with topography, and a good *coup d'œil militaire* for that of the latter.

293. However detailed and perfect may be a map, it can never convey all the information that will enable an officer to plan, even an ordinary march, with safety; still less, operations that necessarily depend, for their success, upon a far greater number of contingencies. To supply these deficiencies of maps, an examination of the ground must be made by the eye; and verbal information be gained, on all the points connected with the operation over this ground. This examination and collection of facts is termed a *Reconnaissance*.

294. From the services demanded of a reconnoitring officer, it is, in the first place, evident, that he should possess acquirements of no ordinary character; but in addition to these he should be gifted by nature with certain traits, without which his acquisitions would be of little account, in the discharge of the responsible duty in question.

295. With clear and specific information before him, one-half of a general's difficulties, in planning his measures, are dissipated. In a letter from General Washington to Major Tallmadge, now to be seen framed in the office of the Commissary-General of New York, he remarks, in relation to reports made to him, on a certain occasion: "But these things, not being delivered with certainty, rather perplex than form the judgment." It is in truth this feeling of certainty that constitutes all the difference; having it, the general makes his dispositions with confidence; without it, he acts hesitatingly; and thus communicates to others that want of confidence felt in his own mind.

296. An officer then, selected for the duty in question, should be known to be cool-headed and truthful; one who sees things as they are, and tells clearly and precisely what he has seen. In making his report, whether verbally or in writing, the officer should study conciseness and precision of language. He must carefully separate what he knows, from his own observation, from that which he has learned from others; and add all the circumstances of place, and time, with accuracy.

297. *Duties of Reconnoitring Officer.* The first thing to be done by an officer, selected for a reconnaissance, is to ascertain *precisely* the duty required of him; and what further should be done in case of certain contingencies that may, from the nature of the duty, be naturally

looked for. In the performance of the duty assigned him, and in making his report, the officer should keep always in mind the specific character of his mission, as his guide in both points.

298. As the need of a reconnaissance supposes a deficiency in information upon the features of the country, the officer, detailed to make one, should provide himself with maps, a good telescope, such simple aids for judging of distances, and ascertaining the relative distance of objects, as he can himself readily make; writing materials; one or more good guides; and gain all the knowledge he can, upon his mission.

299. The talent of judging of distances, and of the connection between the various features of a country within the field of vision, is partly a natural and partly an acquired one. Some individuals can never be brought to have any confidence in their own judgment on these points; others have a natural aptitude for them, which requires but little practice for their perfect development. The powers of the eye vary so greatly among civilized persons, that no general rules can be laid down, as a guide for the matter in question. Among uncivilized hordes, used to a roaming life, there are found standards which are well understood by all,—the Arab, for instance, calling that distance a mile, at which a man is no longer distinguishable from a woman growing out of their habits.

300. The first thing then to be done by an officer, in acquiring the *coup d'œil militaire*, is to learn, both from books and on the field, what space is taken up by a battalion and its intervals, by a squadron, and by a battery when in order of battle; how much when in column of march; and the average time required for certain movements, under given circumstances of the ground. This acquirement he may make by adopting some standard of his own; his ordinary pace, and that of a horse, serving for computing time and distance reciprocally. The next step is to acquire the habit of estimating, by the appearance of these different objects, from various points of view, how far off they are. This must be done practically. A very simple aid to it is the following;—Upon the stem of a lead-pencil, cut square, and held out at a uniform arm's length from the eye, and by means of a thread attached to it and fastened to the top button-hole, let the officer mark off, on one of the edges, the length seen on it by holding the pencil upright between the eye, and a man placed successively at different distances from it, as 100, 150—1000 yards. This will give one rough standard for practice. Another may be made by first ascertaining the average height of certain cultivated trees, as the apple, &c.

301. For getting relative positions, a contrivance for measuring angles roughly must be used. This is done by first folding a leaf of paper across, and then doubling it along the folded edge, as if to divide it into four equal parts. The angle between the edge of the first fold and that of the second will be a tolerably accurate right angle. Now by cutting off carefully along the fold, one of the pieces, we obtain a quadrant or 90° ; then folding this at the angle, so that the two edges will exactly coincide, we get the half of a quadrant or 45° ; and so on, by successive bisections, we can mark off smaller angles. Then making a pen or pencil-mark along each of the folds, and numbering the angles successively from 0° to 90° , we have a rough *protractor*, that can be used both for measuring angles and setting them off on a sketch. To measure vertical angles, a thread with a light plummet, must be attached to the angular point. If the object is above the horizon of the eye, we hold the protractor *with the angular point from the eye*, so that the plumb-line will fall along the face of the paper just touching it; then directing the top edge of the protractor on the object, so that it is just seen by the eye sighting along the edge, and the angle formed between the plumb-line and the other edge, will be the same as the angle between the line of sight and the horizon of the eye.

If the object is below the horizon of the eye, the angular point *is placed towards the eye*; the same series of operations will give the angle below the eye's horizon.

302. Guides. Trustworthy guides are invaluable, but most rare, in an enemy's country. The best, from the information they acquire by their habits of life, are to be found among those classes whose avocations keep them much abroad, going from place to place within a certain sphere constantly; such as common carriers, hunters, smugglers, &c. Among the first thing to be attended to by an officer, in taking post at any point, is to find out persons of this class, and to ascertain their whereabouts when wanted. Kind treatment, *douceurs*, and promises, should not be spared, to enlist either their good will or their interests; and, if policy requires it, they may openly be treated with apparent harshness, to screen them from odium among their neighbors

303. If none of this class can be found, then resort must be had to a higher; local authorities being in preference selected, and if necessary forced to act. Here very careful treatment is requisite; when the necessity of the case is admitted by them, much may be gleaned by kindness, courtesy, and a certain deference, from such persons, that cannot be looked for from their inferiors.

304. Before starting on his mission, the officer should question his guide thoroughly; and if he has several, question each apart; like precautions should be taken with respect to other inhabitants. Care must be had to find out the usual beats of one taken as a guide, so as not to take him out of his own neighborhood. In all cases, the guide must be well watched, however trustworthy he may seem. If unwilling, or sulky, he must, if needs be, be tied, and attached to a strong man, with a rope round his middle; being first strictly searched for any cutting instrument about him.

305. Should there be but one guide, he must necessarily be placed with the most advanced portion of the detachment accompanying the officer. If there are several, one must be there also; the one apparently the most intelligent with the officer, who should ply him with questions; and the others in the rear strictly guarded.

306. It may be well to remark, that guides are useful even in a country of easy communications; as, in case of a *rencontre*, they may point out bye-ways convenient for retreat, if necessary.

307. Reconnaissance. To designate all the objects to be embraced in a reconnaissance, would lead farther than the limits of this little work will allow; some general heads, which will serve as guides in all cases, will therefore be alone noticed.

308. A general view of the ground to be examined must first be taken in, so as to obtain some notion of the forms of the parts, their connection, and relations to each other, before going into a detailed examination. To one possessed of some topographical knowledge, this study of what is before him will not demand much time. A level country, for example, he knows is usually well cultivated, and therefore has plenty of hedges, ditches, &c., which lend themselves well to affairs of light troops;—may be not a little inconvenient to manœuvres of artillery;—and frequently bring up cavalry very unexpectedly in full career. In a mountainous one, dangerous passes, narrow roads, torrents with rough beds, ugly sudden turns, &c., will necessarily be met with. Each and all of these demand a particular examination, and in his report their advantages and disadvantages should be clearly pointed out by the officer.

309. If the reconnaissance is for an onward movement; the distances from halt to halt, as well as all others, should be estimated in *hours of march*; the nature of the roads, and the obstacles along them be carefully detailed; the means that may be gathered along the line to

facilitate the movement, as vehicles, men and materials for removing obstacles, &c. The points where crossroads are found, must be specified; the direction of these roads; their uses, &c.

310. All local objects along the line, as villages, farm-houses, &c., should be carefully designated, both as to their position on the line, or on either side of it; and also as to their form, and color, &c., as "square white house on the right;" "round gray stone tower on hill to left."

311. The names of localities, in the way in which the inhabitants pronounce them, should be carefully written, and called over several times, so as to be sure to get them as nearly as practicable right in sound; then the names, as written by an intelligent inhabitant, should be added.

312. All halting points must be well looked to their military capabilities, in case of attack; as well as their resources for accommodating the troops, be thoroughly gone into.

If the halt is to take position for some time, to await or watch the enemy, then more care must be taken, the whole site be well studied as to its fulfill in the proposed end; the points of support on the flanks be designated, as well as others in front and rear, that may require to be occupied; the suitable localities to be chosen for parks, hospital, &c.; the communications to be opened or repaired, pointed out; and all the facilities either for an advance or a retrograde movement, be laid down.

313. *Armed Reconnaissance.* Reconnaissances, made in the neighborhood of an enemy, require to be done under the protection of a proper detachment; the strength and composition of which will depend on the object to be attained.

314. If the object be to gain secretly a knowledge of the enemy's whereabouts and strength, then a detachment of light cavalry, conducted by a trusty guide, through circuitous by-ways, and in with celerity, but with proper precautions against falling into an ambush, or having its retreat cut off, is usually resorted to. The details for this will be found under the head Patrols.

315. When an enemy's position is to be reconnoitred, with a view to force him to show his hand, by causing him to call out all his troops; then a large detachment of all arms, adequate to the task of pressing the enemy vigorously, and also of withdrawing with safety when pressed in turn, must be thrown forward

316. Under the shelter of either of these forces, the officer, charged with the reconnaissance, takes the best moment, and best point of view, for carefully ascertaining the dispositions made by the enemy. A good time will be at early dawn, when troops, in most services are all made to stand to their arms. The points which the officer must exhibit most attention in finding out, are those occupied by the batteries, and all those in any way intrenched.

317. *Patrols.* Patrols are of two classes, from the different objects had in view. The first are those made with a view of insuring greater security from the enemy's attempts to pass, or force the line of out-posts, and may therefore be termed *defensive patrols*. They consist usually of three or four men, who go the rounds, along the chain of sentinels and between the posts; seldom venturing farther than a few hundred paces beyond the sentinel's chain; the object being to search points which might present a cover to the enemy's scouts, and to keep the sentinels on the alert.

318. The second class are those made exterior to the line of out-posts, with a view of gaining intelligence of the enemy's whereabouts; and may therefore be termed *offensive patrols*. They are composed of larger bodies of men than the first class, the number being proportioned both to the distance to be gone over, and the extent of front to be examined. In a position, presenting but few cross-roads, and sparsely settled, a patrol of ten or twenty horsemen, may be found ample, to search, with all desirable thoroughness, from twenty to forty miles in advance of

the position, along the principal avenues to it; whereas, with a more extended front, presenting many lateral avenues, double this number might be required for the same duty. From the information obtained, through the ordinary channels of maps, and by questioning the inhabitants at hand, the commanding officer can usually settle, with sufficient accuracy, the strength of a patrol.

319. From the duties to be performed by patrols, cavalry are usually employed alone; in cases of very broken country infantry may be necessary but they should always be accompanied by some horse, if for no other purpose than to transmit intelligence promptly to the rear.

320. The main duties of a patrol are to find the enemy if in the neighborhood; gain a good idea of his position and strength; to make out his movements, and to bring in an accurate account of his distance from the out-posts of their own force; and the character of the ground between the position occupied by the respective forces.

321. From the nature of these duties, it is evident that both officers and men, for a patrol, should be selected with especial reference to their activity, intelligence, and the aptitude they may possess, from previous habits of life, for a service requiring a union of courage, prudence, and discriminating observation—usually to be met with only in individuals who have been thrown very much upon their own resources. When the character of the country admits of it, the employment of such individuals, singly, or in very small bodies, as scouts, is one of the most available means of gaining intelligence of an enemy, without betraying the secret of our own whereabouts.

322. *Duties of Officer in Command of a Patrol.* In conducting a patrol, the commanding-officer should provide himself with a good map, telescope, and guides; and gain all the information he can before starting, by questioning persons in the neighborhood. Nothing should escape his eye along his line of search; and he should particularly note points which might be favorable to his defence, if driven back by enemy; or by which his retreat might be endangered.

323. The order of march of the patrol will be regulated by the circumstances of its strength, kind of troops employed, the character of the country passed over, the hour of the day, and the particular object in view. The intelligence and judgment of the officer in command will have sufficient exercise on these points; as he will be continually called upon to vary his dispositions. The general and obvious rule of keeping a look-out on all sides, will prompt the general disposition of an advanced-guard, rear-guard, and flankers, according to the circumstances of the case, however small his command. The sole object being to carry back intelligence of the enemy, no precautions should be omitted to cover and secure his line of march, without making however, too great a subdivision of his force.

324. Too much circumspection cannot be shown in approaching points favorable to ambuscades; as woods, ravines, defiles, inclosures, farm-houses, villages, &c. The main-body should always be halted, in a good position beyond musket-shot, or where cover can be obtained, whilst a few men proceed cautiously forward, following at some distance in the rear of, but never losing sight of each other, to examine the suspected spot. If the officer deem it necessary, at any point, to detach from his command smaller patrols, to examine points at some distance on his flanks, he should halt the rest, at the point where they separate, until the detachments come in and report; or, if he decides to move forward, he should leave three or four men at the spot, to convey intelligence promptly to the rear, if anything is discovered, as well as to himself.

325. It may frequently be found that some eminence on the flanks may present a good view of the surrounding country, in which case, if it be decided to use it, two or three men ought

to be detached for the purpose, with orders to keep in sight of each other, but far enough apart to guard against a surprise of the whole.

326. When the officer finds himself in the presence of the enemy, he should halt his command at a convenient spot, where they will be screened from the enemy's view; and, having made his dispositions against a surprise, he will proceed with a few picked men to the most favorable point from which he can obtain a good look-out, to reconnoitre the position occupied, and the other points of interest. If he deem it advisable to keep his position, or change it for some other point more favorable, he will first transmit a report to the rear of what he has observed.

327. When the patrol moves by night, the ordinary precautions must be redoubled. Signals must be agreed upon to avoid danger, should any of the party become separated from the main-body. Careful attention must be given to everything passing around; as the barking of dogs, noises, fires, &c. On approaching any inhabited spot, the command should be brought to a halt, whilst a few picked men move noiselessly forward, and if practicable, by stealing up to the windows, learn the character the inmates.

328. It cannot be too strongly impressed upon the mind of the officer in command of a patrol, that he must be all ears and eyes; that he will be called upon in turn, to exercise great boldness, caution, presence of mind and good judgment, in accomplishing a mission where the enemy must be seen but not encountered; and such roads and halting points be selected, both in moving forward and returning, as shall be most favorable to his movements, and least liable to expose him to a surprise, or a disadvantageous collision with the enemy.

CHAPTER VI.

DETACHMENTS.

329. DETACHMENTS consist of small bodies of troops, composed of one, or several arms, to which are entrusted some mission connected with the operations of the main-body, but, for the most part performed beyond the sphere of its support; such, for example, as the occupation of some post, or defile, which is to be held temporarily, as necessary to the movements of the main-body; the surprise of a post held by the enemy; the seizure of a convoy, &c.

330. The composition of a detachment will depend upon the nature of the duty to be performed; the character of the country in which it is to operate; the distance of the point to be reached; and the more or less celerity required in the operation. As a general rule, detachments should be formed only of light troops, well acquainted with their duties; and, in every case where it can be done, they should consist of a proper proportion of each arm of the service, if the duty upon which they are sent is at all of an important character. By this combination each arm is enabled to act with more boldness and vigor, from the support with which it will meet in the others; and can better select its moment for action, according to the character of the ground on which it finds itself.

331. The combats of detachments will be mostly restricted to firing, and the skillful employment of skirmishers. The troops must be kept perfectly in hand for mutual support, the artillery keeping near the infantry, and the cavalry, whenever the opportunity is presented, hazarding only short but vigorous charges against the enemy.

332. The officer placed in command of a detachment, should be thoroughly conversant with the handling of troops; so as to insure constant reciprocity of support; and to be able to seize upon those opportunities of bringing the proper arm into action, and for passing from the defensive to the offensive, which combats between small bodies of troops so frequently present.

333. *March of Detachments.* As a detachment must rely mainly on its own resources, the *personnel* and *matériel* of the troops should be rigidly inspected before marching; to see that the men and horses are in a sound state; that nothing is wanting in their equipments; that the gun and other carriages are in good traveling order; and that the necessary amount of ammunition, provisions, and forage have been provided for the expedition.

334. Every source of information should be consulted with respect to the nature of the roads, and the country over which the column is to march; and good maps, telescopes, and guides should be provided. If a reconnaissance of the line of march has been directed, it should be placed in charge of a well informed staff, or other officer, conversant with the duties required of him; so that the commander of the detachment may be accurately informed of the state of the roads, as to their practicability for men, horses, and carriages; particularly the number of hours of march from station to station; and the character of the obstacles with which he may be liable to meet, from the state of the bridges, the nature of the water-courses, and the defiles along the route.

335. In order to avoid being anticipated in our object by the enemy, every attention should be paid to preserve strict order among the troops, and to advance with celerity; so that secrecy maybe kept until the detachment reaches its destination. The troops, for this purpose, should be kept as closely together as the character of the ground will permit; and when the guides are employed, they must be strictly watched, and not dismissed until the march is completed.

336. The distribution of troops, or the *order of march*, will mainly depend upon the character of the country; the general rule to be followed is so to place each arm in the column, that the troops may be formed for action by the most prompt and simple movements. In a very open country, the greater part of the cavalry will be at the head of the column; where it is somewhat broken, half of the cavalry may be in front, and the remainder in the rear; and in a very difficult country the infantry will lead. The artillery may be placed in the intervals of the column where the country is not difficult; in the contrary case it will be in the rear, but covered by a small detachment which it precedes.

337. The column must be secured from a sudden attack of the enemy by an advanced-guard, flankers, and a rear-guard. The advanced-guard will be composed of cavalry or infantry, or of the two combined, according to the character of the country. In some cases it may be well to have two or three light pieces with the advanced-guard. The strength of the advanced-guard, for detachments not over two thousand men, need not be greater than one-fifth of the whole; for larger bodies it may be between a fourth and a third, according to the degree of resistance it may be required to offer.

338. The advanced-guard of a detachment should seldom leave a wider interval than about a thousand paces between it and the main-body. In a broken country, when this force consists of infantry alone, the distance should be less, to avoid an ambush. The main-body of the advanced-guard should always be proceeded by a few hundred paces by a strong patrol of cavalry or infantry, to search the ground and secure the advanced-guard from falling into an ambush, or from a sudden attack.

339. The flankers will consist mainly of a few detachments, which march parallel to the column and a few hundred paces from it, according to the character of the ground; these will throw out a few men, from a hundred to a hundred and fifty paces, on their exposed flank, to keep a vigilant look-out, in that direction, for the enemy. Occasional patrols may also be sent out on the flanks, when it is deemed necessary to push an examination to some distant point, or to gain a height offering a commanding view of the country. As the object of the flankers is rather to give timely notice to the main-body of an enemy's approach, than to offer any serious resistance, the detachments of which they are composed need only consist of a few men.

340. The rear-guard, except in a very broken or mountainous country, which would offer facilities to the enemy for slipping to the rear, need only be a small detachment, placed more to prevent stragglers from falling to the rear than for any other object.

341. Night marches should not be made, except in case of necessity. When their object is to surprise an enemy, if there be an advanced-guard, it should be kept near the head of the column. Patrols should be sent forward, with orders to advance with great caution, and not push on too far. Flying patrols may, if requisite, be kept up on the flanks. The most exact order and silence should be maintained, and extreme vigilance be exercised to avoid placing the enemy on the alert.

342. The following remarks, on the subject of marches, are taken from a little work, "*On the Duties of Troops composing the Advanced Corps of an Army*," by Lieut.-Col. Leach, of the British Army; a work which, for its sound practical views, made in the vein of a judicious, well-informed soldier, who has seen service, commends itself to the *juniors* of the profession generally.

"At the time the following orders were first issued for the march of the light-division, in the summer of 1809, on its route from Lisbon to Talavera, the troops moved off by whole or half sections, according to the width or the road; but, at a later period, a general order appeared, which directed that the infantry should march by threes.

"The division having formed in rear of the leading battalion, at whole, half, or quarter distance, or in close column, and the baggage being assembled in rear of it, the march was commenced with precisely the same regularity as would be observed by a regiment or regiments moving in or out of a garrison town; the bands playing, the light-infantry with arms sloped, and those of the riflemen slung over the shoulder, the officers with swords drawn, and exact wheeling distances of the sections preserved, and perfect silence observed.

"After having proceeded a short distance in this manner, the word of command, 'March at ease,' was given by the general at the head of the leading battalion, and this was passed quickly on to the rear from company to company. The captains, instead of continuing at the head of their companies, dropped back to the rear of them: the reasons for allotting this station to them was, that they might see any men of their respective companies who attempted to leave the ranks without leave. The officers and non-commissioned officers preserved the wheeling distances. The soldiers now carried their arms in any manner most convenient. Some slung them over their shoulders, (most of them, indeed, preferred this mode as the least fatiguing,) others sloped them, and many trailed them, and they constantly changed from the right hand or right shoulder to the left. Whilst some lighted their short black pipes, others sung or amused their comrades with stories and jests, as is usual on those occasions. Although allowed to prosecute the march in this easy and unrestrained manner, a heavy penalty, nevertheless, awaited the man who quitted the ranks without permission from the captain or officer commanding his company. The captains were always provided with tickets bearing their own signature, on each of which was written,

‘The bearer has my permission to fall out of the ranks, being unable to proceed with the regiment.’ Any soldier found on the line of march by the rear-guard, without a ticket, was liable to be punished for disobedience of orders; and, as no difficulty was ever experienced by men who were sick, or knocked up, in procuring this certificate of inability to keep up with their regiments, such offenders certainly merited punishment.

“If a soldier wanted to fall out of the ranks for a few minutes only, he was required to ask leave of the captain to do so, and, moreover, to take off his knapsack, and to give it, together with his musket, in charge of the men of his own section, to be carried by them until he rejoined them. This was an admirable order, and it operated in two ways; first, the soldier was enabled, not being encumbered with either knapsack or musket, more speedily to overtake the column on its march; and secondly, if he loitered unnecessarily on the way to rejoin his comrades, who were doubly burdened with his arms and pack, he would be certain to incur their displeasure.

“About once in every hour and a quarter or half, a halt was ordered, and ten or twelve minutes allowed for the men to rest. When practicable, this was done on ground near which there was water; but it is almost unnecessary to add, that very frequently it was not possible to find such favorable spots.

“Preparatory to those temporary halts, the word of command, ‘Attention!’ was given at the head of the leading regiment, and passed on rapidly (as already stated) from company to company. Upon this, the captains moved quickly from the rear of their companies to the front; the arms of the soldiers were regularly shouldered or slung; perfect silence was observed; the pipes were instantaneously put out of sight, either in the haversacks or elsewhere; the dressing and the wheeling distances of the sections were correctly kept; and in an instant there was a magical change from apparent irregularity to most perfect discipline and order.

“On resuming the march after those halts, the troops observed the same extreme regularity during the first hundred or two of yards, as I have already described. The words ‘March at ease’ being again given, they returned to the song, the story, and the tobacco-pipe.

“On approaching rivulets or shallow pieces of water, which it was necessary should be passed, neither officers nor soldiers were allowed to pick their way through, nor was the smallest break or irregularity permitted to exist in the ranks; but the column marched through by half sections, sections, or subdivisions, (according to the width of the ford,) preserving the same order as if moving alone a road.

“That this regulation was, on some occasions, too rigidly enforced, I have never heard disputed; still, the object at which it aimed, viz. that of expending as little time as possible on each day’s march, so as to give the soldiers time to take their rest, to construct huts in the bivouac, to wash their linen, to mend their clothes or shoes, to draw their rations, and to cook their meals, that they might be fresh for whatever fatigues happened to be in store for them, was indisputably a most desirable one.

“Those who have campaigned know, that in advancing to attack an enemy, or in retiring before one, the passage of rivers in the line of march, even if so deep as to reach their middles, and under the fire of an enemy also, are expected to be crossed by the troops without a greater derangement taking place in their order of march than the obstacles which they are in the act of encountering, must necessarily produce in a greater or less degree.

“With a detachment consisting of a few hundred men, at a distance from an enemy, and with ample time before them to get over their day’s march, it would appear that this order might well be dispensed with; but with a division of four or five thousand men, the case is widely different.

“Let it be supposed that it has arrived at a stream which admits of being passed by sections, subdivisions, or even by companies; and that, instead of proceeding straight through it in this manner, every soldier is permitted to pick his way across in any manner he may think proper, and to break off from his place in the ranks,—what a vast loss of time would this occasion! When would the rear of the column have effected its passage? Surely the patience of those belonging to the front, centre, and rear of this body of four thousand soldiers, would be pretty well exhausted long before the opposite bank was gained by the whole, and the march resumed

“In the rugged and mountainous districts which the army so frequently traversed in the Peninsula, it encountered various defiles and other obstacles, which precluded the possibility of their being passed except by a very small number of men at a time; and the following mode was therefore adopted by each company in making its way along. The first company of the leading battalion, as soon as it had disentangled itself from the defile, or broken ground, was directed to march forward, perhaps about a quarter of a mile; there to pile arms, and the men to rest. The head of the next company, when it had cleared the defile, halted about thirty or forty yards on the other side, until all the men belonging to it came up in succession. This done, the captain moved it forward independently until it joined the leading company, where it piled arms. Thus, each company, as soon as it had cleared the obstacle, was brought up en masse, and at a regular pace, without reference to those in its rear. By those means that most unmilitary exhibition of file after file running on, like a string of wild geese, to catch those in their front, was entirely avoided.

“Few things tend so effectually to fatigue and irritate soldiers who are already jaded, as that of trotting on, bending under the weight of pack, belts, and musket, to overtake those who continue to march on in their front.

343. “When the division was about to perform a march not in the immediate vicinity of an enemy, the following arrangements were made either for bivouacking or quartering it, (as the case might be,) so that no time should be lost after it had reached its destination.

“A staff-officer, accompanied by the quartermasters of the division, or (if other duties at that moment were required to be performed by the quartermasters) by a subaltern of each regiment, preceded the troops on horseback, so as to arrive long before them at the ground on which they were to halt for the day, or at the town or village in which it was intended they should be quartered.

“A whole street, or part of one, (as circumstances admitted,) was allotted by the staff-officer to the quartermasters for each of their regiments, who immediately divided the street into equal portions for the different companies, reserving a house or two for the staff of the regiment.

“A sergeant of every company of the division being sent forward so as to arrive long before the troops, and being told by his quartermaster how many and what buildings were set apart for his own people, again subdivided the houses into four equal parts for each of the sections.

“In the event of any noise or disturbance taking place, whether by day or by night, the probabilities were, that the officers belonging to the companies where such irregularities were going on, would certainly hear it, and as instantaneously put an end to it.

“If, then, the division marched into a town, each company was by its sergeant conducted to the houses allotted to it; in which they were established in a very few minutes. It rarely happened, therefore, that the soldiers were kept waiting in the streets for any length of time, as has too often been the case.

“Should it, on the other hand, have been intended to bivouac the division, instead of putting it into houses, arrangements of a singular nature were adopted, by sending forward officers and sergeants to take up the ground; by which means each company marched at once up to its own sergeant, on whom they formed in open column.

“The rolls were immediately called; the men first for duty were warned for guards, (also inlying and outlying pickets, if near the enemy,) for fatigue duties, to draw the rations, to procure wood for cooking if none was near at hand, to go for water if no river flowed near the encampment, &c. &c.

“This done, and the alarm-post, or place of general assembly, having been pointed out to every one, the men were dismissed; the arms piled, the cooking immediately commenced, and all further parades were dispensed with for the day, except a roll-call about sunset.

“Parties to procure forage, whether green or dry, were sent out in charge of an officer as soon as the troops were dismissed.

344. “Amongst the various regulations laid down for the light-division, I must not omit to mention what were termed mule-guards.

“A corporal and three privates of every company, mounted guard at nightfall, whenever the division was encamped. The particular duty expected from the sentinels of these company guards, was to keep an eye to the baggage animals belonging to their officers, (which were picketed to the trees or fastened in some other manner,) and to prevent them from breaking loose.

“After the establishment of those little guards, but few instances occurred of whole troops of noisy mules, horses, and asses, chasing each other round and through the camp or bivouac, and galloping over the faces and bodies of the soldiers whilst they were asleep.

“Independent of their utility in this way, every company in the division, having its own sentinel, was sure to be instantly apprized of any alarm during the night from the pickets in front; and they were enabled, also, to communicate to their respective companies, without the least delay, any orders arriving at the camp.

“Those only who have witnessed it can thoroughly understand with what uncommon facility a dispatch the division could suddenly get under arms, form in column of march, load the baggage, and proceed on the route chalked out for it.”

345. *Defensive Measures of Detachments.* In the combats of detachments, whether offensive or defensive, as the employment of skirmishers is the principal means resorted to, and the troops, but in rare cases, act in mass against the enemy, positions should be chosen which will be favorable for this kind of combat. It but seldom happens, in selecting a position for the defensive, that strong points can be found to secure the wings from an attack; but no position should be taken up which does not present covers for the infantry; good points for the action of the artillery, where it will be but little exposed; as well as shelters where the cavalry may be kept at hand, ready for any emergency, and unexposed to the fire of the enemy’s artillery.

346. The natural features of the position will necessarily determine the dispositions for the defence. It must, however, be borne in mind that, as it is essential to keep the troops well in hand for mutual support, they must not be too much dispersed; and that a position which requires this cannot be vigorously defended. The artillery should be kept within a hundred paces of the main-body of the infantry; and the cavalry at about two hundred paces. Offensive movements will be mostly left to the cavalry, which should be held in reserve as long as possible, in order that it may act with the more effect upon the enemy when he is weakened. The infantry should only resort to the bayonet under very favorable circumstances; as, when acting in mass, it will be more exposed to the enemy’s fire, and be more in danger of being surrounded.

347. Defiles in the rear of a position do not present the same dangers to small as they do to large bodies of troops, and may indeed be very favorable to the defence in a retreat; but a position should not be taken up too far in advance of a defile, as it might give the enemy an opportunity of cutting off the retreat of the detachment. Whenever this danger is to be apprehended, it must be guarded against by flankers; whose duty it will be to give timely warning to the main-body of any movement of the enemy to gain their rear.

348. If the detachment is forced to retreat, the greatest attention must be given to keep the troops well together, and to inspire them with confidence in their mutual support. Every advantage should be taken of the strong features of the ground for checking the enemy, by occupying it with skirmishers. A portion of the cavalry should be always at hand, to act offensively when occasion offers. The artillery will retire by half batteries, or sections, for the purpose of taking up successive positions to secure the retreat of the main-body. When ever a defile is met on the line of retreat, the entrance to it should be timely secured, by occupying every strong point near it, to cover the retreating column. If the defile is of a character that admits of interior defence, some men should be sent in advance to raise, at suitable points, barriers, or any other obstacles that will serve as shelters from which the enemy can be held in check.

349. Defence of Defiles. The term defile is applied to any narrow passage through which troops can only pass in column, or by a flank; such, for example, as roads confined between mountains, causeways through marshes, a bridge, &c.

350. Defiles are occupied either to secure them for our own purposes, or to prevent an enemy from passing them. In either case, the position taken up by the troops, whether in advance of, or in the rear of the defile, to hold it, will depend upon its length and the features of the ground at its outlets. If the ground in advance is open to the enemy's fire, the entrance to the defile cannot be defended with any chance of success. In like manner, if the ground in the rear is of the same character, and within range of the enemy's fire, it will not be practicable to prevent the enemy from *débouching* if in sufficient force.

351. When the defile is to be secured for our own use, the ground in advance must be occupied, by taking advantage of all the natural features favorable to the defence. The flanks of the position should, if practicable, rest upon points that the enemy will not be able to turn. The entrance will be guarded by a strong detachment; and if there are points within the defile which would be favorable for checking the enemy, in case of retreat, they should be prepared for defence, by using such means as may be found at hand for strengthening them.

352. If it be deemed advisable to take position in rear of the defile rather than in front, the entrance to it should be occupied by a small detachment, for the purpose of observing the enemy; and if there are points on the flanks of the defile which, if in possession of the enemy, would render him master of it, they must be strongly guarded.

353. The detachment for the defence of a defile will be composed of one or several arms, according to the character of the ground. Each arm will be posted on the points most favorable to its action, and for mutual support. If the position taken up be in rear of the defile, the artillery should be placed at three or four hundred paces in the rear, so as to command by its fire the interior and outlet. The cavalry should be at some two hundred paces back, ready to charge the enemy in flank as he *débouches*. The skirmishers should seize upon every point near the outlet from which the enemy can be reached, both within the defile and as he *débouches* from it; whilst the main-body of the infantry will be posted on the right and left of the outlet, in the best positions for throwing in a heavy, and then driving back the enemy with the bayonet.

354. When a position taken in advance of a defile is likely to be forced, the retreat should be commenced by sending all the artillery except two to the rear, to take a position to secure the outlet. A portion of the cavalry will next retire, the rest remaining with the rear-guard, to check by its charges, the enemy, should he press on with vigor to seize the entrance. The main-body of the infantry will next retire by the usual movements, either from the centre or the wings, as the case may require. The rear-guard having secured the entrance until the main-body is far enough to the rear to be out of danger, will retire; the cavalry, or the infantry leading, as the defile may present features most favorable to the action of the one or the other arm. As the troops successively clear the outlet, they will take position to receive the enemy should he attempt to force a passage.

355. In mountainous passes, where the flanks of the defile can be attained by the heights falling into the hands of the enemy's skirmishers, these points must be occupied by detachments, as well as all paths, or roads leading to the flanks, or to the rear of the defile. The reserves of the detachments should occupy in preference points where crossroads meet. The communications between the detachments and the main-body must be well preserved; and if the detachments are driven in, they must fall back on their supports, and occupy other points on the flanks previously designated. A retreat, under such circumstances, will demand the greatest circumspection, and great unity of action. To secure the retreat of the rear-guard, the lateral issues should be well guarded by detachments.

356. Bridges and dikes are defended in the same manner as other defiles. A bridge in an open country, particularly one over a small water-course, is not susceptible of a good defence, and the best thing to be done, to render the passage useless to the enemy, is to destroy it. If the country on the side towards the enemy is open, whilst on the opposite side it is broken so as to present good covers for the troops, a position may be taken up behind the bridge, and the defence be conducted in the usual manner. If, on the enemy's side, the ground is broken, whilst the other side is open, a defence can only be attempted at great risk; as, in case of being forced to retreat, the movement must be made under strong disadvantages, arising from the exposed position of the flanks of the retreating force, whilst on the bridge, to fire, as well as that of the position which must be taken up on the opposite side, if an attempt is made to arrest the enemy at the outlet of the bridge. When both ends of the bridge are favorable to defence, the side towards the enemy may be occupied by a detachment whilst the main-body takes position on the opposite side.

357. Fords can only be defended with safety by taking up a position behind them when the ground presents good covers, near enough to the point of crossing to bring a strong fire on the enemy whilst passing. Fords are usually the more difficult of defence, as several are frequently found in the same vicinity. The best plan to be resorted to generally, is to endeavor to obstruct them by any means at hand.

358. *Villages, &c.* Villages which are accessible on all sides should not be occupied by a detachment which is obliged to rely only on its own resources; but when they are so situated that they can be approached by the enemy only in front, having their flanks covered by natural obstacles, and the ground in their rear being favorable to a movement of retreat, they may be defended with success, provided they are not commanded by the ground in advance, within the range of fire-arms, and that the approaches to them can be swept by the fire of the defence.

359. On occupying a village, the commanding officer should immediately make himself acquainted with the environs to at least within the range of fire-arms; and lose no time in erecting

such obstacles, as barricades across the streets, abatis, &c., as the means at his disposal will permit.

360. The defence will mainly fall upon the infantry, which should be divided into three parties for this object; the one will occupy all favorable points where cover can be obtained on the outskirts of the village, such as ditches, inclosures, &c.; another, divided into a suitable number of detachments, will be posted, under cover, on the most accessible avenues to the position occupied by the first, of which they will form the supports; the third will form one or more reserves, according to the extent of ground taken up, and will be posted at some central point most convenient to act, according as circumstances may demand.

361. The artillery will be placed at those points where it can best sweep the ground over which the enemy must approach to attack the weak points of the position. It should be covered by an epaulment, and be masked until it is necessary to open its fire.

362. Cavalry can aid but little in the interior defence of a village; if it form a part of the detachment, it may take post so as to secure the flanks of the village, if they are not well covered; otherwise a position should be taken by it in rear, to be ready to cover the retreat, if the other troops should be driven out by the enemy.

363. In the defence of a village, the detachment, unless it should find itself decidedly superior to the enemy, will rely mainly upon the effects of its fire. Sorties may be attempted, if the enemy commits any blunder; such as exposing himself to a flank attack, or not supporting well his advanced line. When a sortie is decided upon, the point from which it is made should be strongly occupied, to cover the party sallying out in case of a repulse. The party for the sortie should attack with vigor, but with due precautions against being cut off; and if they succeed in driving back the enemy, they must not engage in a headlong pursuit, but fall back under cover of the party holding the point from which they sallied.

364. If the troops occupying the exterior line are in danger of being turned by a flank attack, they must retire upon the village, and take up positions previously designated for this contingency. To insure good order and steadiness in this movement, the supports should hold the enemy in check by a sortie on his flank.

365. When it is found that the village must be evacuated, the supports will act with the line of skirmishers, to delay the progress of the enemy, by disputing every favorable point, in order that the reserves may have time to retire and take up a position in the rear, to secure the retreat of the troops still engaged.

In the retreat, the troops falling back on their supports, or reserves, should be careful not to place themselves so as to obstruct either their movements, or their fire upon the enemy.

366. *Inclosures and Houses.* In the defence of posts, it frequently becomes necessary to occupy isolated houses and strong farm-yard inclosures, to prevent the approach of the enemy on some point. In such cases the doors and windows, through which an enemy might force his way in, must be strongly barricaded, those from which a good fire can be brought to bear upon the enemy, should be arranged to give the men secure shelter whilst firing; loop-holes must also be made through the walls to give more fire. If circumstances require that the house be held until the last extremity, the arrangements in the interior must be made to defend it story by story, until the object to be attained is accomplished.

367. The distribution of the troops will depend on the character of the inclosure. When it is spacious and open, the usual distribution of a line of troops around the walls, with supports and a reserve, will be made. In a house, the troops will be divided into several parties, each under the command of a subaltern, or non-commissioned officer, who will direct the defence of

their respective stories. When there are men enough, two should be placed at each loop-hole, and a small reserve be kept in the most sheltered spot at hand. The main reserve will occupy the point most convenient to fall upon the enemy should he force his way in. The men at the loop-holes should be cautioned not to throw away their fire, and at suitable intervals they should be relieved by men from the reserve.

368. It is but seldom that artillery can be used in these cases. Some pieces may be posted with advantage in inclosures. Cavalry can be of no service, except it can act in ambush from some point where it may fall on the enemy's flank.

369. *General Measures for the Attack.* The dispositions made for the attack by the commanding officer of a detachment, will necessarily be based upon the defensive measures of the enemy. Therefore, in the first place, a correct knowledge should be gained of the position taken up by the enemy, and the manner in which his troops are distributed for its defence. The points to which attention will be directed in these respects, are *first*, the natural features of the position as adapted to a good defence; and *second*, the distribution of the troops.

370. On the first point, the character of the ground in front of the enemy's position, as to its capabilities for the effective action of infantry, cavalry, and artillery, must be carefully examined; the flanks of the position, as to the practicability of turning them; finally, its rear, as offering a secure retreat to the enemy.

371. On the second point, we must endeavor to ascertain whether the enemy, in posting his troops, has taken advantage of the features of ground in his front, by placing each arm on those points most favorable to its action; whether the extent of ground taken up by the enemy is susceptible of a strong defence by the troops which occupy it; whether the different arms are so posted as to give a mutual support; whether the enemy has neglected to give proper supports and reserves, or to place them within suitable distances; whether he has crowded too many troops upon one point, or has posted too few on another; whether the points occupied by any portion of the troops, particularly by the artillery, or cavalry, are exposed to an enfilading fire of our own artillery; whether his flanks are assailable; whether there are defiles to his rear which he has omitted to occupy; finally, whether he has neglected to guard avenues by which either his flanks or rear may be reached.

372. If the enemy's troops are well posted in front, occupying all the advantageous points presented by the ground, and well supported, we must look to see what can be done by operating on his flanks, or by turning his rear, whilst a feigned attack is made on his front. If the extent of his position is too great, and his troops too much dispersed, his flanks may be menaced whilst a serious attack is made on his front.

373. Attacks on the flanks by a portion of the troops are very favorable against an enemy not prompt at manœuvring; but, when made against a skilful active enemy, we expose ourselves to the same attack that we attempt against him, besides weakening our front.

374. In moving forward to the attack, the troops should be kept well in hand for mutual support. The artillery and cavalry should avail themselves of all covers presented by the ground, to avoid exposure to the enemy's artillery. The artillery could reserve its fire until it can open with a decided effect to clear the way for the action of the main-body; leaving to the skirmishers to push forward, and by their fire drive the enemy from his covers. If, however, there are points from which the enemy cannot be well dislodged without the aid of artillery, it should be brought early into action, to avoid the blood-shed of unavailing attacks of the infantry. In no case should the artillery be isolated, but always covered by a strong escort; otherwise it might at any moment fall into the enemy's hands.

375. In attacks of the character in question, where the skirmishers play so important a part, they will be required to resort frequently to the bayonet, to dislodge the enemy fully from his covers whenever an opportunity offers, some cavalry should be at hand to take advantage of the retreat of the enemy when driven from such points.

376. The cavalry in its charges, however dashing made, should use due circumspection, and not venture too far in a headlong pursuit, for fear of being brought up suddenly by the enemy, advantageously posted to profit by such faults.

377. The infantry will only act in mass and with the bayonet when the enemy has been well wearied by the fire of its skirmisher's and artillery; if, when driven from his position, the enemy can be forced upon a defile, a few rounds of grape followed up by the bayonet can seldom fail of completing his destruction.

378. *Attack of Defiles.* The length of a defile, and the circumstance of its being prepared by barricades within it, to protract the defence, are points of grave importance in planning an attack. When the length is so great that the outlet is beyond the range of our cannon, the troops will not be able to pass it, except under the most favorable circumstances, as the enemy can make the best dispositions at a short distance from the outlet, to crush the troops which first attempt to *débouche*. If the defile is barricaded, the barricades should not be attacked in front, except for very grave reasons, as, if skillfully defended, they can only be carried at great cost of life.

379. In attacking the entrance of a defile, the troops should approach along the most convenient and best sheltered avenues, and deploy when a little beyond musket range. The skirmishers and the artillery should profit by the ground, in taking positions favorable both for shelter, and to reach with their fire the enemy's troops. Skirmishers should be directed to close in, particularly on the obstacles by which the flanks of the enemy's position are strengthened, and endeavor to dislodge his troops from them. The main-body, held in reserve to carry the entrance with the bayonet, so soon as it is seen that a serious impression has been made by the fire, should be kept under cover, and as near at hand as the ground will permit. If the enemy gives way, the main-body should make a vigorous attack in mass with the bayonet; and, following up closely the retreating troops, endeavor to secure the outlet by *débouching* from it before the front is so far unmasked by the retreating troops as to enable those, in action for its defence, to act with freedom. As fast as the troops *débouche*, they must occupy the ground in front of the outlet strongly, leaving a sufficient force for the immediate defence of the outlet. The reserve should remain at the other extremity of the defile to act as circumstances may require. So soon as we find ourselves in secure possession of the defile, a part of the reserve, with all of the cavalry, should pass and take positions indicated on the opposite side. The greater part of the artillery follows, and takes position on the flanks to open its fire on the retiring enemy.

380. If the attack on the entrance to the defile is unsuccessful, the troops will retire behind their reserves, the latter covering this movement, and holding the enemy in check should he attempt a pursuit. If a renewed attack is ordered, the troops first in action will form a reserve for the fresh troops thrown forward.

381. When it is found impracticable to force the entrance by a direct attack, resort must be had to stratagem, by pushing forward a few troops to act on the enemy's flanks, and try to dislodge him from the obstacles by which they are covered. If this attempt is successful, the troops in action must be gradually reinforced to gain supports for the flanks of the column of attack in its advance movement. As the column penetrates the defile, ground must be gradually

gained by throwing forward fresh troops which dislodge the enemy, secure the issues in case of retreat, and hold the points of support of the flanks.

382. In the attack of defiles forming mountainous passes, the column of attack must be well covered on the flanks, by detachments which make a simultaneous attack on the enemy's posts on the heights, to prevent the one from affording support to the other. These detachments should be strong enough for the duty assigned, so that should any post offer a vigorous resistance, they may be enabled to renew their attacks with fresh troops.

383. Two-thirds of the detachments will act as skirmishers, the other third will be held in reserve. So soon as any post is carried, the reserves will occupy it. When the skirmishers move forward, a portion of the whole of the reserve will follow, as circumstances may demand. There should be no intermission in the attacks when once commenced, but the enemy be driven by alternate attacks of fire and the bayonet, from point to point, to enable the detachments gradually to gain the immediate borders of the defile, so as to reach the rear of the enemy's troops, and force them to retire. The main-body, in meantime, should occupy the enemy in front, to prevent him from sending succor to the posts that secure his rear and flanks.

384. *Attacks of Villages, &c.* As villages, when occupied with a view to defence, are usually prepared for it by the addition of artificial obstacles to those which the position naturally presents, an open attack upon them should, when practicable, be avoided, as it can only succeed, if the assailed perform their duty, at great loss of life to the assailant. In any case, whether made openly or otherwise, attacks of this kind ought not to be hazarded except with superior numbers, unless the enemy be very inferior in discipline.

385. In conducting the attack of a village, the troops should endeavor to approach their points of attack by avenues which will afford them cover from the enemy's fire until they arrive near them, and should particularly try to gain any commanding points from which a plunging fire may be brought to bear on the enemy's covered defences.

386. The most favorable points of attack are those which are salient; as they are naturally weak; those where there are no prepared defences, or where they are but slight; and the flanks and rear, when they are accessible, or are not well secured by troops so posted as to cover them.

387. The attack will mainly devolve upon the infantry. The artillery, by taking suitable positions either to enfilade any part of the enemy's line which lies exposed to its fire, to dismount the enemy's guns, or to throw shells from its howitzers into inclosures, will prepare the way for the infantry. The cavalry can only act as a reserve, to cover the infantry if repulsed, and to secure the flanks from an offensive movement against them.

388. The infantry will be divided into three parties for the attack; one, which will display as skirmishers, may be a sixth of the whole; another which will act as the supports of the first, may be about the one-half of the whole; and the remaining third will form the reserve. The party in advance, in dispersed order, will get over the ground as rapidly as possible, and endeavor to close with the enemy's skirmishers; relying almost exclusively on the bayonet. Their supports will follow in line, at from one hundred to one hundred and fifty paces in their rear; the reserves at about the same distance in rear of the supports, taking advantage of the ground to screen themselves from the enemy's fire. If the advanced party succeeds in its attack upon the interior defences, they will follow up the enemy closely, and give him no opportunity to halt and make a stand; the supports will advance and clear the streets with the bayonet. Should the enemy form across a wide street to stop the advance, the skirmishers will move forward in open order, taking advantage of any shelters to cover themselves, and by their fire force the enemy to deliver his, and the supports and reserve in mass will attack with the bayonet. So soon as an entrance is

secured, the skirmishers and supports will drive the enemy from the interior defences in their front, whilst the reserve will push forward to the central point, to attack his reserve if posted there, and to be in readiness, to support the advanced parties at any point where succor may be necessary.

389. Whenever they can be procured, a party of well-trained sappers should be sent forward with the advance, to clear any obstacles by which their progress might be impeded. If this description of troops is not to be obtained, a few active men, used to handling the axe and pick, should be detailed for this necessary duty.

390. In case of the repulse of the advance, they will fall back to the nearest cover from which they can open a fire on the enemy, and after being joined by their supports will renew the attack.

391. *Handling of Skirmishers.* Skirmishers play so important a part in all affairs of detachments, as well as in engagements of larger bodies, the circumstances being rare, either in the attack or defence, where they cannot be employed with considerable effect, either to harass or occupy the enemy, that a few words may be here especially given to the manner of handling them; even at the risk of repeating what has been already laid down.

392. The number of skirmishers employed will greatly depend on the features of the ground, as being more or less favorable to the action of cavalry, or of infantry in mass. In no case, however, should the main-body be unduly weakened by detaching too many skirmishers. A third of the entire force is the most that can be safely thrown forward for this duty; and, if it be found that they are unable to maintain their ground in the presence of the enemy, it will be safer to cause them to fall back and reinforce the main-body, by forming on the flanks, or any previously designated point, than to detach from the main-body for their support.

393. The manner of forming a line of skirmishers, and posting their supports and reserves, with the other ordinary manœuvres for extending, advancing, retiring, &c., belong to elementary tactics, and require no comment here. A few precepts, however, may be mentioned, as connected with this subject. The line of skirmishers should not be pushed so far in advance of the main-body that the latter will not be able to come to their aid in time if they should be vigorously pressed by the enemy; or be able to profit by any advantages obtained by them. The reserves to support the line should in all cases be near enough for this object and, as far as practicable, be posted where they can readily find cover from the enemy's fire; taking advantage, for this purpose, of any irregularities of ground or shelters, like walls, hedges, ditches, &c. The reserves may be of less strength in broken than in open ground; being, however, never less than a fourth in the former, nor a third in the latter case.

394. The position of skirmishers in advance of the main-body will depend on the natural features of the ground. As a general rule, they ought to cover both the front and flanks of the main-body, extending far enough beyond each flank for the latter purpose; and, in all manœuvres of the main-body in the face of the enemy, it should be protected by skirmishers until the new position is taken up.

395. It is seldom necessary to throw forward the skirmishers before the main-body is ready to commence the action. They should deploy and extend before coming within reach of the enemy's musketry; and, when the lines are near enough to engage, they should retire to the positions previously assigned them.

396. A quick eye, presence of mind, and good judgment in taking up ground are indispensable to an officer in command of skirmishers, to enable him to keep his troops easily in hand; preventing them from rushing on headlong in the pursuit, when any success is gained; and

directing them to seize upon every cover, either in advancing or retiring, from which they can with advantage annoy the enemy or hold him in check.

397. The accuracy of aim, upon which the good effects to be obtained by skirmishers depends, requires that the men should be kept cool and in good order. All hurried and violent movements, by which the men may lose breath and become exhausted, should be avoided; and they should be frequently cautioned against rapid firing, which soon impairs the aim, and be directed never to raise the piece until they feel sure of their shot.

398. In an advance movement of skirmishers, their line will necessarily have to conform to the features of the ground; when this is open, the alignment should, as far as practicable, be preserved; and when broken, the officers should see that mutual support is given throughout between the detached portions; and that those on the flanks be particularly cautioned not to suffer their attention to be so much taken up by the enemy in front as to neglect securing the flanks from any attempt upon them, either openly or by ambush.

399. Wherever an open portion of ground occurs, it should be gotten rapidly over, so that the men shall be exposed as little as may be; and, if there is any apprehension from the enemy's cavalry in such cases, the men should be kept well together, or even be rallied on the reserves, until the character of the ground will enable them to deploy with safety.

400. If the more advanced portions come upon the enemy in force, they should halt and occupy him in front; whilst a portion may try to turn him, or to annoy his flanks. In like manner, in a successful attack on the enemy's out-posts, the skirmishers should endeavor to maintain their ground when they come upon his main-body, by occupying its attention until their own main force can come up.

401. In the attack upon all covered positions held by the enemy, skirmishes play the most important part; and, although it may require the action of masses to dislodge the enemy under some circumstances, there are but few in which, by a judicious selection of ground, skirmishers may not greatly bother him. The broken features presented by wooded and rocky ravines, or the beds of small fordable streams, from the opposite side of which an enemy must be rooted out before ground can be gained forward, are ugly circumstances in an advance movement; and great skill and patience are requisite on the part of both officers and men to accomplish their object. Points which afford a good cover for a few men, or from which a commanding or a flanking view of the enemy's line can be obtained, should be sought for; and, where the men would be much exposed in gaining such points, from the open character of the intervening ground, they should be sent forward singly, with directions as to the best probable manner of attaining their object, and be particularly cautioned against exposing themselves in little knots of three or four together, as the chances of casualties will be thereby increased. If the crest of a hill intervenes in a pursuit, it should be gained with great caution, for fear of coming suddenly upon the enemy in force on the opposite side.

402. When the enemy occupies strong artificial obstacles, as palisades, an abatis, yards, of which the walls are loop-holed, &c., an attempt should be made to dislodge him by shells from howitzers; the troops for the assault may then be advanced as skirmishers, and when within about two hundred paces, should clear the intervening ground at full speed, in closing.

403. In attacks upon forests, the intervening open ground must be cleared in a similar style; and after the enemy has been dislodged from the skirts, the further advance should be cautiously made; attention being paid to preserving the general alignment; the men taking care to avoid leaving any considerable gaps between them, or of losing sight of each other. A vigilant eye should be kept upon securing the communications to the rear by the reserves, in case of

being forced to retire; and, before passing cross-roads, it should be well ascertained that they do not offer any facilities for an offensive movement of the enemy.

404. Whenever a defile is met with, which is not strongly guarded, some of the line of skirmishers may enter it boldly, relying on the bayonet, whilst others take up points from which they can enfilade it; but if the enemy makes a show of a vigorous resistance, the skirmishers should seize upon the best points on its flanks from which a warm steady fire can be kept up on it, and hold them until their reserves, or if necessary the main-body, can come up and force their way with the bayonet. When the defile is carried, the reserves follow the onward movement of the line of skirmishers, leaving it to be held, if it be thought necessary, by a detachment from the main-body.

405. Skirmishers necessarily play a very important part in mountainous warfare, as the broken character of the ground presents many points from which it may become exceedingly difficult to dislodge an enemy thoroughly conversant, from some days' occupancy, with all its resources. In such attacks, as the valley-passes will usually be occupied by the strength of the enemy, the skirmishers must try to gain successively the heights on the flanks of the main position; care being taken that no party gets too much in advance of the other. If the enemy retires, a portion of the skirmishers should follow closely upon his rear, whilst others occupy commanding points from which they can keep up a well-directed fire on him. If, in the pursuit, paths should be found leading to the flanks, or rear of the enemy's main-position, some detachments may be pushed forward in these directions, to bother the enemy, whilst the rest join in the main attack.

406. If a vigorous resistance is offered by the enemy, it will be necessary to employ a number of small detachments to dislodge him from every cover. These should advance along the most advantageous paths, proceeding with great caution, and leaving no suspicious points to the rear, until they are thoroughly searched and their character ascertained. The communications to the rear, by which the skirmishers will have to retire if repulsed, must be well secured by the reserves, who will usually take post at the junction of cross-roads, or in other positions favorable to receiving the skirmishers and covering their retreat.

407. If an isolated post of the enemy is met with every point around it, from which a fire can be brought to bear, should be occupied by skirmishers; and a steady unintermitted fire be kept up against it until it is dislodged, or driven from it by an attack with the bayonet by the reserves.

408. In the retreat, every advantageous point which offers cover to skirmishers, should be seized on by them, to hold the enemy in check, and thus give time to the main-body to retire in good order. The skirmishers, however, should not fall too far to rear, so as not to compromise their own safety; whenever obliged to this, a part of the reserves may be thrown forward, to reinforce the line, and give more vigor to its fire; but a part should always be kept in reserve to be ready for any emergency. If the retreat be through a defile, and the enemy's pursuit is feeble, it will usually be only necessary to deploy the reserves of the skirmishers on such ground on the right and left of the entrance to it, as may be favorable to bringing a good fire to bear on the enemy. As soon as the main-body has cleared the defile, or is sufficiently beyond the reach of an active pursuit, the skirmishers and their reserves retire by sections; keeping at from two to three hundred paces in the rear of the main-body. In case the enemy should push forward with vigor, the skirmishers adopt the same measures; but the additional precaution should be taken of holding the outlet of the defile, by a detachment posted advantageously for that object, until all the skirmishers have cleared it.

409. In all positions taken up for the defensive in mountainous, or broken ground, whether the valleys or the heights be occupied, those points from which the troops might be annoyed by the enemy's skirmishers should be guarded by our own, as well as all pathways leading to them; attention should be given so to post our skirmishers as to take the enemy in flank in his assault upon the front of the position.

410. The safety of the communications must be carefully looked to in a retreat; and for this object the position of the reserves should be judiciously selected; taking them at those points where the enemy would be met, should be take paths or cross-roads, passing beyond the flanks of the line occupied by the skirmishers, to gain their rear. The skirmishers themselves should not hold possession too long of any point, in order not to have their safety compromised, by leaving too wide an interval between themselves and the main-body; and whenever they are thrown into inclosures, they should see that easy communications are opened to the rear for a timely exit.

411. Although skirmishers should rely mainly on a steady, well-directed fire, for the attainment of their ends, still a resort to the bayonet by the reserves should not be overlooked; as, by a judicious combination of caution with boldness, the enemy may not only be held in check, and be constrained to a very circumspect course, but may be frequently so forced back as to enable the skirmishers, if it be advisable, to recover lost ground.

412. The fact should never be lost sight of, that a line of skirmishers is weak in itself; and even powerless when exposed to the attack of cavalry, or that of infantry in mass. It offers but a bad mark to the enemy's round shot in front, but it may be greatly damaged from an enfilading position; any care should therefore be taken not to post a line behind any obstacle which, like a hedge, or ditch, may so present itself to the enemy's batteries. The line may also greatly suffer when, manœuvring in open ground, it comes within short range of the grape and canister of the enemy. The true tactics, therefore, of skirmishers, is to avoid open ground, and to throw themselves into that which presents obstacles to the enemy's movements, and affords covers not exposed to enfilading views of his batteries; to seek for positions from which their fire will annoy the enemy both in front and flank, occupying him in front whilst ground is gained on the flank; and in all changes of position whether advancing or retiring, to move from one to the other, both with celerity and by an orderly simultaneous movement.

413. *Escalading.* This is a means of attack upon which our English friends rather pique themselves; in spite of some signal failures during the Peninsular campaigns, and some successes in which as much seems to have been owing to chance as to any other cause; as the reader, who may look over *Jones's Journal of the Sieges* carried on in these campaigns will find. Since that time it has been successfully used in the attacks made on the *stockade forts* in India. How far it might succeed against ourselves, we have no means of judging; as in the attempts by our friends on our slight field-works, during the last war, very few of them had an opportunity of getting further than the ditch, under deadly fire our well-practised citizens. It is a resource, however, when others fail; and, in a favorable moment, may succeed, either through the surprise, or cowardice of the assailed.

414. In a little work, on the *Attack of Military Posts &c.*, by Captain, now, we believe, Colonel Jebb, of the Royal Engineers,—which, as well as his *Defence of Out-posts*, is cordially commended to the perusal of our young officers, for its practical details and capital common-sense views; maugre its slap-dash flippancy of style, with which the *Juniors* of the British line, it seems, must be indulged, to cheat them into a little study of their art,—the manner of conducting an assault by escalade is given with some detail. Whether the groups termed *rallying columns* by the author, would act more harmoniously towards the attainment of the main object, than the

groups of another more celebrated system by their attractional sympathies, experiment alone can determine.

415. The following is the outline of the method of escalade, proposed by Colonel Jebb in the work referred to. Ladders of suitable length for the enterprise are to be provided for scaling the scarp; the one proposed is three feet longer than the height of the scarp; so that, the foot of the ladder being planted a pace or two from the bottom of the wall, the top may project far enough above the wall to enable the men to step from the ladder with ease, in an upright position. An allowance of one ladder is made for every five feet of the face to be scaled; one hundred feet, for example, requiring twenty ladders.

416. To each ladder, from four to six men are assigned, according to its length. The ladders are borne, in the usual manner, on the shoulders of the men; two or three being placed on each side for this purpose.

The ladders for scaling the scarp are assigned to the advance. A second set of less dimensions, for descending into the ditch only, are assigned to the support. The scarp ladders are placed on the ground in line, at some suitable point, with the proper intervals between them; the men to carry them, properly "told off," are drawn up in rear of them, at the proper commands, are marched to their places at the sides of the ladders, and raise them ready for the forward movement. Similar dispositions are made for the counterscarp ladders, which are placed in line, from 100 to 150 yards in rear of the others.

417. At a given signal, the whole are to move forward; covered by an advanced firing party, to keep down the fire of the work, and followed by a reserve.

The scarp ladders are let down into the ditch, the men descend, carry them across it, plant them against the scarp, and mount to the top. The top of the parapet gained, the men are to group themselves rapidly in *rallying-columns*; and proceed to clear the parapet by charging the assailed in flank.

418. The support and reserve, in the meantime, are to follow on without loss of time, to take their share in the action.

CHAPTER VII.

CONVOYS.

419. TO conduct a convoy in safety through an enemy's territory, where it is exposed to attacks either of regular, or of partisan troops, is one of the most hazardous operations of war; owing to the ease with which a very inferior force may take the escort at disadvantage in defiles, or other positions favorable to an ambuscade, or surprise, and to the difficulty of securing a long column, like that presented by a convoy from a sudden attack.

420. The escort should be of sufficient strength to beat off any presumed force that the enemy can bring against it. A weak escort will only hold out a temptation to the enemy to attack the convoy. When the convoy is of very great importance, it may be necessary, besides giving it a strong escort, to throw out detachments between its line of march and the enemy; and when there are posts occupied by our troops along this line, they should keep up a vigilant system of patrols, pushing them as far out as practicable, so that the escort may receive aid and timely notice of any hostile movement.

The escort, when it is deemed necessary, should be composed of all arms; but always of both infantry and cavalry, as, from the necessity of gaining timely information of the enemy's approach, patrols of cavalry must be pushed out to some distance, both in front and on the flanks.

421. As the convoy must be perfectly hemmed in and guarded on all points by its escort, the latter is usually divided into five principal portions with this object; an advanced-guard, which is preceded by a small detachment to scour and search the ground in front of the line of march; a rear-guard; flankers; and the main-body. For the purpose of presenting a sufficient force upon those points of convoy that will probably be assailed, the main-body is subdivided into four unequal portions; one-half of it will constitute a reserve; one-fourth will form a guard for the centre of the convoy; and the remaining fourth will be divided into two equal portions one of which will march directly at the head of the convoy, and the other close in its rear. This subdivision of the main-body is made on the supposition that the enemy will attack the convoy either at the centre, or in the front, or rear. If the attack is made upon either of the two last points, the divisions for their protection can be readily reinforced by the advanced, or the rear-guard. As the reserve must be in readiness to reinforce any point menaced, and to offer a vigorous resistance, its strength should be greater than of the other divisions.

422. The order of march of the escort will be regulated mainly by the natural features of the ground passed over. The advanced-guard will precede the convoy about a thousand paces. The detachment by which it is preceded, and which should consist of cavalry, will push forward as far as it can with safety, taking care to scour thoroughly all the ground passed over. The flankers, which will also usually be composed of cavalry, will be divided into platoons, and be thrown out as far as circumstances will permit. Each platoon will throw out a small detachment, on its outer flank, which last will furnish vedettes to move along the outward flank of the detachment. The reserve will usually occupy some point near the centre of the convoy. The rear-guard will leave about 1000 paces between it and the tail of the column. The divisions immediately at the head and tail of the train will keep close to the convoy. The centre division will usually be divided into two portions, one being on each flank of the convoy; a space of eight or ten paces being left in the centre of the train, for these portions to pass to either flank, as circumstances may require.

423. The convoy is placed under the orders of an officer, subordinate to the commandant of the escort, who is charged with everything appertaining to its police, &c. A detachment of pioneers, or sappers, should precede the convoy, to repair the roads and bridges, &c. A few wagons, with all the necessary implements for the sappers, should accompany the convoy; and it is also recommended to carry with it a few *chevaux-de-frise*, the lances of which are of iron, and connected with the bodies by hinges, to pick conveniently, in order to form a temporary obstacle against the enemy's cavalry, when the convoy parks for the night or when threatened with an attack.

424. When a part of the convoy consists of batteries, horses, or mules, they should be placed at the head of the column of wagons, as they are found to travel better in this position than when in the rear.

425. *Distribution of the Train.* The train is usually divided into four sections. If money or powder form a part of the train, it should occupy the centre of the second section, as this point is usually best protected. The provisions and other munitions will be distributed equally among the other sections; so that, should any one be cut off by the enemy, a portion of each kind may be saved in the remainder.

426. As it takes some time to set the whole column in motion, the horses are harnessed and hitched to successively, by sections. The second section will not commence to harness until the first is ready to move off, and so on in succession. The time for this operation will be ascertained by the officer in charge of the convoy; so that each section may be notified of the proper moment to prepare for the march. This should be done in order not to fatigue the horses unnecessarily, by keeping them standing in harness.

427. *March of Train.* The convoy will march in single or double files, according to the state of the roads. The files should not be doubled unless the road is wide enough for three files; and also when the train can march in this order at least an hour; otherwise there will be too great inconvenience and loss of time in changing the order of march. To pass from single to double file, the hindmost wagons of the first and third sections will lead off to the side of the road; and so on each in succession to the one at the head. The leading wagons of the second and fourth sections move briskly on in their new line of direction, followed by those in their rear until they come up with the leading wagons of the other two sections. An interval of four paces should be preserved between the files. To change from double to single file, the first section quickens its pace, and when its last wagon has passed the leading one of the second section, this and the rest of the section follow in the new line.

428. The greatest attention should be paid to preserve regularity and good order in the march. For this purpose small detachments of infantry, taken from the centre division of the escort, should march at intervals on the flanks of the train. When the number of men will admit of it, each wagon should be under the guard of a soldier, or at least of one man to three wagons. If neither of these arrangements can be made, each section may be placed under the charge of four or five horsemen, who will keep in constant motion along the line, to see that all goes well. If, for any purpose, a wagon is obliged to halt, it must fall out of the line, and not be allowed to enter it until the rear wagon of its section has passed. The line should be kept well closed up; the leading wagons to allow the others to come up, if retarded by any obstacle.

429. *Halt of Train.* When from any cause the convoy is forced to halt for some time, as for the repair of a bridge, the passage of a defile, &c., the wagons should be parked either in lines of sections, or as many in line as the character of the ground will admit of. An interval of about twenty paces may be left between each line. If there is any apprehension of an attack under these circumstances, the lines may close to within fifteen paces; the openings on the flanks being covered wagons placed across them.

430. *Parking of Train.* When the convoy halts to park for the night, a strong position should be chosen, offering only one side, if practicable, to an attack. The park may be formed by lines of sections or in squares, as may be deemed most advisable. The faces of the park should be flanked by some pieces of artillery, and the angles be covered by any temporary obstacle, as a chevaux-de-frise, a slight abatis, &c. The different portions of the escort will take position around the park, to cover it from the enemy's approach; those divisions, which march with the convoy, being posted behind the wagons, and the obstacles which cover them. The usual dispositions of out-posts and patrols will be made, to guard against a surprise. It is not safe to park in villages, nor even to pass through them on a march, when powder forms a part of the convoy.

431. When the park is formed as a temporary entrenchment, to cover the escort against an attack, an open portion of ground should be selected, which offers no covers for the enemy to approach within musket range. The wagons may be placed in one line, or in two if their number is sufficient to inclose the necessary ground for the troops, &c., so as to form a square,

rectangular, or circular figure, as the locality may require. When the inclosure is formed of a single line of wagons, they are placed wheel to wheel, with an outlet of three or four feet between every six wagons; a wagon being placed, six paces to the rear of the line, behind each outlet to close it. If the inclosure is a double line, the wagons are placed end to end, and wheel to wheel, outlets, as in the preceding case, being left between every four wagons, and closed as before. The poles of four-wheel carriages are placed outwards; the shafts of the two-wheel inwards; the horses picketed opposite their wagons. The wagons that contain ammunition, or valuables, are placed within the inclosure, at the point regarded as least exposed. If the convoy is surprised on a march, and have not time to park in square, the files should be rapidly doubled if moving in single file, the heads of the horses be turned towards the centre of the road, so as nearly to touch each other, and the wagons be brought as closely together as practicable.

432. Duties of Escort. All the usual precautions, to guard a column in march against a surprise, should be redoubled in cases of convoys. The patrols on the flanks and in front should push as far out as practicable; so that the convoy may have timely warning of an enemy's approach; in order to park, according to circumstances, before an attack can be made. With drivers accustomed to their business, half an hour at least will be required for this operation. The advanced-guard should be particularly careful to occupy by detachments any lateral roads which might offer the enemy a favorable point of attack on the convoy. These detachments will keep their posts until the convoy has passed; and they will join the rear-guard as it comes up.

433. The officer in command of the head-division, marching with the convoy, will see that his detachment moves on regularly, as the pace of the convoy will be regulated by it; and, from time to time, he will bring it to a halt, to allow the carriages to close up; this precaution must be carefully attended to when near an enemy.

434. If menaced with an attack, the divisions at the head and tail of the convoy will keep their positions and repel the enemy by their fire should he attack; the centre division will move to the flank menaced, and take position to cover the two centre sections of the convoy; the reserve will move towards the point threatened; the advanced and rear-guards and flankers will close upon the convoy to be in readiness to act as circumstances may require.

435. Before entering a defile, a detachment from the reserve should be sent forward to secure its flanks and outlet, and then send out patrols in all directions to examine the ground in front, and see that all is safe. As the convoy comes up to a point designated in rear of the defile, it is parked in lines of sections. The centre division of the escort will join the advanced-guard to cover the front; the rear-guard will take position to cover the rear; the flankers on the flanks; and the reserve in a central position to advance upon the point which may be attacked. When the patrols report all safe, the advanced-guard and centre division pass the defile, and proceed far enough beyond it to cover the ground where the convoy will park as it reaches the other side; the reserve and flankers will cover the flanks of the convoy as it moves to its new position, and will then take post as before; the rear-guard joined by any detachments left to secure particular points on the flanks of the defile, will follow so soon as the convoy and the rest of the troops are in position. When all the troops have passed, strong detachments are sent forward, in all directions, at least one hour before the convoy is again put in motion.

436. When the escort takes position at night, within the park, for defence, the reserve will be posted in the centre, and the divisions that march with the convoy in rear of their respective sections. The advanced and rear-guards and the flankers will take post without, and establish their out-posts and sentinels in the usual way for safety. The cannon, placed at the angles of the park, will be supported by detachments of infantry and cavalry in their rear. The different

divisions will throw forward skirmishers to meet the enemy if he attacks; whilst others will occupy the wagons from which they can fire. Should the enemy not be beaten off by the fire or these troops, the reserve will sally out and attack with the bayonet.

437. *Attack of Convoy.* An attack upon a convoy is a comparatively easy and safe operation, and may be made with a force quite inferior to the escort; as the latter is obliged, for the security of the convoy, to keep on the defensive.

It will usually be best to attempt a surprise, choosing points which are favorable to ambuscades. The manner of conducting the attack will depend upon its object, whether it be to capture the entire convoy, to cut off a part of it, or simply to delay its march. In the first case, the escort must be beaten and dispersed, whilst a detachment is sent to secure the convoy. In the second, an attack may be made on one point with the view of drawing the main-body of the escort to the defence of that point, whilst a detachment attempts to cut off the part of the convoy from which the escort has been withdrawn. In the last case the convoy will be frequently menaced with an attack, to force it to halt and park for defence; the roads will be obstructed, bridges broken down, &c.

438. If the attack is successful, the main-body of the troops should be kept together in position, to cover the captured convoy, whilst the detachment sent to secure, or destroy it, is performing its duty. The cavalry will endeavor to disperse the escort, and bring in all the horses that may have been cut loose from the convoy. The precaution should be taken of having spare horses in harness, in readiness to take the places of those which the escort may have cut loose, or maimed, to prevent the wagons from being carried off. For the attack of a convoy parked for defence, some pieces of artillery will be necessary, and howitzers will be found particularly useful. Without the aid of this arm it will be very difficult to force a defensive park with infantry, unless the escort is very feeble, or the position chosen for the park presents covers within the effective range of musketry, from which, after keeping up a well-directed fire, a rush may be made on the park.

CHAPTER VIII.

SURPRISES AND AMBUSCADES.

439. THESE two classes of operations depend for their success upon the same point, that being able to attack the enemy suddenly when he is not prepared to resist. The term *surprise* is applied to unexpected attacks upon an enemy's position; that of *ambuscade* where a position is taken for the purpose of falling suddenly upon the enemy when he reaches it. Secrecy, good troops, and a thorough knowledge of the localities, are indispensable to the success of either of these operations.

440. *Surprise.* In planning a surprise, the officer must spare no pains in ascertaining the face of the country leading to and in the immediate vicinity of the enemy's position; the character and disposition of his troops; and the state of preparation of the defences of the position. Information may be obtained on these points from spies, deserters, inhabitants of the locality occupied by the enemy, good maps, &c.

441. The troops to be employed in the expedition, as well as the other necessary arrangements, will depend upon the information gained on these points. If the position be an intrenched one, infantry will constitute the main force; cavalry and artillery can be of little other

use than to cover the retreat of the infantry, and to make prisoners of those who may escape from the position. A body of engineer troops or of picked men used to handling tools, will accompany the infantry, carrying with them such implements as may be requisite from the character of the defences, as axes, saws, crowbars, small scaling ladders, &c.

442. If the position be not entrenched, as an open village, &c., cavalry may perform a very important part, by a sudden dash among the enemy, in creating confusion and alarm.

443. As the success of the affair will greatly depend upon the secrecy with which these preparations are made, and the celerity with which it is conducted, all orders for collecting the necessary implements and assembling the troops, should be given at the shortest notice; no more troops should be taken than are indispensably necessary; and they should carry nothing with them but their arms, and the requisite amount of ammunition.

444. Midnight is the best hour for small bodies of troops to carry out such enterprises; as they must effect all they desire to do and be off before daybreak. A few hours before daylight is the best time for large expeditions; as the dawn of day will be favorable to their retreat, by which time they will have been able to effect their purposes. The season of the year and the state of the weather should be taken advantage of. Winter and bad weather are most favorable, as the enemy's sentinels and out-posts will then, in all probability, be less on the alert, and more disposed to keep under such shelters as they can procure.

445. As our purpose may be divined by the enemy, measures should be taken against such a contingency. These will mainly consist, in securing by detachments all defiles and roads by which our retreat might be cut off; and by designating a rallying point, on which our force will fall back, if repulsed, which should be strongly occupied by cavalry and artillery, if they constitute a part of the force.

446. In conducting the march, the troops will be kept well together; the greatest order and silence be observed. Instead of the ordinary precautions of an advanced-guard and flankers, reliance should rather be placed upon a few active and intelligent scouts, to gain timely notice of any movement on the part of the enemy.

447. Concerted attacks upon several points are good means of creating confusion and paralyzing the enemy's efforts, when they can be successfully carried out; but, as they may require some of the detachments to make considerable circuits to reach their points, much will depend upon chance as to their success. In such cases, some signal must be agreed upon, to let the detachments, already in position, know when those, which are likeliest to reach theirs latest, are ready; but this may have the inconvenience of giving the alarm to the enemy. Rockets may be used for this purpose, and also to give notice to the troops to retire together.

448. The retreat after a successful issue should be conducted with the same promptitude as the advance. Time must not be lost in waiting too long for all the detachments to come in at the rallying point, as the safety of the whole command might be compromised.

449. *Ambuscade.* In planning an ambuscade, we should be well acquainted with the enemy's force, and the state of discipline shown by it. The position chosen for the attempt must be favorable to the concealment of troops, and if practicable it should be reached by night, every precaution being taken to insure secrecy. The best positions are those where the enemy is closed in a defile, or village, and has not taken the proper precautions to secure himself from an attack. By seizing the outlets of the defile by infantry, in such cases, and making an impetuous charge of cavalry into it, the enemy may be completely routed.

450. Ambuscades may frequently be attempted with success in the affairs of advanced and rear-guards; by pushing the enemy vigorously and then falling back, if he offers a strong resistance, so as to draw him upon a point where troops are posted in force to receive him.

451. To trace anything more than a mere outline, as a guide in operations of this kind, which depend upon so many fortuitous circumstances, would serve but little useful purpose. An active, intelligent officer, with an imagination fertile in the expedients of his profession, will seldom be at a loss as to his best course when occasion offers; to one without these qualities, opportunities present themselves in vain.

THE END.